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Moore DC. Regional Block. Springfield-Illions, CharlesC. Thomas 1979; 155-172. Esener Z. Klinik Anestezi. Istanbul, Çiftbay Matbaası 1991; 267-275.

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Kupeli I. Diabet ve Anestezi. Çeviri: Elar Z. In: Snow JC, (ed.) Anestezi El Kitabı, Çeviri Editörü: Elar Z, İzmir, Güven Kitabevi 1986; 315-324.
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## SCIENTIFIC PROGRAM

May 15, 2015, Friday

**08:30-14:00 REGISTRATION**

**May 15, 2015, Friday: Akernia Hall**

**14:00-15:00 Opening Ceremony** *Tritan Shehu (Albania), Meral Kanbak (Turkey)*

**15:00-15:30 Coffee Break**

**15:30-16:00 Conference I** *Chairs: Filiz Tüzüner (Turkey),  
Ilir Ohri (Albania)*

Perioperative medicine: The future of Anesthesia *Zeynep Kayhan (Turkey)*

**16:00-16:50 Panel I**

**Anesthesia in Obstetric Patients** *Chairs: Asuman Uysalel (Turkey),  
Antigona Hasani (Kosovo)*

1. What's new in obstetric anesthesia *Bilge Karşlı (Turkey)*
2. The prevention of spinal induced hypotension in caesarean section *Paraskevi Matsota (Greece)*
3. Anesthesia in nonobstetric surgery in obstetric patient *Semra Karaman (Turkey)*

**16:50-17:00 Discussion**

**May 16, 2015, Saturday: Balsha Hall**

**08:00-09:15 Panel II**

**Perioperative Volume Management** *Chairs: Neslihan Alkış (Turkey),  
Hektor Sula (Albania),  
Filadelfo Coniglione (Italy)*

1. Goal directed fluid management rationale and basic principles *Eleni Mavromatti (Greece)*
2. Anesthesia in cardiac patient in noncardiac surgery *Mihal Kerçi (Albania)*
3. Which methods of hemodynamic monitoring? *Ilir Ohri (Albania)*
4. What kind of fluid? *Mehmet Uyar (Turkey)*
5. Fluid responsiveness in liver surgery: comparisons of different indices and approaches *Filadelfo Coniglione (Italy)*

**09:15- 09:45 Discussion**

**09:45-10:15 Coffee Break**

**10:15-11:00 Panel III**

**Mysteries in Genetics and Anesthesia** *Chairs: Ülkü Aypar (Turkey),  
Rudin Domi (Albania)*

1. Genetics and anesthesia *Elvin Kesimci (Turkey)*
2. Genetics and pain *Altan Sahin (Turkey)*
3. Genetics and critical illness *İsmail Cinel (Turkey)*

**11:00-11:15 Discussion**

11:15-12:00	<b>Panel IV</b> <b>Anesthesia in Obese Patients</b>	<b>Chairs: <i>Bora Aykaç (Turkey), Mustafa Bajraktari (Albania)</i></b>
	1. Pathophysiology of morbid obesity	Haluk Gümüř (Turkey)
	2. Airway and ventilation management in obese patients	Alma Cani (Albania)
	3. Obesity and regional anesthesia	Fuat Güldođuř (Turkey)
12:00-12:15	<b>Discussion</b>	
12:15-13:15	<b>Lunch</b>	
13:15-14:00	<b>Panel V</b> <b>New aspects - Old drugs</b>	<b>Chairs: <i>Ařl Dönmez (Turkey), Islam Krasniqi (Kosovo)</i></b>
	1. Lidocaine: More than just a local anesthetic	Katarina Sakic (Croatia)
	2. Chloroprocaine: Controversies in neurotoxicity	Ebru Kelsaka (Turkey)
	3. Nitrous oxide: To use or not?	Antigona Hasani (Kosova)
14:00-14:15	<b>Discussion</b>	
14:15-14:45	<b>Pro/con</b> <b>Dexamethasone in Anesthesia</b>	<b>Chairs: <i>Turgay Öcal (Turkey), Aleksander Hoxha (Albania), Tülin Gümüř (Turkey)</i></b>
	1. Should be used routinely	Karamehmet Yıldız (Turkey)
	2. Should not be used routinely	Zerrin Özköse řatırlar (Turkey)
14:45-14:55	<b>Discussion</b>	
14:55-15:15	<b>Coffee Break</b>	
15:15-16:00	<b>Panel VI</b> <b>New concepts in Intensive Care</b>	<b>Chairs: <i>Necmettin Ünal (Turkey), Nehat Baftiu (Kosovo), Seda B. Akıncı (Turkey)</i></b>
	1. Patient safety in ICU	Seda B. Akıncı (Turkey)
	2. The new notions in the use of antibiotics and bacterial resistance	Hülya Ulusoy (Turkey)
	3. Therapeutic hypothermia: a great deal of promise in the care of ICU patients	Mirjana Shosholcheva (Macedonia)
16:00-16:15	<b>Discussion</b>	
16:15-16:45	<b>Pro/con</b> <b>Regional Anesthesia</b>	<b>Chairs: <i>Fatma Sarıcaođlu (Turkey), Mihal Kerçi (Albania)</i></b>
	1. Adjuvants are needed	Gürkan Türker (Turkey)
	2. No need for adjuvants	Yavuz Gürkan (Turkey)
16:45-17:00	<b>Discussion</b>	
<b>May 16, 2015, Saturday</b>		
<b>08:00-14:00</b>	<b>WORKSHOP I</b> <b>Mechanical Ventilation Workshop</b>	<b>Abret Hall</b> <b>Chairs: <i>Necmettin Ünal (Turkey), Roland Xhaxho (Albania)</i></b>

## May 16, 2015, Saturday

<b>08:30-10:30</b>	<b>ORAL PRESENTATIONS</b>	<b>Onufri Hall</b>
<b>08:00-9:20</b>	<b>Oral Presentation I</b>	<b><i>Pediatric Anesthesia</i></b> <b>Chairs: <i>Tülin Gümüş (Turkey),</i></b> <b><i>Aysun Anıay Yulbaş (Turkey), Rudin Domi (Albania)</i></b>
<b>09:30-10:50</b>	<b>Oral Presentation II</b>	<b><i>Cardiovascular Anesthesia</i></b> <b>Chairs: <i>Aslı Dönmez (Turkey),</i></b> <b><i>Ümit Karadeniz (Turkey)</i></b>
<b>11:00-12:20</b>	<b>Oral Presentation III</b>	<b><i>Intensive Care</i></b> <b>Chairs: <i>Işıl Özkoçak (Turkey),</i></b> <b><i>Süheyla Ünver (Turkey)</i></b>
<b>12:30-13:50</b>	<b>Oral Presentation IV</b>	<b><i>Airway Management-Regional Anesthesia</i></b> <b>Chairs: <i>Aydın Erden (Turkey),</i></b> <b><i>Dritan Muzha (Albania)</i></b>
<b>14:00-15:20</b>	<b>Oral Presentation V</b>	<b><i>General Anesthesia-I</i></b> <b>Chairs: <i>Özgür Canbay (Turkey),</i></b> <b><i>Seher Altınel (Turkey)</i></b>
<b>15:30-16:50</b>	<b>Oral Presentation VI</b>	<b><i>General Anesthesia-II</i></b> <b>Chairs: <i>Ünase Büyükköçak (Turkey),</i></b> <b><i>Elvin Kesimci (Turkey)</i></b>

## May 17, 2015, Sunday: Balsha Hall

<b>08:00-08:45</b>	<b>Panel VII</b>	
	<b>Approach to Traumatic Patient</b>	<b>Chairs: <i>Işıl Özkoçak (Turkey),</i></b> <b><i>Mihal Kerci (Albania), Şule Akın (Turkey)</i></b>
	1. The attitude towards patients in medical urgency	Edmond Zaimi (Albania)
	2. Intensive treatment of vascular accident	Lale Karabıyık (Turkey)
	3. What is new regarding fluid resuscitation in trauma patients?	Ünase Büyükköçak (Turkey)
<b>08:45-9:00</b>	<b>Discussion</b>	
<b>09:00-09:45</b>	<b>Panel VIII</b>	
	<b>Keys in Anesthesia</b>	<b>Chairs: <i>Bilge Çelebioğlu (Turkey),</i></b> <b><i>İlir Ohri (Albania), Elvin Kesimci (Turkey)</i></b>
	1. Perioperative glycemic control: regimen, targets, recommendations	Monica Belba (Albania)
	2. Cerebral monitorization	Bilge Çelebioğlu (Turkey)
	3. Intraoperative ventilatory management	Hülya Başar (Turkey)
<b>09:45-10:00</b>	<b>Discussion</b>	
<b>10:00-10:30</b>	<b>Coffee Break</b>	

<b>10:30-11:00</b>	<b>Conference II</b>	<b>Chairs: <i>Dilek Özcengiz (Turkey), Spiro Sila (Albania)</i></b>
	<b>Regional anesthesia in children: The new trends</b>	Jordan Nojkov (Macedonia)
<b>11:00-11:45</b>	<b>Panel IX</b>	
	<b>Perioperative organ protection: The place of Anesthesia</b>	<b>Chairs: <i>Zühal Aykaç (Turkey), Hektor Sula (Albania)</i></b>
	1. New strategies in cerebral protection	Kliti Pilika (Albania)
	2. New strategies in cardiac protection	Ayşegül Özkök (Turkey)
	3. New strategies in renal protection	Rudin Domi (Albania)
<b>11:45-12:00</b>	<b>Discussion</b>	
<b>14:00-19:00</b>	<b>EVALUATION MEETING</b>	
	<b>May 17, 2015, Sunday</b>	
<b>8:30-13:00</b>	<b>WORKSHOP II</b>	<b>Abret Hall</b>
	<b>Airway Management Workshop</b>	<b>Chairs: <i>Kamil Toker (Turkey), Igli Zhilla (Albania)</i></b>
	<b>May 18, 2015 Monday: Balsha Hall</b>	
<b>08:00-08:45</b>	<b>Panel X</b>	
	<b>Perioperative Blood Transfusion Safety</b>	<b>Chairs: <i>Fatma Aşkar (Turkey), Özgür Canbay (Turkey), Alma Cani (Albania)</i></b>
	1. Blood conservation strategies	Bahar Öç (Turkey)
	2. Blood transfusion triggers	Feray Gürsoy (Turkey)
	3. Monitoring the coagulation	Süheyla Ünver (Turkey)
<b>08:45-09:00</b>	<b>Discussion</b>	
<b>09:00-10:00</b>	<b>Panel XI</b>	
	<b>Difficult Airway-Difficult Weaning</b>	<b>Chairs: <i>Kamil Toker (Turkey), Iglia Zhilla (Albania), Hülya Bilgin (Turkey)</i></b>
	1. Difficult airway management in ICU	Dusanka Jancevic (Serbia)
	2. Airway management for the patients with glottic pathology	Biljana Shirgoska (Macedonia )
	3. Challenges in paediatric airway management	Marijana Karışık (Montenegro)
	4. Update in difficult airway management algorithms	Kamil Toker (Turkey)
<b>10:00-10:15</b>	<b>Discussion</b>	
<b>10:15-10:45</b>	<b>Coffee Break</b>	
<b>10:45-11:15</b>	<b>Conference III</b>	<b>Chairs: <i>Orhan Kanbak (Turkey), Alma Cani (Albania)</i></b>
	<b>The rights of a patient on mechanical ventilation</b>	Marija Soljakova (Macedonia)
<b>11:15-12:00</b>	<b>Closing Ceremony</b>	
<b>14:00-19:00</b>	<b>EVALUATION MEETING</b>	

May 16, 2015, Saturday

08:00-14:00 WORKSHOP I

Abret Hall

**Mechanical Ventilation Workshop**

**Opening session**

Aims of the course,  
Introduction of Faculty members

Necmettin Ünal,  
Roland Xhaxho

**Theoretical Section**

Description and types of Respiratory failure

Bora Aykaç

Indications of mechanical ventilation

Işıl Özkoçak Turan

Respiratory system mechanics

Necmettin Ünal

General specifications of ventilation modes

Lale Karabıyık

Components of Lung protective ventilation:

Recruitment, PEEP, Low Tidal volume

Roland Xhaxho, Tritan Musha

Weaning: Indications and techniques

Seda Banu Akıncı

Technical specifications of ventilators

Mehmet Uyar

Complications of mechanical ventilation

İsmail Cinel

**Practical section**

Humidification (HH and HMEs)

Roland Xhaxho,

Tritan Musha

Initial ventilatory settings

Seda Banu Akıncı

Monitoring 1 (Pressure, Flow, Volume, Compliance)

Mehmet Uyar

Monitoring 2 (PEEPi, P0.1, RSBI, Stress index, Time constant)

İsmail Cinel

PEEP titration

Necmettin Ünal

Recruitment

Işıl Özkoçak Turan

Monitoring 3 (Loops)

Lale Karabıyık

Blood gas analysis

Bora Aykaç

May 17, 2015, Sunday

08:00-12:00 WORKSHOP II

Abret Hall

**Airway Management Workshop**

*Kamil Toker (Turkey), Iglı Zhilla (Albania)*

Fiberoptic intubation

Aydın Erden

Supraglottic airway devices

Biljana Shirgoska, Iglı Zhilla

Fiberoptic intubation via supraglottic airway devices

Yavuz Gürkan

Videostylet fiberoptic intubation

Hülya Bilgin, Aysun Yılbaş

Videolaryngoscopes

Kamil Toker, Marijana Karisik

Emergency airway access & ventilation techniques

Dusanka Janjevic, Özgür Canbay



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**ORAL PRESENTATIONS - I****PEDIATRIC ANESTHESIA**

**Chairs:** *TULIN GUMUS (TURKEY), AYSUN ANKAY YILBAS (TURKEY),  
RUDIN DOMI (ALBANIA)*

- 1. THE USE OF SUGAMMADEX IN A PREMATURE INFANT WITH MULTIPLE ANOMALIES: A CASE REPORT**  
*M. YALÇIN, G. SAGIR, B. BALTACI, N. OZDEMİR, H. BASAR*
- 2. PROPOFOL-MIDAZOLAM BASED SEDATION FOR MAGNETIC RESONANCE IMAGING IN CHILDREN: A-5-YEAR EXPERIENCE**  
*G. KESKIN, M. AKIN, S. SAYDAM, S. OZMERT, Y. SENAYLI, D.T. KURT, F. SEVER*
- 3. PREVENTION OF WITHDRAWAL MOVEMENT ASSOCIATED WITH INJECTION OF ROCURONIUM IN CHILDREN: COMPARISON OF PARACETAMOL AND LIDOCAINE**  
*R. POLAT, M. AKIN, G. KESKİN, D. UNAL, A. DONMEZ*
- 4. A CASE OF VACTERL SYNDROME-REPEATED ANAESTHESIA MANAGERMENTS**  
*M. AKIN, G. KESKIN, Y. SENAYLI, S. SAYDAM, D.T. KURT, S. OZMERT, F. SEVER*
- 5. PERIOPERATIVE COMPLICATIONS AND CONCOMITANT DISEASES OF PATIENTS FOLLOWED IN POSTANESTHESIA CARE UNIT AFTER CLEFT LIP-PALATE SURGERY**  
*M. TUMER, A. AYYILDIZ, B. AKCA, A.Y. ANKAY, F. UZUMCUGİL, O. CANBAY,*
- 6. THE USE OF A FIBEROPTIC BRONCHOSCOPE IN A TRACHEAL RESECTION**  
*M.E. INCE, V. YILDIRIM, S. DOGANCI, G. OZKAN, A. COSAR*
- 7. ANESTHETIC MANAGEMENT OF A PATIENT WITH JOUBERT SYNDROME**  
*F. UZUMCUGIL, A. MUZ, T. BAYRAMOV, B. AKÇA, A.A. YILBASI, F. SARICAOGLU*
- 8. CEREBROOCULOFACIOSKLETAL SYNDROME (COFS, PENA-SHOKEIR II SYNDROME, COCKAYNE SYNDROME TYPEII) IS A RARE, AUTOSOMAL-RECESSIVE AND EARLY LETHAL DISEASE**  
*A. ŞAYLAN, E. ERKMEN, N.O. CELEBI*
- 9. GENERAL ANAESTHESIA FOR A CHILD WITH LAURANCE-MOON-BARDET- BIEDL SYNDROME; CASE REPORT**  
*M. YALCIN, B. BALTACI, D. EBILOGLU, S.S. AMOFTI, H. BASAR*
- 10. KNOWLEDGE AND PRACTICE CONSCIOUS SEDATION WITH NITROUS OXIDE IN THE CONTEXT OF ALBANIA**  
*G. FAZIO, D. DE NOTARIS, C. BREGLIA, F. CONIGLIONE*
- 11. GENERAL ANESTHESIA IN A CHILD WITH SCHWARTZ-JAMPEL SYNDROME**  
*A.A. YILBAS, F. UZUMCUGIL, B. AKCA, A.M. VURAL, M. CELİK, N. CELEBİ*

**12. PERSISTENT RIGHT BUNDLE BRANCH BLOCK DUE TO VENOUS PORT CATHETER PLACEMENT IN A PEDIATRIC PATIENT**

*F. UZUMCUGIL, H.H. AYKAN, T. DUZAGACI, B.BUYUKAKKUŞ,  
F. ARSLAN, B. AKÇA, A. A. YILBAS*

**13. LOCAL ANESTHESIA IN ANTERIOR EYE SEGMENT SURGERY AND ITS COMPLICATIONS**

*A. BECI*

**14. NITROUS OXIDE: YES OR NO?: A CRITICAL REVENUE**

*G.M. SANSIPERSICO, G. DE BENEDICTIS, F. CONIGLIONE*

**ORAL PRESENTATIONS - II**

**CARDIOVASCULAR ANESTHESIA**

*Chairs: ASLI DÖNMEZ (TURKEY), ÜMİT KARADENİZ (TURKEY)*

**1. MYOCARDIAL CONTUSION IN THORACIC TRAUMA**

*B. DAUTAJ, E. JAHO, E. SULAJ, A. GRECA, T. ZHURDA, M. SARAÇI, M. KĒRÇİ*

**2. ANESTHESIA EXPERIENCE IN PATIENTS UNDERGOING PERCUTANEOUS MITRA-CLIP IMPLANTATION**

*E. ERKILIC, E. KESIMCI, C. DOGER, T. GUMUS, S. ELLIK, O. KANBAK*

**3. ANESTHESIA MANAGEMENT IN A PATIENT WITH A RARE COMPLICATION OF TRANSCATHETER AORTIC VALVE IMPLANTATION: AORTIC ROOT RUPTURE**

*M.E. INCE, G. OZKAN, U. KARA, M.B. ESKIN, S. SENKAL, V. YILDIRIM*

**4. ANESTHESIA IN A MITRACLIP DEVICE PATIENT WITH A SECOND TRANSPLANTED KIDNEY**

*E.ERKILIC, E. KESIMCI, T. GUMUS, O. KANBAK*

**5. IS TICAGRELOR SAFE IN CARDIAC SURGERY?: A PRESENTATION OF 3 CASES**

*B. ACIKGOZ, C.U. KANTEKIN, Y. TURAN, S. OZTURK,  
A. DEMIREL, F. CICEKCIOGLU*

**6. MANAGEMENT OF INTRAOPERATIVE VENTRICULAR FIBRILLATION DURING REMIFENTANIL INFUSION**

*O. ARUN, B. OC, F. TULEK, A. DUMAN*

**7. SPONTANEOUS TENSION PNEUMOTHORAX FOLLOWING CORONARY ARTERY BYPASS GRAFTING IN A PATIENT WITH BULLOUS LUNG DISEASE**

*C.U. KANTEKIN, B. ACIKGOZ, M. GENCER, F. YAR, F. CICEKOGU*

**8. COMPLICATIONS ENCOUNTERED IN TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI) PERFORMED PATIENTS AND ANESTHESIA MANAGEMENT**

*G. OZKAN, N. PUSAT, M.E. INCE, V. YILDIRIM*

9. **USE OF SUGAMMADEX FOR NON-CARDIAC SURGERY IN A CARDIAC TRANSPLANT PATIENT**  
*B. TEZCAN, A. SAYLAN, D. BOLUKBASI, R. KOCULU, U. KARADENIZ*
10. **TRANSESOPHAGEAL ECHOCARDIOGRAPHY "A LODESTAR" FOR GUIDING INTRAOPERATIVE PLACEMENT OF PULMONARY ARTERY CATHETER**  
*G. OZKAN, M.E. INCE, V. YILDIRIM*
11. **COMPARISON OF FENTANYL AND MORPHINE FOR REPAIR OF COARCTATION OF THE AORTA**  
*B. OC, O. ARUN, M. SIMSEK, M. OC, A. DUMAN*
12. **VASOPLEGIC SYNDROME FOLLOWING CORONARY ARTERY BYPASS SURGERY**  
*G. OZKAN, M.E. INCE, S. DOGANCI, V. YILDIRIM*
13. **CARILLON MITRAL ANGIOPLASTY; SEDOANALGESIA WITH REMIFENTANIL**  
*G. OZKAN, V. YILDIRIM, S. DOGANCI, C. BARCIN, A. COSAR*
14. **IN VITRO VASOACTIVE EFFECTS OF DEXMEDETOMIDINE ON ISOLATED HUMAN UMBILICAL ARTERIES**  
*O. ARUN, S.B. TAYLAN, I. DUMAN, B. OC, S.A. YILMAZ, A. TEKIN, H. BARISKANER, C. CELIK, J.B. CELIK*

### ORAL PRESENTATIONS - III

#### INTENSIVE CARE

*Chairs: ISIL OZKOÇAK (TURKEY), SUHEYLA UNVER (TURKEY)*

1. **UNEXPLAINED CASE OF BRADYCARDIA IN INTENSIVE CARE: RIVASTIGMINE PATCH EFFECT**  
*R. YARIMOGLU, M. YALÇIN, A. OZCAN, N. OZCAN, C. KAYMAK, H. BASAR*
2. **ILEUS DUE TO LARGE BOWEL OBSTRUCTION BY TAKING ACTIVATED CHARCOAL THAT USED FOR MUSHROOM POISONING**  
*T. YILDIRIM, C.U. KANTEKIN, Z.T. OZDEMIR, ELIF BOREKCI*
3. **MANAGEMENT OF RESPIRATORY COMPLICATIONS AFTER THORACOTOMY**  
*A. CANI, E. SHIMA, F. KOKICI, A. HATIBI, R. KORTOCI*
4. **CLINICAL APPROACH TO ANTI-NMDA-RECEPTOR ENCEPHALITIS IN ALBANIAN PATIENT**  
*A. NDREU, M. QATO, I. OHRİ, E. SHEHU, A. RAMALIU, R. KAZA, A. PAPA, A. BAME, D.H. KRAJA*
5. **EXAMINATION OF AUTONOMIC NERVOUS SYSTEM ACTIVITY WITH HEART RATE VARIABILITY BY HOLTER MONITORIZATION IN PATIENTS UNDER MECHANICAL VENTILATION IN INTENSIVE CARE UNIT**  
*R. YARIMOGLU, C. KAYMAK, N. OZCAN, S.N. MURAT, H. BASAR, A. KURTUL, A. OZCAN, M. KOTANOGLU*

6. **ANAPHYLAXIS AVOIDANCE AND MANAGEMENT OF LATEX ALLERGY**  
*F. YAMAN, G. AYDIN, S. COLAK, B. AKTAN, I. GENÇAY, U. BUYUKKOCAK*
7. **PERIORBITAL NECROTIZING FASCIITIS CAUSED BY STREPTOCOCCUS PNEUMONIAE**  
*T. KALO, B. ZAMA, A. PILACA, A. NDREU, G. XHEPA, E. MUÇA, DH. KRAJA*
8. **MANAGEMENT OF NON-INVASIVE MECHANICAL VENTILATION IN AN ELDERLY PATIENT WITH H1N1 PNEUMONIA**  
*D. COMAK, S. BEKTAS, A. OZCAN, C. KAYMAK, H. BAŞAR*
9. **FROM RESPIRATORY DISTRESS TO DIAGNOSIS OF AMYOTROPHIC LATERAL SCLEROSIS: A CASE REPORT**  
*M.E. NALDAN, P. AYDIN, E.O. AHISKALIOGLU, F. KARAKOC, D. KARA*
10. **ACUTE ADRENAL CRISIS, A LIFE THREATENING SITUATION: AN OVERVIEW ON CLINICAL CASES HOSPITALIZED IN ENDOCRINOLOGY DEPARTMENT AT UHCM**  
*E. DEMAJ, V. HOXHA, M. KERMAJ, G. HUSI, E. AHMETI, D. YLLI, E. MJEKAJ, T. FURERAJ, A. YLLI*
11. **BONSAI VICTIMS: A NEW EXPERIENCE IN OUR INTENSIVE CARE UNIT**  
*O. OZMEN, M.A. KARAKAYA, F. KARAKOC, D. KARA, E. IPEK*
12. **A CASE REPORT OF ACUTE COLCHICINE INTOXICATION**  
*P. AYDIN, D. KARA, M.E. NALDAN, O. OZMEN, M.A. KARAKAYA*
13. **NEAR INFRARED SPECTROSCOPY IN CARBONMONOXIDE POISONING**  
*T. DAL, T. ASKIN, T. KANDEMİR, Y. KILIC, S. UNVER*
14. **LOW DOSE RISPERIDONE-INDUCED NEUROLEPTIC MALIGN SYNDROME IN PARKINSON DISEASE: A CASE REPORT AND REVIEW OF LITERATURE**  
*E.O. AHISKALIOGLU, A. AHISKALIOGLU, P. AYDIN, M.A. KARAKAYA, F. KARAKOC*

#### ORAL PRESENTATIONS - IV

##### AIRWAY MANAGEMENT-REGIONAL ANESTHESIA

*Chairs: AYDIN ERDEN (TURKEY), DRITAN MUZHA (ALBANIA)*

1. **A COMPARISON OF THE EFFICACY OF MACINTOSH LARYNGOSCOPE, TRUVIEW EVO<sub>2</sub> AND MCGRATH VIDEOLARYNGOSCOPY IN PAEDIATRIC CASES**  
*M. ÇAKIRCA, M. BEKTAS, A. DEMİR, H. BASAR, B. BALTACI*
2. **IS THERE A ROLE FOR AIRWAY ULTRASONOGRAPHY IN THE ASSESSMENT OF VOCAL CORD MOBILITY AFTER THYROID SURGERY?**  
*D. YAZICIOĞLU, O. BAYIR, C.K CATAROGLU, A. GEZER, A. DONMEZ*

3. **EARLY TRACHEOSTOMY IN CARDIOVASCULAR INTENSIVE CARE UNIT**  
*M.E. INCE, V. YILDIRIM, G. OZKAN, S. DOGANCI, A. COSAR*
4. **CASE REPORT: THE ROLE OF FIBEROPTIC BRONCHOSCOPY FOR DIFFICULT INTUBATION IN ENLARGING NECK MASS**  
*B.SHUTERIQI, L. AGOLLI*
5. **COMPARISON OF THE MCGRATH SERIES 5 VIDEOLARYNGOSCOPE TO THE STANDARD MACINTOSH LARYNGOSCOPE FOR THE INTUBATION OF THE OBESE PATIENT**  
*A. POSTACI, M. CAKIRCA, O. SACAN, I. AYTAC, B.S. UYAR, S. BASKAN, M. BAYDAR, I.O. TURAN*
6. **PROGRESSIVE HEMATOMA IN ANTERIOR NECK AFTER ENDOVASCULAR TREATMENT OF MIDDLE CEREBRAL ARTERY ANEURYSM**  
*A.A. YILBAS, C. KANBUROGLU, F. UZUMCUGİL, C. CIFTCI, O.O. SARALP, H. KARAGOZ, S.B. AKINCI, A. ARAT*
7. **LMA FOR SUBGLOTTIC LASER SURGERY: ADVANTAGES AND LIMITATIONS**  
*A.HOXHA, L. GRAZHDANI, N. QYRA, G. KUCAJ, I. SELMANI*
8. **COMPARISON OF INTUBATION PERFORMANCE OF ANESTHESIA RESIDENTS WITH KING VISION AND MCGRATH SERIES 5 VIDEOLARYNGOSCOPE ON MANIKIN**  
*M. CAKIRCA, I. AYTAC, A. POSTACI, S. SEVİM, E.M. AYDIN, S. BASKAN, M. BAYDAR*
9. **COMBINED GENERAL AND EPIDURAL ANESTHESIA VERSUS GENERAL ANESTHESIA ALONE IN COLORECTAL CANCER SURGERY**  
*P. SHKEMBI, H.GANI, M. NACO, V. BEQIRI, O. JANUSHAJ, F. BEDALL, N. KODRA*
10. **SINGLE DOSE HYPERBARIC PRILOCAINE DOES NOT CAUSE HISTOPATHOLOGIC DAMAGE IN RAT INTRATHECAL MODEL**  
*D. YAZICIOGLU, I. DOGAN, T. AKKAYA, E. ONDER, O.G. KABAN, M. OZHAN*
11. **THE EFFECT OF NORMAL SALIN AND RINGER'S LACTATE ON METABOLIC ACIDOSIS IN PATIENTS UNDERGOING TOTAL KNEE ARTHROPLASTY WITH TOURNIQUET APPLICATION UNDER SPINAL ANESTHESIA**  
*M. BAKIR, D. OZKAN, E. ARIK, A. DONMEZ*
12. **DIFFERENTIAL DIAGNOSIS OF A PATIENT WITH HEADACHE, FEVER AND MENINGISMUS AFTER SPINAL ANAESTHESIA**  
*Z. OZCELIK, E. DENIZCI, M. KAV, O.B.OZSANCAKTAR, S.B. AKINCI*
13. **CLINICAL IMPACT OF PREOPERATIVE CARBOHYDRATE DRINKS IN PATIENTS UNDERGOING COLORECTAL AND CHOLECYSTECTOMY OPERATIONS**  
*F. SADA, A. GECAJ-GASHI, A. HASANI, N. BAFTIU, F. KAVAJA, A. KRASNIQI*

ORAL PRESENTATIONS - V

GENERAL ANESTHESIA - I

*Chairs: OZGUR CANBAY (TURKEY), SEHER ALTINEL (TURKEY)*

1. **THE ROLE OF ANESTHETISTS, KNOWLEDGE AND ATTITUDES OF OUR PATIENTS TOWARDS ANESTHESIA**  
*S. ALTINEL, M. BABAYIGIT, Z.B. TUTAL, H. GULEC, M.A. BABAYIGIT, E. HORASANLI*
2. **COMPARISON OF MEPERIDINE WITH TRAMADOL FOR TREATMENT OF SHIVERING DURING SPINAL ANESTHESIA**  
*H. GANI, M. NACO, R. DOMI, F. BEDALLI, V. BEQIRI, P. SHKEMBI, N. KODRA*
3. **CONTEMPORARY LEGAL ISSUES IN FORENSIC CADAVER ORGAN DONORS**  
*D. ERDEM, B. AKAN, S. ACAR, I.O. TURAN*
4. **ANGIOTENSIN II RECEPTOR SUBTYPE-1 ANTAGONISTS USED CHRONICALLY IN THE HYPERTENSIVE GERIATRIC PATIENTS IS ASSOCIATED WITH GREATER HEMODYNAMIC FLUCTUATIONS AFTER ANESTHETIC INDUCTION**  
*M. NACO, H. GANI, A MANDI, A. LLUKAÇAJ, N. KODRA, B. RAKIP, B. GOGU, M. KACI*
5. **DETECTION OF CEREBRAL PERFUSION DURING HEAD-UP POSITION BY NEAR INFRARED SPECTROSCOPY IN A PATIENT UNDERGOING THYROIDECTOMY**  
*Y. KILIC, T. ASKIN, T. DAL, S. MUSLU, S. UNVER*
6. **THE EFFECT OF MATERNAL PREOPERATIVE ANXIETY ON HYPOTENSION AFTER SPINAL ANAESTHESIA IN CAESARIAN DELIVERY**  
*A.S. ISUFI, A. MISJA, A. DELILAJ, D. XHANGOLLI, V. SHPATA, H. SULA*
7. **THE EFFECTS OF DIFFERENT TYPES OF MUSIC AND QURAN ON HEART RATE VARIABILITY INDEX AND HEMODYNAMIA PATENTS IN GENERAL ANESTHESIA**  
*F. BAYSAL*
8. **CLINICAL EXPERIENCE FROM TRANEXAMIC ACID INTRAOPERATIVE USAGE IN THA, TKA**  
*M. BAJRAKTARI, M. KERÇI, S. HORESHKA, R KAZA, M. SARACI*
9. **A CASE OF MALIGNANT TRACHEA ESOPHAGEAL FISTULA CAUSED BY ADVANCED LUNG TUMOR INTRODUCTION**  
*S.M. AKSOY, H. AKDAG, A.T.D. OZCAN, B. AKINCI, O. ERSOY, M. GUMUS*
10. **IMPORTANCE OF EVALUATION OF HYPONATREMIA IN ADULT PATIENTS OF TERTIARY SERVICE**  
*A. NAKE, M. KOKICI, E. PETRELA, G. ZACAJ*
11. **THE EFFECTS OF TOTAL INTRAVENOUS, LOW FLOW AND HIGH FLOW ANESTHESIA APPLICATIONS ON MIDDLE EAR PRESSURE**  
*A.T.D. OZCAN, H. KASIKARA, H. SAHINTURK, T. MUDERRIS, A. YUNGUL, O. KANBAK*

**12. RELATIVE RISK OF SEPSIS AND MORTALITY IN RELATION TO MODERATE, CRITICAL AND OVERALL HYPERGLYCEMIA**

*M. BELBA, A. ALEKSI, I. NEZHA, V. HIMA, I. DERVISHI, M. LAMCE*

**13. IMPORTANCE OF PERIOPERATIVE GLYCEMIC CONTROL IN PATIENTS WHO UNDERGO UROLOGY PROCEDURES**

*H. GANI, M. NACO, R. DOMI, I. OHRI, V. BEQIRI, H. SULA, P. SHKEMBI, N. KODRA*

**ORAL PRESENTATIONS - VI**

**GENERAL ANESTHESIA - II**

*Chairs: UNASE BUYUKKOCAK (TURKEY), ELVIN KESIMCI (TURKEY)*

**1. ANESTHETIC MANAGEMENT OF A PATIENT WITH PARKINSON'S DISEASE. A CASE REPORT**

*M.B. MIRAKA, B. ARAPI, G. HUTI, E. PANAJOTI, K. BRAHIMAJ*

**2. A CASE OF "ANESTHESIA MUMPS" AFTER PERCUTANEOUS NEPHROLITHOTOMY**

*E. ERKILIÇ, E. KESIMCI, A. YUNGUL, F. ALAYBEYOGLU, M. AKSOY*

**3. HOW DOES PNEUMOPERITONEUM AFFECT CEREBRAL OXYGENATION AND COGNITIVE FUNCTIONS?**

*O. KEREMOGLU, E. KESIMCI, T. GUMUS, A. BUT*

**4. EVALUATION OF ONE-YEAR ANESTHESIA REPORTS IN PATIENTS AGED ABOVE 80 YEARS**

*E. ERKILIC, E. KESIMCI, G. UGUR, C. DOGER, T. GUMUS, M. AKSOY, O. KANBAK*

**5. THORACOTOMY RELATED CENTRAL VENOUS CATHETER MIGRATION AND ACUTE RENAL FAILURE**

*R. YARIMOGLU, A. OZCAN, D. EBİLOGLU, N. OZCAN, C. KAYMAK, H. BAŞAR*

**6. ANESTHETIC APPROACH TO THE PATIENT WITH REFRACTORY AUTOIMMUNE HEMOLYTIC ANEMIA SCHEDULED FOR SPLENECTOMY**

*A.T.D. OZCAN, A. YALCIN, H. AKDAG, A. BUT, L. OZTURK, Ş.M. AKSOY*

**7. THE COMPARISON OF TOTAL INTRAVENOUS ANESTHESIA AND SEVOFLURANE ANESTHESIA EFFECTS ON POSTOPERATIVE RECOVERY BY QUALITY OF RECOVERY (QOR-40) SCORES IN LAPAROSCOPIC CHOLECYSTECTOMY**

*A. YILMAZ, G. OZKAN, M.E. INCE, M.B. ESKIN, S. SENKAL, V. YILDIRIM, A. COSAR*

**8. A RARE COMPLICATION OF CARDIOPULMONARY RESUSCITATION: TENSION PNEUMOTHORAX**

*D. KARA, P. AYDIN, E.O. AHISKALIOGLU, F. KARAKOC, E. KARAMAN*

**9. TRANSTHORACIC ECHOCARDIOGRAPHY GUIDED CENTRAL VENOUS CATHETER PLACEMENT IN PLASMAPHERESIS PERFORMED PREGNANT PATIENT**

*G. OZKAN, M.E. INCE, U. KARA, M.B. ESKIN, V. YILDIRIM*

- 10. DO WE NEED GUIDELINES? RESULTS OF A QUESTIONNAIRE AMONG ANESTHESIOLOGISTS IN ANKARA**  
*A. DONMEZ, S.B.YORULMAZLAR, J. ERGİL*
- 11. SEDO-ANALGESIA IS PREFERABLE FOR ELECTROPHYSIOLOGICAL STUDY FOR WOLF-PARKINSON WHITE SYNDROME**  
*N. PUSAT, V. YILDIRIM, S. DOGANCI, G. OZKAN, A. KILIC, A. COSAR*
- 12. PULMONARY COMPLICATION AFTER UPPER ABDOMINAL SURGERY AND RISK FACTORS THAT CAN BE ASSESSED**  
*N. KODRA, H. GANI, M. NACO, A. MANDI, B. RAKIPI, V. HAJRO, A. CELA, I. OHR*
- 13. IMPACT OF EPHEDRINE AND PHENILEPHRINE ON MATERNAL AND FETAL OUTCOME DURING MANANGEMENT OF HYPOTENSION AFTER SPINAL ANESTHESIA FOR CESAREAN DELIVERY**  
*A.S. ISUFI, A. MISJA, A. DELILAJ, V. SHPATA, H. SULA*
- 14. REHABILITATION OF PATIENTS WITH PHYSICAL AND NEUROPSYCHIC TRAUMA**  
*M. SARACI, M. KËRCI, E. SULAJ, B. KURTI, M. BAJRAKTARI*



## ORAL PRESENTATIONS

OP - I

1

OP - I

2

**THE USE OF SUGAMMADEX IN A  
PREMATURE INFANT WITH MULTIPLE  
ANOMALIES: A CASE REPORT**

**M. YALCIN, G. SAGIR, B. BALTACI, N. OZDEMIR,  
H. BASAR**

**Ankara Training and Research Hospital Anesthesiology  
and Reanimation Clinic, Ankara, Turkey**

*Introduction:* When sugammadex is compared with acetylcholinesterase inhibitors used to antagonise muscle relaxing effects, it is preferred with rapid onset and fewer side-effects.

In this case, the use of Sugammadex is discussed in the anaesthesia approach to a premature infant with multiple anomalies.

*Case Report:* A 47-day premature female infant being monitored in the neonatal unit for Arnold Chiari Type 2 malformation and prematurity was planned to undergo surgery for bilateral inguinal hernias which could not be reduced and for an umbilical hernia. From the birth of the infant weighing 1700gr, there was known to be spina bifida, hydrocephaly, pes equinovarus and bilateral inguinal hernia. A ventriculoperitoneal shunt was applied to the infant to correct spina bifida and hydrocephaly.

In the echocardiographic examination, VSD and small secundum ASD were determined. In preoperative evaluation, the infant weighed 2000gr and the general status was good. A 3/6 systolic murmur was determined. The vital signs were stable and blood test results were normal. After ECG and SpO<sub>2</sub> monitoring, anaesthesia induction was applied with 50% O<sub>2</sub> containing 50% N<sub>2</sub>O and sevoflurane. Fentanyl at 1mcg/kg and rocuronium at 0.6mcg/kg were administered intravenously then the patient was intubated with 2.5 size headless tube. Maintenance of anaesthesia was applied with 50% O<sub>2</sub> + 50% N<sub>2</sub>O in 2% sevoflurane. TOF-Whatch SX acceleromyography monitoring was made using the adductor pollicis muscle. At the 70th minute after surgery was completed, during which time the patient had no need for an additional dose of muscle relaxant, when the TOF value was 10%, 2mg/kg Sugammadex was administered. The TOF value reached 100% extubation was safely performed. Oxygen was administered with a mask at 3lt/min and after sufficient recovery the patient was transferred to the clinic

*Discussion and Conclusion:* In addition to the rapid effect of Sugammadex, it is preferred in paediatric cases in particular because of features such as the safety of the airway and not causing tachycardia. In paediatric cases with multiple anomalies may always occur in the general anaesthesia. In conclusion, it can be considered that Sugammadex can be used safely in the antagonising of rocuronium in infants with anomalies.

**PROPOFOL-MIDAZOLAM BASED  
SEDATION FOR MAGNETIC RESONANCE  
IMAGING IN CHILDREN: A-5-YEAR  
EXPERIENCE**

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*Objective:* Magnetic resonance imaging(MRI) is a non-invasive diagnostic procedure with loud noise, need for a complete inactivity during the process for perfect imaging, entering to a closed area and necessity for sedation or general anaesthesia, especially for mentally disabled children. Propofol is preferred in ambulatory anaesthesia because of being quickly metabolized, absence of accumulation, having less nausea and vomiting incidence compared with other agents. In this study we aimed to evaluate the effectiveness, side effects, complications and recovery time of patients undergoing MRI examination sedated with propofol-midazolam.

*Material and Methods:* The anaesthesia records of 719 consecutive pediatric patients who were sedated during MRI in children hospital between January 2010-December 2014 were retrospectively analyzed. Multiple parameters including demographic findings, the type of MRI, anaesthetic agents, complications, side effects, recovery time, the percentage of failed cases were discussed. Midazolam (0,1 mg/kg, iv) and propofol (2mg/kg) were given to the patients slowly in the MRI room. Spontaneous breathing of the patients were maintained and Ramsey sedation scores were 3-4 during the procedures. When there was a difficulty in completing the procedure because of movement additional dose propofol (1mg/kg) was administered. Propofol infusion (2 mg/kg/h) was given in prolonged procedures taking more than 20 minutes.

*Results:* Male/female ratio of the patients was 425/294, mean age was 3.01 years (1 month-18 years). ASA classification of them were 2-3 in 88,6%. Patients who had a neurological disorder was 80.4%. Cranial MRI ratio was 85.7%. The sedation method that we used was successful in 99.7% patients. Side effects such as allergic rash, increased secretion, desaturation, apnea, bradycardia, laryngo-bronchial spasm, hiccups were seen in 2.1% cases. The most frequent complication was desaturation seen in 4 patients (0.56%).

*Discussion and Conclusion:* In the literature sedation causes adverse effects in 20% of children during MRI procedure and the majority of them (5.5%) is respiratory problem. We provided adequate sedation with propofol-midazolam combination in our patients with high successful ratio and few side effects, complication rates.

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### PREVENTION OF WITHDRAWAL MOVEMENT ASSOCIATED WITH INJECTION OF ROCURONIUM IN CHILDREN: COMPARISON OF PARACETAMOL AND LIDOCAINE

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**Objective:** Pain from rocuronium injection is a common side effect reported to occur in

50–80% of the patients. This randomized, double-blind study was designed to evaluate the efficacy of pretreatment with i.v. paracetamol and lidocaine on prevention of withdrawal response during rocuronium injection in paediatric patients.

**Material and Methods:** After obtaining written consents from parents, 58 paediatric patients were randomly allocated into two groups to receive either i.v. paracetamol 50 mg(5ml) (paracetamol group, n=32) or i.v. lidocaine 0.5 mg/kg in saline (5 ml) (lidocaine group, n=26). Venous occlusion was applied 10 cm above the venous access site. Pretreatment drugs were injected and retained for 60 seconds(s) at the site of injection by an anesthetist blinded to group allocation. After release of the tourniquet, rocuronium (0.5 mg/kg) was then injected over 5 s, and the patient's response was graded on a four-point scale in a double-blinded manner.

**Results:** Although there was no difference in withdrawal (grade 0 or 1) movements between the groups ( $p>0.05$ ), the incidence of withdrawal (grade 2) movements was significantly higher in the paracetamol group than that in the lidocaine group ( $p<0.05$ ).

There were no generalized movements, in any group after pretreatment with the study drugs.

**Discussion and Conclusion:** The release of local mediators such as histamine and kinins are suggested as possible causative mechanism of the rocuronium-induced injection pain. Our results demonstrated that intravenous paracetamol is effective in decreasing the intensity of rocuronium injection pain, but is not as effective as lidocaine. This may be related to paracetamol's effects on local mediator release and lidocaine's antiinflammatory effects

### A CASE OF VACTERL SYNDROME- REPEATED ANAESTHESIA MANAGERMENTS

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**Introduction:** VACTERL syndrome is defined by combination of at least three of congenital abnormalities including vertebral anomalies (V), anal atresia (A), cardiac malformations (C), trachea-esophageal defects (TE), renal anomalies (R), limb abnormalities (L). The etiology hasn't been understood but mesodermal defect of the embryo during first trimester is suggested to be reason and it is estimated to occur in approximately 1,6/10000 live births. Here in we present the anesthetic management of a case with VACTERL syndrome who had eight different operations at different times.

**Case Report:** A newborn from G3P2A2 mother with birth weight of 2080 gram, gestational age of 35<sup>57</sup> weeks had an operation for isolated long gap esophagus atresia on the first day of life. While atrial septal defect, physiological ductus arteriosus, 1° mitral, aortic valve regurgitation, scoliosis, anal atresia were detected at first examination, further investigations after first operation of gastrostomy have revealed multiple abnormalities including right renal agenesis, left duplicated collecting system, thoracic spinal fusion and absence of costa. During 18 months period she had multiple anaesthetic implementations for gastrostomy, esophagus end-to-end anastomosis, jejunostomy, esophagoscopy, esophageal dilatation, central venous catheterization and bilateral ureteroneocystostomy. During her follow-up in intensive care unit (ICU), she had threatened for cardiorespiratory arrest for five times. In time, chronic lung disease, pulmonary hypertension were developed leading to an increase risk for anaesthetic procedures. She has been assessed as ASA class IV. Before this operation she was O<sub>2</sub>dependent, during induction of anaesthesia desaturation occurred even while intubation time was short, we had extubation difficulties like previous ones. Salbutamol inhaler was given as premedication. After standard monitorization she was pre-oxygenated with 100% of O<sub>2</sub>. Fentanyl 2 mcg/kg iv, atracurium 0.5 mg/kg iv, metilprednisolone iv, sevoflurane 2% in 50-50% O<sub>2</sub>-medical air were administered. Maintenance was provided with sevoflurane 2% in 50-50% O<sub>2</sub>-medical air. Deep tracheal aspirations were applied for bronchial secretions. Tramadol 1 mg/kg iv was given for analgesia.

**Discussion and Conclusion:** The anaesthetic management of patients with VACTERL syndrome is complicated on account of multiple abnormalities. Careful preoperative evaluation, full monitorization, preoxygenation, appropriate choice of anaesthetic agents and postoperative care in the ICU are required.

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## PERIOPERATIVE COMPLICATIONS AND CONCOMITANT DISEASES OF PATIENTS FOLLOWED IN POSTANESTHESIA CARE UNIT AFTER CLEFT LIP-PALATE SURGERY

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**Objective:** Cleft lip/palate is one of the most common craniofacial abnormalities seen both worldwide and in our country. It is important for anesthetists to know about the airway management, associated abnormalities and perioperative complications of this patient group.

**Material and Methods:** After obtaining ethical committee approval, cleft lip/palate patients followed in postanesthesia care unit (PACU) after surgery between 2005-2013 were retrospectively reviewed. A total of 20 patients were included to the study. Demographic properties, concomitant diseases, perioperative complications and indications for PACU admission were recorded.

**Results:** Fourteen of the patients had cleft lip and palate together. Ten of the patients were syndromic. Most commonly seen syndrome was Pierre-Robin. Sixteen of the patients had micrognathia and the second most common associated abnormality was atrial septal defect. Difficult mask ventilation was seen in 1 of the patients who had also micrognathia and encephalocele. The incidence of difficult intubation was 40% (8 patients). Fifteen of the patients were followed in PACU for close monitoring because of concomitant syndromes and difficult airway management. The other reasons for PACU admission were postoperative dyspnea in 2, desaturation following extubation in 1, delay in awakening in 2 of the patients. Four patients stayed longer than 24 hours in PACU. Two of these patients had desaturation episodes, one had pneumonia whereas the other one developed postoperative fever.

**Discussion and Conclusion:** The most compelling part of the anesthetic technique during cleft lip/palate surgery is the airway management which is often difficult in association with several syndromes. Even in the absence of a diagnosed associated syndrome, these children may have a syndromic face, micrognathia and difficult airway. In the case of difficult intubation; PACU admission should be evaluated for providing safe and optimum conditions for extubation and/or for close monitoring after extubation.

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## THE USE OF A FIBER OPTIC BRONCHOSCOPE IN A TRACHEAL RESECTION

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**Introduction:** Tracheal stenosis following prolonged intubation is a serious problem. The cuff-pressure of endotracheal tubes plays an important role on the development of tracheal stenosis. Tracheal stenosis is come up mainly where the endotracheal tube cuff has been in contact with the tracheal wall. Reduced blood flow due to the high cuff pressure cause fibrous tissue formation that may lead tracheal stenosis. We aimed to present a case related to the effectiveness of fiber optic bronchoscopy (FOB) in a patient who underwent tracheal stenosis surgery.

**Case Report:** A 35-year-old woman was followed up for 35 days in the intensive care unit after traffic accident. She was referred to our hospital with the complaints of gradually increasing difficulty in breathing and an audible wheeze for few days. She was underwent diagnostic bronchoscopy and the stenosis was seen. It was decided to perform the surgery by both thoracic and cardiovascular surgeons together since the stenosis was placed retrosternally and 2 cm just above the carina. Intubation was performed under FOB guidance and the tube was fixed when the tip passed immediately after vocal cords. After stenotic segment was resected, endotracheal tube was advanced to be guide for anastomosis and proper place of the tube was checked with FOB. After completion of the anastomosis, it was checked again with FOB. It was showed that there was a leakage in the anastomosis line. After the correction of the anastomosis, the surgery was over and the patient was transferred to the intensive care unit (ICU). The tracheal extubation was carried out successfully one day after the operation in the ICU.

**Discussion and Conclusion:** Although lower tracheal stenosis is rare, sometimes it becomes a life-threatening state. Surgery is the most effective treatment, although the procedure is challenging for the anesthesiologists. FOB is the main visualization technique for identification of tracheal stenosis either preoperatively or intraoperatively.

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## ANESTHETIC MANAGEMENT OF A PATIENT WITH JOUBERT SYNDROME

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**Introduction:** Joubert syndrome is a otosomal recessive disorder, characterized with hypoplasia of cerebellar vermis and brainstem, resulting in problems in respiratory drive, leading to life-threatening episodes of hyperpnea and apnea<sup>1</sup>. Along with this abnormal breathing pattern, generalized hypotonia, high arched palate, large protruding tongue, laryngomalacia and micrognathia, which may all complicate the anesthetic management, have all been observed in these patients<sup>2</sup>. Our aim is to present a child with this rare syndrome, who underwent a procedure for trigger finger.

**Case Report:** Our patient was a 3-year-old, 15 kg male, diagnosed to have Joubert syndrome. He had atypical facial appearance with large protruding tongue, short neck and micrognathia; along with generalized hypotonia, nystagmus and hepatosplenomegaly. Preoperative evaluation revealed normal ECG, chest x-ray and laboratory tests. Operating room was prepared for difficult airway management. Sevoflurane was used for induction. Propofol 2 mg/kg was administered and laryngeal mask airway (2,5 no.) was placed easily. Anesthesia was maintained by sevoflurane in oxygen/air, and remifentanyl infusion. Neuromuscular blocking agents (NMBAs) and opioids were avoided. Paracetamol was administered for pain management. In ICU, a hyperpnea episode of 50 bpm occurred, lasted approximately 25 minutes and ended abruptly without any intervention. During the follow-up period, episodes did not recur.

**Discussion and Conclusion:** In Joubert syndrome, abnormal respiratory pattern and sensitivity to anesthetic agents and opioids are the highlighted features. During anesthesia, controlled or assisted ventilation and maintenance of a patent airway by using airway devices, without leaving the patient on his/her own spontaneous ventilation, were recommended. Total intravenous anesthesia including remifentanyl and regional techniques were reported to be both safe and effective.

In conclusion; Assisted or controlled ventilation, maintenance of a patent airway with airway devices, and avoidance of opioids and NMBAs, with a follow-up period in ICU in the postoperative period, may optimize the anesthetic management of these patients.

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## CEREBRO-OCULO-FACIO-SKLELETAL SYNDROME (COFS, PENA-SHOKEIR II SYNDROME, COCKAYNE SYNDROME TYPE II) IS A RARE, AUTOSOMAL-RECESSIVE AND EARLY LETHAL DISEASE

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**Introduction:** Clinical presentation is characterized by facial dysmorphism, micrognathia, microcephaly, microphthalmia, cataract, blepharophymosis, kyphoscoliosis, hypotonia, hyporeflexia, arthrogryposis, osteoporosis, congenital flexion contractures, developmental delay, convulsions, severe psychomotor and mental retardation, degeneration of brain and spinal cord. We report anaesthetic management for ophthalmic surgery in a case of COFS.

**Case Report:** A seven-month-old, ASA II, 39 weeks and 2800 gr weight born infant was referred with raucous cry and disabling to open her eyes to pediatric polyclinic. Beside a good general status; she had been diagnosed as COFS with symptoms like microcephalia, facial dysmorphism, retromicrognathia, nystagmus, deep and small eyes, prominent nasal root, pit palate, closed lower lip by upper lip, camptodactyly, widely spaced nipples, flexion contracture of upper and lower extremities, Rocker – Bottom feet. Ophthalmic surgery planned for bilateral lensectomy-anterior vitrectomy due to bilateral leukocoria and bilateral congenital cataract. After premedication, all standard monitors were applied on the patient's arrival in the operating room. Anesthesia was induced with propofol-sevoflurane and propofol-fentanyl-rocuronium were added for deep anesthesia and muscle relaxation. Size 1 laryngeal mask airway (LMA) was inserted uneventfully. Remifentanyl-propofol infusion was used for the maintenance. Paracetamol IV was administered for postoperative analgesia. Anesthesia was completed successfully and the patient was kept in the Intensive Care Unit.

**Discussion and Conclusion:** COFS was initially reported by Lowry in 1971 and delineated by Pena and Shokeir in 1974. It is a progressive syndrome involving central nervous and musculoskeletal systems, leading to recurrent aspiration pneumonia, growth deficiency, malnutrition, respiratory infections due to pulmonary hypoplasia and child death. Maintenance of airway and control of perioperative respiratory complications are important for anaesthetic management for patients with this syndrome. Difficult airway equipment must be available before anesthesia induction because of high incidence.

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## GENERAL ANAESTHESIA FOR A CHILD WITH LAURANCE-MOON-BARDET- BIEDL SYNDROME: CASE REPORT

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**Introduction:** Laurance-Moon-Bardet- Biedl syndrome (LMBBS) is an autosomal recessive disorder characterized by cone-rod dystrophy, postaxial polydactyly, central obesity, cognitive impairment, hypogonadism, renal dysfunction, retinal pigmentation degeneration, mental retardation and short stature. As the secondary features of LMBBS, heart defects, diabetes mellitus, hypothyroidism, renal diseases, hepatic, dental and facial abnormalities have been reported. In this report, we aimed to present our anesthetic management in a patient with LMBBS.

**Case Report:** Eleven years old boy who was planned surgery for polydactyly of right hand. He was diagnosed to have Bardet-Biedl syndrome in early childhood. He had postaxial polydactyly both upper limbs, mild mental retardation and partial blindness, hypogonadism and micro penis. There was no history of cardiovascular abnormalities, diabetes mellitus or abnormal renal function. He was consulted by pediatrics, neurology and cardiology. His BMI was 37 and he had truncal obesity. Macroglossia, restriction in thyromental distance, restriction of flexion of head were observed. Under these circumstances, the necessary measures were taken for the possibility of difficulties with intubation and saving airway patency. Standard monitors including pulse oximeter, electrocardiogram and noninvasive blood pressure were applied. General anaesthesia was induced with  $O_2$ ,  $N_2O$ , and sevoflurane. Mask ventilation was easy. Intravenous access was secured with a 24 G cannula on the dorsum of the left hand and he was medicated by intravenous  $1 \mu g kg^{-1}$  fentanyl and  $0.6 mg kg^{-1}$  rocuronium. The trachea was then intubated with a cuffed 6.0 endotracheal tube easily and ventilation was continued with sevoflurane in oxygen and nitrous oxide,  $FiO_2$  0.5. After completion of the surgery, the trachea was extubated with the patient awake. There was no problem in the recovery room and he was discharged.

**Discussion and Conclusion:** Children with this condition frequently require multiple anaesthetic procedures for both diagnostic and therapeutic measures including MRI, uro-gynaecological procedures or corrective surgeries for limb deformities. We chose to intubate this patient's trachea because of his obesity and we had no difficulty in intubation. General anaesthesia was safely performed in this patient with a rare congenital condition. Difficulties in managing the airway, hepatic, thyroid and renal dysfunction and cardiovascular defects may complicate anesthesia in these patients.

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## KNOWLEDGE AND PRACTICE CONSCIOUS SEDATION WITH NITROUS OXIDE IN THE CONTEXT OF ALBANIA

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**Objective:** Fear and avoidance of dental treatment as knowledge to be major deterrents to oral health: the image of dentist as an instrument of pain is not justified. In fact dentist promoted and researched methods of pain and anxiety control. Wells, a dentist, was first to use nitrous oxide for sedation, and Morton, a physician introduced ether. So conscious sedation is in dentistry improved access of quality of care in patients who have difficult coping with treatment. The aim of this study was to know the diffusion of the conscious sedation in Albania by an investigation made on a sample of 100 physician include (survey) in oral health operator.

**Material and Methods:** We investigate the knowledge of conscious sedation, the use, the demand by patient and more else.

**Results:** The results that we extrapolated in graphs, out of despite the fact that the sample was small, the result shows us that a lot of dentists seems not interested in conscious sedation. Whears others are intrigued but not enough informed and that only 2 physician of the tale sample used it under suggestion of their patient too.

**Discussion and Conclusion:** Due to the results we can say that conscious sedation is stil unpreferred application because of limited presentation about the practice of it during dental procedures.

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## GENERAL ANESTHESIA IN A CHILD WITH SCHWARTZ-JAMPEL SYNDROME

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**Introduction:** Schwartz-Jampel Syndrome (SJS) is a rare autosomal recessive disorder related to chromosome-1 (1). The main characteristic properties of the disease are micrognathia, limited mouth opening, myotonia, bone dysplasias, joint contractures and short stature. During general anesthesia, endotracheal intubation may be difficult because of limited mouth opening, jaw muscle rigidity and micrognathia. In addition, patients with SJS are under risk of developing malignant hyperthermia (1-2).

**Case Report:** We present a 3.5 year-old boy with SJS type-1A undergoing general anesthesia for tonsillectomy and adenoidectomy. He had bilateral ptosis, limited palpebral opening, microphthalmia, limited mouth opening, small mandibula, hypertrophic muscles, hyporeflexia, pectus carinatum and joint contractures. Following standard monitoring with 3-lead electrocardiogram, pulse oximeter, non-invasive blood pressure; anesthesia induction was maintained with propofol and morphine. Temperature and etCO<sub>2</sub> monitoring were also performed. There was no difficulty with mask ventilation and intubation. Continuous intravenous infusion of propofol was used for maintenance of anesthesia. The surgical procedure was difficult to perform because of limited mouth opening and the airway pressures were tending to be high due to the compression of the endotracheal tube by the mouth gag. Paracetamol was used for the early postoperative analgesia. Adequate anesthesia and analgesia was achieved without any complications and the patient was transferred to post-anesthesia care unit (PACU) after extubation. In PACU, he suffered from abdominal distention which recovered after enema treatment. His body temperature was measured between 36-37.6 °C. The patient was discharged from PACU after nearly 36 hours without any problems.

**Discussion and Conclusion:** Malignant hyperthermia and difficult airway are the two major potential complications that can be seen during anesthesia of patients with SJS. Careful preoperative evaluation and perioperative monitoring, keeping dantrolene sodium and difficult airway equipment ready in the operating room are the keystones of a safe anesthetic management.

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## PERSISTENT RIGHT BUNDLE BRANCH BLOCK DUE TO VENOUS PORT CATHETER PLACEMENT IN A PEDIATRIC PATIENT

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**Introduction:** More than 15% of patients undergoing intervention for central venous access, experience early or late complications. Cardiac arrhythmias are the less reported, However, there are reports, which highlight the life-threatening potential of this complication, especially in the presence of preexisting dysrhythmias<sup>1</sup>. Arrhythmias often occur due to inappropriately advanced guidewires and catheters<sup>2</sup>. Our aim is to present a child, who developed right bundle branch block (RBBB) during port catheter insertion.

**Case Report:** Our patient was a 7-year-old male, diagnosed to have Acute Lymphocytic Leukemia (ALL). In the preoperative evaluation, we learned that he once developed bradycardia, which was evaluated by the Department of Pediatric Cardiology, was reported to be due to high doses of steroid therapy and dose was adjusted accordingly. On arrival to the operating room, he was monitored with ECG, non-invasive blood pressure and pulse-oximetry. ECG revealed normal sinus rhythm; 100 bpm. Anesthesia was maintained by sevoflurane in O<sub>2</sub>-air, supplemented by remifentanyl infusion. Standard Seldinger technique was used for access. Immediately after catheter placement, bradycardia developed and responded well to 0.03 mg kg<sup>-1</sup> intravenous atropine and catheter withdrawal. ECG revealed RBBB, which did not alter hemodynamic stability, so did not require any intervention. Ensuring that the hemodynamics were stable, the procedure was completed. Two weeks after the procedure, the RBBB still persisted, without complicating the treatment process of leukemia.

**Discussion and Conclusion:** The incidence of RBBB during cannulation is 3-12%, due to its superficial location. In patients with preexisting dysrhythmias, CVC complicated with arrhythmias may result in life-threatening complete-atrioventricular-block. Guidewire and catheter advancement should be performed according to the predetermined distance from insertion site to cavo-atrial junction, where the catheter tip is to be maintained. Several techniques, including simple formulas and anatomical landmarks, were reported to predetermine the length of guidewire and catheter advancement. Preventing overadvancement by predetermining the length of guidewire and catheter to be advanced through central veins, will provide a safer central venous access.

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### LOCAL ANESTHESIA IN ANTERIOR EYE SEGMENT SURGERY AND ITS COMPLICATIONS

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**Objective:** The efficacy and performance of various local anesthesia modalities for cataract surgery under monitored anesthesia care have been reviewed such as intra- and postoperative analgesia and patient satisfaction, of retrobulbar block, sub-Tenon block, and topical anesthesia.

**Material and Methods:** A comparative evaluation of these different modalities in terms of akinesia, patient-perceived pain during both anesthesia administration and intraoperative cataract surgery is presented.

**Results:** From these techniques, peribulbar anesthesia has been very successful over the retrobulbar anesthesia seen its effectiveness and safety. However, peribulbar anesthesia is not without risk.

**Discussion and Conclusion:** Reports of complications relating increasing of blood pressure, presence of tonic-clonic seizures associated with local anesthesia in ophthalmic surgery have increased conspicuously in recent years. Sub-Tenon's capsule anesthesia for anterior segment surgery avoids the risks of retrobulbar and peribulbar injections.

### NITROUS OXIDE: YES OR NO?: A CRITICAL REVIEW

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**Objective:** Considering the continuous progress made in the field of anaesthetics, the aim of this work is centred on scientifically determine if the use of N<sub>2</sub>O is nowadays to be considered not only safe but useful.

**Material and Methods:** In order to accomplish this task, a wide overlook of the existing scientific literature has been considered and cited together with the perspective given by the very own professional experience, leading to a quite evident conclusion.

**Results:** Seen the vast amount of studies concerning this matter and the various conclusions, for whether temporary they may be, that they have come to, it is still unsafe to lean too confidently on either side.

**Discussion and Conclusion:** We should therefore keep working with the reliable evidence that we already have today and go on using N<sub>2</sub>O in all those fields it has proved to be not only safe but unreplacable so far.

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## MYOCARDIAL CONTUSION IN THORACIC TRAUMA

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**Introduction:** Blunt cardiac injury (BCI) encompasses a spectrum of pathology silent, transient arrhythmias to deadly cardiac wall rupture. The most common form is "cardiac contusion", which remains the subject of considerable debate. The absence of a clear definition and accepted gold standard for testing makes the diagnosis of cardiac contusion difficult. Important considerations in blunt cardiac trauma include arrhythmia, cardiac wall motion, abnormalities possibly progressing to cardiogenic shock, and rupture of valves, the septum or a ventricular, atrial or septal wall.

**Case Report:** The patient 26 years old has been admitted to our hospital after an automotive accident with the diagnosis "Polytrauma blunt thoracic trauma. In admission orthopneic, decubitus dorsalis, spontaneous breathing  $F_R -24 - 25'$ , sat  $O_2 - 85\%$  ( $O_2$  nasal); conscious; the hemodynamic  $F_K - 23d$  TA 130/80 mmHg. In the monitor is seen "supraventricular tachycardia with aberration" wide QRS, right bundle branch block (dexter) and raise of ST in the anterior and inferior leads. Immediately this case has been consulted with the cardiologist, was repeated another ECG, transthoracic echo, cardiac enzymes and chest x rays. In the same time the surgeon put a drain in the pleural space, because the patient has hemothoraces sinister (200ml blood). The first thoracic ultrasound without pericardial liquid. Cardiac enzymes high.

The patient complains chest pain and pain on the left arm and shoulder. In all the examination we conclude that the patient has fracture of clavicle, ribs fractures, left hemothoraces and a suspected of myocardial contusion. The patient was admitted in the ICU and monitored 24/24h with electrocardiography two times daily ECG and one time daily cardiac enzymes and transthoracic ultrasound.

The patient was followed step by step with EKG and cardiac enzymes (we have also high transaminase and leukocytosis).

The patient has been treated with verapamil, anticoagulant, antibiotic, antiinflammator (AINS), cortisone, analgesic (tramadol) and  $O_2$  therapy.

**Discussion and Conclusion:** Although we have new device, it's yet difficult to put the right diagnose in the cardiac contusion. The treatment of a non penetrating trauma or a blunt thoracic trauma don't need open surgery and it is not established.

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## ANESTHESIA EXPERIENCE IN PATIENTS UNDERGOING PERCUTANEOUS MITRA-CLIP IMPLANTATION

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**Objective:** The Mitra-Clip implantation system is a new, alternative method to conventional open surgery which has begun to be used in patients with symptomatic, functional, severe mitral insufficiency who are accepted as high risk patients. The procedure is generally performed under the guidance of fluoroscopy and transesophageal echocardiography (TEE) and under general anaesthesia in a catheterization laboratory (1). The current study aimed to present our anaesthesia experiences in patients undergoing Mitra-Clip implantation procedures.

**Material and Methods:** The electronic files and medical records of 84 patients with severe mitral insufficiency who had undergone Mitra-Clip implantation under general anaesthesia between July 2012 and March 2015 were retrospectively investigated in terms of anaesthetic findings.

**Results:** 84 patients (54 male, 30 female) with mean age of  $68.5 \pm 10.2$  years were analyzed. The mean duration of the procedure was  $140.9 \pm 48.2$  minutes and the mean duration of anaesthesia was  $165.7 \pm 50.6$  minutes. Following intra-arterial pressure monitoring under mild sedation, anaesthesia was induced with midazolam, thiopental sodium, fentanyl and non-depolarizing muscle relaxant by titration according to the hemodynamic findings. An inhalation agent (sevoflurane or desflurane) in  $O_2$ -air mixture was used in anaesthesia maintenance. The procedure was not successful in two patients. Postoperative renal insufficiency developed in three patients. All patients except seven patients (8.3%) were left intubated and transferred to the intensive care unit. These patients were extubated after a mean duration of 3 hours. The duration of hospitalization in the intensive care unit and discharge from hospital was 2 to 4 days on average, respectively.

**Discussion and Conclusion:** Percutaneous Mitra-Clip implantation procedure is quite difficult for anaesthesiologists either due to the procedure itself or due to the population on which the procedure is performed. The main aim of anaesthesia management is to provide hemodynamic stability. The preoperative preparation and anaesthesia methods should be the same as the patients undergoing cardiac surgery. Together with the increase in experience in this subject, the procedure could be performed successfully and it could provide many advantages.

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## ANESTHESIA MANAGEMENT IN A PATIENT WITH A RARE COMPLICATION OF TRANSCATHETER AORTIC VALVE IMPLANTATION: AORTIC ROOT RUPTURE

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**Introduction:** Transcatheter aortic-valve implantation (TAVI) is an novel procedure that is applied with increasing frequency for patients with severe aortic stenosis that are not candidates for surgery. Although compared with medical therapy TAVI increases the survival of inoperable patients, complications related to the procedure can be fatal. Aortic root rupture is one of the most severe complications of transcatheter aortic valve implantation

**Case Report:** An 80-year-old woman with a history of diabetes mellitus, coronary artery disease and severe aortic stenosis was scheduled for TAVI procedure due to her age and co-morbidities. For this patient, monitoring included pulse oximetry, 5-channel electrocardiogram, invasive blood pressure, urinary output and temperature. The maintenance of normothermia was provided by the use of heating blanket and warm intravenous fluids. Sheet catheter was placed into the right jugular vein in order to either measure central venous pressure or placed the electrodes for rapid ventricular pacing. Midazolam 2 mg IV was administered immediately before monitoring. Anesthetic induction was performed with bolus doses of propofol, fentanyl and rocuronium. Anesthesia was maintained with sevoflurane and remifentanyl infusion. TEE was placed following a smooth intubation. The patient had no trouble during procedure. After aortic valve was successfully implanted, patient was become hemodynamically unstable condition and meanwhile TEE demonstrated pericardial tamponade. Whereas the aortic angiography indicate the aortic annulus rupture, the patient underwent emergent cardiac surgery. Despite the long-standing intervention, patients hemodynamic stabilization could not be achieved and died because of the heart failure.

**Discussion and Conclusion:** Although TAVI is a minimally invasive intervention, perioperative preparations should be always the same as that for perform in open heart surgery. Both anesthetic and surgical pre-procedural careful assesment and planning vital to avoid this kind of complications.

## ANESTHESIA IN A MITRACLIP DEVICE PATIENT WITH A SECOND TRANSPLANTED KIDNEY

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**Introduction:** Chronic renal failure is strongly related to poor outcomes in cardiovascular diseases. In end-stage renal failure patients, cardiac dilatation, valve regurgitations, and left ventricular dysfunction are frequently observed. Thus anesthetic management of these patients requires safe conduct of anaesthesia with knowledge of immunosuppression, other risk factors. We would like to share our anesthetic experiences with a case of successful mitral valve repair by MitraClip device in a patient who had undergone renal transplantation twice.

**Case Report:** A 50-year-old female patient with a medical history of end stage renal disease secondary to hypertension received cadaveric kidney transplant twice. She had a history of smoking and two vessel coronary artery bypass grafting. Her baseline serum creatinine was 2.3 mg/dl.

Echocardiography demonstrated severe mitral regurgitation and a hypokinetic left ventricular wall motion with an ejection fraction of 25%. Due to high surgical risk, she was referred for percutaneous treatment with the MitraClip valve repair system. In the operation theater, she was monitored by non invasive blood pressure (NIBP), pulse oximetry and ECG were applied. Induction was carried out with Pentothal 250 mg, Lidocaine 60 mg, Rocuronium bromide 40mg. After induction, the right internal jugular vein and right radial artery were cannulated. Anaesthesia was maintained with TIVA (propofol-remifentanyl). The procedure lasted 90 min. At the end, muscle paralysis was reversed with sugammadex and the patient was transferred to the intensive care unit. She was moved out of the intensive care unit on the 3th postoperative day.

**Discussion and Conclusion:** To our knowledge, this is the first reported case of successful MitraClip device implantation in twice renal transplanted patient. Despite improvements in surgical technique, perioperative morbidity and mortality continue to be a significant problem. Recently, MitraClip implantation is a new and exciting development in the treatment of severe mitral regurgitation. Anesthetic management of these patients is proceeded as that for any patient for cardiac surgery. Nevertheless, successful implants are associated with an improvement in renal function, likewise in our patient.

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## IS TICAGRELOR SAFE IN CARDIAC SURGERY? A PRESENTATION OF 3 CASES

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**Introduction:** It has been already known that the number of patients who use new age antiaggregants and anticoagulant drugs and require surgical operations increase constantly. The platelet malfunction is one of the frequent reasons for bleeding complications after coronary artery bypass grafting surgery (CABG). The aim of this presentation is to evaluate the effect of ticagrelor which is a specific and irreversible inhibitor of platelet aggregation on bleeding as well as blood and blood products usage after CABG.

**Case Reports:** All the cases had loading dose of 180 mg ticagrelor upon diagnosis of acute MI in the emergency room. Following the loading dose, all the patients underwent coronary angiography. Ticagrelor was administered to the patients until 2 days before the surgery as the dose of 90 mg twice a day. Patients used acetylsalicylic acid and low molecular weighted heparine (LMWH) after interruption of ticagrelor until the day of surgery. All the patients were evaluated peroperatively which included intraoperative and postoperative 48-hours period.

**Case 1:** A 54-year-old male patient underwent 2-vessel off-pump CABG. There were no blood pack transfusions intraoperatively. The mean hematocrit level was  $35 \pm 1.41\%$ . The chest tube drainage level was 500 mL.

**Case 2:** A 81-year-old male patient underwent 3-vessel on-pump CABG. The total cardiopulmonary bypass time was 94 minutes and aortic cross-clamp time was 45 minutes. Two fresh whole blood packs were administered to the patient. The mean hematocrit level was  $29.8 \pm 1.2\%$ . The chest tube drainage level was 700 mL.

**Case 3:** A 50-year-old male patient underwent 2-vessel on-pump CABG. The total cardiopulmonary bypass time was 89 minutes and aortic cross-clamp time was 43 minutes. One fresh whole blood pack was administered to the patient. The mean hematocrit level was  $37.2 \pm 2.8\%$ . The chest tube drainage level was 650 mL.

**Discussion and Conclusion:** In our cases we did not have any bleeding complication due to ticagrelor but randomized controlled studies should be done to assess the functionality of this novel drug.

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## MANAGEMENT OF INTRAOPERATIVE VENTRICULAR FIBRILLATION DURING REMIFENTANIL INFUSION

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**Introduction:** Ventricular fibrillation (VF) is a major cause of death in adults. We present the management of an unexpected VF in an adult patient undergoing general anesthesia with remifentanil.

**Case Report:** Fifty-one years old male patient undergoing lumbar spinal mass resection had no significant medical history. No premedication was given. Monitoring included ECG, SpO<sub>2</sub> and NIBP. Anesthesia was induced with propofol 2 mg kg<sup>-1</sup>, rocuronium 0.5 mg kg<sup>-1</sup>, lidocaine 1 mg kg<sup>-1</sup> and fentanyl 1.5 mcg kg<sup>-1</sup>. Orotracheal intubation was performed by direct laryngoscopy using a 9.0 mm cuffed tracheal tube and anesthesia was maintained using controlled ventilation with air/oxygen 50/50 % and TIVA with 8 mg kg h<sup>-1</sup> propofol and 0.5 mcg kg h<sup>-1</sup> remifentanil. After radial arterial cannulation for invasive arterial blood pressure monitorization, patient's position was changed to prone. Approximately at the 40<sup>th</sup> minute of the operation a ventricular arrhythmia (HR 64-68 min<sup>-1</sup>) and shortly after ventricular bradycardia (HR 36 min<sup>-1</sup>) occurred. Atropine 0.01 mg kg<sup>-1</sup> iv was done and HR increased to normal value (84 min<sup>-1</sup>). The arterial blood gas analysis and cardiac enzymes were normal. Ventricular arrhythmia continued and transformed into VF. Surgical operation and anesthetic medication was stopped, patient was returned to supine position and resuscitation was initiated, immediately. Lidocaine 1 mg kg<sup>-1</sup> iv was done while defibrillator was prepared. In the first defibrillation attempt with 150 joule, sinus rhythm was obtained. No abnormality was appeared in the arterial blood gas analysis and surgical wound was closed properly under general anesthesia with 2% sevoflurane in air/oxygen 50/50%. Following extubation without any problem, the conscious patient was transferred to the neuro-intensive care unit (NICU) with stable vital signs. There wasn't any abnormality in the postoperative transthoracic echocardiography and angiography and the patient was discharged in the postoperative 1<sup>st</sup> day.

**Discussion and Conclusion:** In the literature, it was reported that severe bradycardia might be occur due to remifentanil IV infusion. We conclude that the most reasonable responsible factor in the development of VF was remifentanil infusion in our patient who had no abnormality in the clinical or laboratory assessments in the perioperative period

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## SPONTANEOUS TENSION PNEUMOTHORAX FOLLOWING CORONARY ARTERY BYPASS GRAFTING IN A PATIENT WITH BULLOUS LUNG DISEASE

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**Introduction:** Bullous lung disease which is an acquired disease of the lung can be life threatening due to its possible postoperative pulmonary complications. Tension pneumothorax occurs when the intrapleural pressure exceeds atmospheric pressure and frequently is seen as a consequence of rupture of bullous segment of the lung in the postoperative period of cardiac surgery. It causes shifting of the mediastinal tissues which needs emergent intervention. Here we present a case of spontaneous tension pneumothorax after cardiac surgery with bullous lung disease.

**Case Report:** A 65-year-old male patient admitted to hospital with chest pain. He was scheduled for coronary artery bypass grafting (CABG) operation after the evaluation of coronary angiography. He had history of smoking and he had rhonchi on his physical examination. Left bullous lung was observed on intraoperative inspection. He underwent on-pump 3-vessel CABG operation and was taken to the intensive care unit (ICU) without any problem. The patient had sudden hypotension and bradycardia 2 hours later postoperatively. The patient was explored via re-sternotomy in the ICU and pneumothorax was observed in the right lung due to ruptured bullous segment. Following re-sternotomy the hypotension and bradycardia has improved. Ruptured bullous segment was repaired. The patient was discharged 15 days after surgery without any complication.

**Discussion and Conclusion:** The tension pneumothorax is an urgent situation which can cause mortality if untreated. In cardiac surgery, the intraoperative assessment as well as the preoperative assessment of the patient for pulmonary disorders is important. In conclusion, the postoperative management of the ventilator should be arranged delicately in the group of patients with high risk for pulmonary complications.

## COMPLICATIONS ENCOUNTERED IN TRANSCATHETER AORTIC VALVE IMPLANTATION (TAVI) PERFORMED PATIENTS AND ANESTHESIA MANAGEMENT

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**Introduction:** Despite aortic stenosis has poor prognosis, open heart surgery is avoided in high-risk patients and TAVI is used which is less invasive. During TAVI, anesthesiologists take an active role in each period due to increased perioperative morbidity and mortality. We aim to mention complications that encountered and anesthesia management in two TAVI performed patients.

**Case Report:** Intravenous Access was established with 16 G cannula in the operating theater. After patients monitored included pulse-oximetre, 5-channel electrocardiogram, invasive blood pressure, urinary output, temperature and cerebral puls oximetry 2 mg IV midazolam administration was performed for premedication. Anesthetic induction was performed with bolus doses of propofol, fentanyl and rocuronium. Anesthesia was maintained with sevoflurane and remifentanyl infusion. Sheet catheter was placed into the right jugular vein and pacing electrode was pass through this to locate. TEE was placed in order to evaluate the valve and processing the procedure. Case 1: An 76-year-old man with a history of coronary artery bypass surgery, hypertension, diabetes mellitus and severe aortic stenosis with 37 % EF was scheduled for TAVI procedure due to high surgical risk, age and co-morbidities. The patient had no trouble during procedure. After aortic valve was successfully implanted, SVT was occurred spontaneously. Heart rate was returned to normal range within a few minutes without any medical treatment or defibrillation. The patient was extubated uneventfully and transferred to the ICU. Case 2: An 71-year-old man with a history of coronary artery bypass surgery and severe aortic stenosis with 31 % EF was scheduled for TAVI procedure due to high surgical risk. After aortic valve was successfully implanted and procedure was performed smoothly. However, the patient was intubated again within the first hour following extubation in the cause of acute pulmonary edema. Medical treatment with mechanical ventilatory support was applied and the patient was extubated again within 4 hours.

**Discussion and Conclusion:** Although transcatheter aortic valve implantation is a non-invasive technique, anesthetist must be beware at all stages. Therefore perioperative preparations should be always the same as that for perform in open heart surgery and should not be underestimated.

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## USE OF SUGAMMADEX FOR NON-CARDIAC SURGERY IN A CARDIAC TRANSPLANT PATIENT

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**Introduction:** Ever since first performed in 1967 by Christian Bernard, cardiac transplantation is a surgical procedure with increasing frequency every year. With improved perioperative monitoring and care, together with better patient selection and pharmacologic agents like immunosuppressants; transplantation patients survive longer and have a high quality of life. As a result; they present with new health problems and anesthesiologists may encounter these patients at any time like other health care professionals. The potential risks such as rejection and infection brought about by immunosuppression and denervation of the transplanted heart make anesthetic management of cardiac transplant patients unique. The transplanted heart is known as anefferent organ; it has no sensory, sympathetic and parasympathetic innervation. But consistent evidence indicates that some degree of sympathetic and parasympathetic re-innervation can be reestablished with time. With denervation and different degrees of re-innervation, physiological and pharmacological interactions may be different in an allograft heart. Therefore, unexpected responses to anticholinergic drugs and anticholinesterases have been described. Sugammadex; a new direct acting reversal agent for neuromuscular blockage may be a safe alternative for cardiac transplant patients.

**Case Report:** This case report describes the successful use of sugammadex in a cardiac transplant patient. A 60 years old male patient of average height and weight, the recipient of a cadaveric heart transplant 10 years earlier presented with mediastinoscopy for a mediastinal mass. At the end of an uncomplicated surgical and anesthetic procedure; sugammadex was administered for reversal of rocuronium. After an uneventful extubation and postoperative recovery, the patient was discharged from the hospital.

**Discussion and Conclusion:** As a result; the clinical use of sugammadex in cardiac transplant recipients may be a useful strategy to avoid a potentially catastrophic response to anticholinergics and anticholinesterases, like neostigmine and atropine.

## TRANSESOPHAGEAL ECHOCARDIOGRAPHY( TEE) "A LODESTAR" FOR GUIDING INTRAOPERATIVE PLACEMENT OF PULMONARY ARTERY CATHETER (PAC)

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**Introduction:** The use of PAC in cardiovascular surgery has decreased over the last several years, but is still widely used and valuable for monitoring hemodynamics perioperatively in certain pathological conditions. It provides clinical information on heart chamber pressures, blood flows and vascular resistances. We describe a case, who underwent open cardiac surgery for CABG, MVR and tricuspid valve repair with ring, in which guidance of catheter insertion by TEE intraoperatively.

**Case Report:** A 56-year-old woman who was scheduled open cardiac surgery. With initiation of cardiopulmonary bypass, the catheter was withdrawn into the superior vena cava, which is routine procedure at our institution for operations involving the tricuspid valve. After distal anastomosis of grafts and implantation prostheses in the mitral valve a tricuspid annuloplasty using ring was performed. Repositioning of the PAC was attempted with the TEE probe in a transgastric short-axis position to monitor volume load and regional wall motion abnormalities. Several attempts to redirect the catheter through the right heart were unsuccessful. Up to an insertion depth of 50cm, no right ventricular pressure tracings could be obtained, without any perceptible resistance to catheter advancement. Three milliliters of normal saline was placed in the PAC balloon resulting in 100% visualization of the balloon. The balloon was then manipulated through the tricuspid valve using the standard 4 chamber view revealed the tip of the PAC to impinge against the tricuspid annuloplasty ring and advanced into the right ventricle and further into the pulmonary artery was achieved uneventfully. The transgastric RV inflow-outflow view was then used to guide the balloon through the pulmonary valve and into the main pulmonary artery. Once in the main PA the midesophageal ascending aortic short axis view was used to float the balloon into the RPA.

**Discussion and Conclusion:** We conclude that without noticeable resistance to catheter advancement, blinded attempts might have resulted in damage to the Carpentier ring, the sutures, or the valve leaflets. The PAC placement should be guided by TEE to prevent damages to valvular structures. TEE guidance is a "lodestar" in the operating room, as does fluoroscopy, enabling smooth placement of the catheter.

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## COMPARISON OF FENTANYL AND MORPHINE FOR REPAIR OF COARCTATION OF THE AORTA

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**Objective:** Coarctation of the aorta (CoA) accounts for 5%–8% of all congenital heart defects. Surgical repair is required soon after clinical stabilization of the neonate. Elective surgical repair of CoA is indicated at 3–6 months of life or at the time of diagnosis. The aims of this study were to describe the various anesthetic techniques used for surgical repair of CoA children at our institution, and their impact on postoperative outcome.

**Material and Methods:** After obtaining Ethics Committee approval, a retrospective study was conducted using anesthetic records and medical charts of all infants who underwent surgical repair of CoA between 2011 and 2015. Anesthesia was induced with sevoflurane (8%) and fentanyl (5 mcg/kg) (Group F) (n=14) or morphine (100 mcg/kg) (Group M) (n=10) and muscle relaxation was achieved with rocuronium (1 mg/kg). The trachea was intubated with adequate uncuffed endotracheal tube. The children were ventilated with pressure control mode of ventilation using air/oxygen 50-50%, with the inspiratory pressure set at 25 cm H<sub>2</sub>O and ventilatory rate at 25-30 breaths per minute. Anesthesia was maintained with fentanyl or morphine, according to the group. All the patients were transferred intubated back to the cardiac intensive care unit (CICU) where standard mechanical ventilation support was reinstated. The postoperative outcomes variables: unstable postoperative respiratory course (UPRC), hypotension, extubation and CICU discharge time were collected by independent individual. Data were tabulated and analyzed using SPSS version 15.

**Results:** Twenty-six of the children received CoA repair. Of these infants, 1 had cardiac arrest before the anesthesia induction, and in another case, had operation for NEC in the postoperative period. Total average amount of morphine and fentanyl were  $154.2 \pm 72.1$  mcg/kg and  $14.6 \pm 5.8$  mcg/kg respectively. Demographic data were similar between the groups. Postoperative UPRC, hypotension and CICU discharge time were similar between the groups. Extubation time was shorter in Group F ( $34.2 \pm 10.3$  min) than Group M ( $42.7 \pm 17.9$  min) ( $p < 0.05$ ).

**Discussion and Conclusion:** We conclude that the use of morphine and fentanyl for surgical repair of CoA in children provides postoperative respiratory stability. Both opioids may have similar effect on patient outcomes. Fentanyl provides faster extubation.

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## VASOPLEGIC SYNDROME FOLLOWING CORONARY ARTERY BYPASS SURGERY

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**Introduction:** Vasoplegic syndrome is a complication of cardiopulmonary. Although the precise cause of vasoplegic syndrome has yet to be defined. Risk factors for vasoplegic syndrome include preoperative use of ACE inhibitors, calcium-channel blockers, and b-blockers. It dramatically increases mortality and morbidity in cardiac surgery. Clinically tachycardia normal to increased cardiac output, decreased systemic vascular resistance and hypotension, resistant to volume loading and vasopressor agents are encountered. We present a vasoplegic syndrome following cardiopulmonary bypass for aortic valve replacement.

**Case Report:** 72 year-old female with severe multi-vessel coronary artery disease and depressed ejection fraction (EF%35) presented for CABG. Prior to cross-clamping, cardiac output was poor; dopamine infusions were started to optimize cardiac function. Upon removal of cardiopulmonary bypass, cardiac output was noted to be significantly improved, but arterial pressures remained markedly inadequate. Fluid status, acidosis, and calcium deficits were addressed and infusions including adrenaline, noradrenaline and amiodarone were started. In the early postoperative period, the patient was haemodynamically unstable. The following abnormalities were observed: low systemic blood pressure (MAP < 55 mm Hg), radiographic features of lung oedema, low left ventricular ejection fraction (25%) on echocardiography and increasing metabolic acidosis. Methylene blue infusion was administered (2 mg kg<sup>-1</sup> over 60 min). During the infusion, peripheral vascular resistance and arterial blood pressure increased, which enabled us to reduce the dose of noradrenalin. Patient was ultimately transferred to intensive care unit in critical condition. At subsequent examinations, the level of lactates significantly decreased and normalized within 24h. Broad-spectrum antibiotics were instituted to prevent the spread of bacteria from the intestines. FIO<sub>2</sub> was gradually reduced in the respiratory mixture.

**Discussion and Conclusion:** Vasoplegic syndrome may be present in a variety of clinical scenarios, including anaphylaxis, sepsis, SIRS, renal failure, and hepatic failure. In each instance, activation and release of inflammatory mediators occurs. Nitric oxide overproduction in vascular smooth muscle causes massive vasodilatation, which is nonresponsive to vasopressor therapy. Methylene blue following cardiac surgical procedures in vasoplegic patients may effectively increase arterial pressures and improve organ perfusion providing that the timing of its institution is appropriate.

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## CARILLON MITRAL ANGIOPLASTY; SEDOANALGESIA WITH REMIFENTANIL

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**Introduction:** Morbidity in patients with systolic heart failure is significantly increased by functional mitral valve regurgitation. In addition to pharmaceutical treatment or surgical reconstruction of the impaired valve, minimally invasive procedures have continuously advanced into the focus of interest. The Carillon Mitral Contour System is a catheter-based method to converge dehiscent mitral valve leaflets with implantation of a nitinol clip into the coronary sinus, leading to a closer approach of the valve leaflets with subsequent decrease in mitral regurgitation. The device is implanted via a central venous catheter, using a special delivery system under fluoroscopy. We present a case of carillon mitral angioplasty with sedo-analgesia.

**Case Report:** A 61-year-old male with whose medical history was included chronic ischemic heart disease, concomitant mitral regurgitation, congestive heart failure (NYHA class III) was scheduled for Carillon mitral angioplasty in cardiac angiography suit. Because of the patient condition, we decided to manage this patient with awake sedation and check the process with trans-thoracic echocardiography (TTE). Anesthetic monitoring consisted of a 5-lead electrocardiogram (ECG), pulse oximetry and invasive blood pressure. Oxygen was supplied by a simple nasal cannula. Sedo-analgesia was initiated by 2 mg midazolam and infusion of remifentanil up 0.20 to 0.25 µg kg min. TTE and fluoroscopy guidance was used for the procedure. Patient received intravenous heparin to achieve an activated coagulation time of >250 sec. After the procedure coronary flow was checked and then, TTE was showed a marked reduction in mitral regurgitation. Next, the proximal anchor was deployed in the coronary sinus. The effect of the implant on the degree of mitral regurgitation was verified again and finally the Carillon implant was decoupled from the delivery system. After the successful procedure and confirming successful placement, remifentanil infusion was discontinued the patient was monitored in the coronary care unit.

**Discussion and Conclusion:** Administration of remifentanil for carillon mitral angioplasty for high-risk patients, provides sufficient analgesia, satisfactory hemodynamic stability, minor respiratory depression, and rapid recovery, and allows patients to be discharged after the procedure.

## IN VITRO VASOACTIVE EFFECTS OF DEXMETETOMIDINE ON ISOLATED HUMAN UMBILICAL ARTERIES

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**Objective:** Dexmedetomidine is an alpha-2 receptor agonist used for sedation and analgesia. Direct effects of vasoactive agents on umbilical cords are important due to the lack of autonomic innervation. We aimed to investigate the vasoactive effects of dexmedetomidine on isolated human umbilical arteries.

**Material and Methods:** After institutional ethical approval; umbilical cord samples taken from parturients after vaginal delivery were cut into endothelium-denuded spiral strips (3-4 mm X 10-15 mm) and suspended in organ baths containing Krebs-Henseleit solution bubbled with O<sub>2</sub> 95% + CO<sub>2</sub> 5% mixture. Control contraction to phenylephrine (10<sup>-5</sup>M) was recorded. Response curves were obtained to 10<sup>-5</sup> M acetylcholine. The tissues were accepted as endothelia (+) if they gave relaxation response and endothelia (-) if they did not give relaxation response. For the tissues without endothelium, cumulative dexmedetomidine (10<sup>-9</sup>-2x10<sup>-5</sup>) was added to the organ bath and dose-response curves were recorded. In the second part of the study, in order to assess the possible mechanisms of dexmedetomidine's vascular effects, same cumulative response curves of dexmedetomidine were repeated in the presence of propranolol (10<sup>-6</sup>M), atropine (10<sup>-6</sup>M), yohimbine (10<sup>-6</sup>M), prazosine (10<sup>-5</sup>M), indomethacin (10<sup>-5</sup>M), verapamil (10<sup>-6</sup>M), and Ca<sup>2+</sup> (10<sup>-4</sup> - 10<sup>-2</sup>M) in (Ca<sup>2+</sup> free medium). Wilcoxon rank test was used for analysis, p<0.05=significant.

**Results:** Dexmedetomidine revealed contraction responses in all umbilical artery strips except in Ca<sup>2+</sup> free medium. Propranolol, atropine and indomethacin did not significantly affect dexmedetomidine-elicited contractions. There were statistically significant differences in the contraction responses in the presence of yohimbine (E<sub>max</sub>: 12.1±11.9%), prazosine (E<sub>max</sub>: 28.8±4.6%) and verapamil (E<sub>max</sub> 11.2±13.6%) (p<0.05).

**Discussion and Conclusion:** Dexmedetomidine has constrictive effect on endothelium denuded umbilical artery strips with the possible mechanism of alpha-1 and 2 receptor agonistic effect in the favor of alpha-1-receptors. While Ca<sup>2+</sup> ions are involved, beta-receptors, muscarinic receptors and COX enzyme inhibition don't participate in this constrictive response.

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### UNEXPLAINED CASE OF BRADYCARDIA IN INTENSIVE CARE: RIVASTIGMINE PATCH EFFECT

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**Introduction:** Since the introduction of the cholinesterase inhibitors to be the first line pharmacotherapy for mild to moderate Alzheimer's disease, most clinicians and probably most patients would consider the cholinergic drugs, donepezil, galantamine and rivastigmine.

**Case Report:** A 84-year-old woman with Alzheimer's disease was admitted to the ICU because of dizziness and respiratory distress. The patient was receiving the following long-term medication: diltiazem, quetiapine, piracetam, rivastigmine patch and atorvastatin due to hyperlipidemia and she had undergone heart valve replacement. Complete blood count, electrolyte levels, and cardiac biochemical markers were normal and had normal ECG results except for bradycardia. On the second day of hospitalization, patient's respiratory distress decreased, venous blood gas became normal but bradycardia was still continuing. On the third day, bradycardia was around 45-50 min<sup>-1</sup> when she was awake and continued in the 30-40 min<sup>-1</sup> range when she was asleep. The average heart rate in the holter analysis was 48 min<sup>-1</sup>, the minimum heart rate was 39 min<sup>-1</sup> and maximum heart rate was 60 min<sup>-1</sup>. On the fourth-day heart rate was 50-55 min<sup>-1</sup> range so installation of a temporary pacemaker was planned by cardiologists. On the fifth-day heart rate was 55-60 min<sup>-1</sup> and on the sixth-day it was in 65-75 min<sup>-1</sup> range, so pacemaker installation was cancelled.

**Discussion and Conclusion:** Arrhythmias related to cholinesterase inhibitors include bradycardia, atrioventricular block, QT prolongation, ventricular tachyarrhythmia, or even torsades de pointes. In our case only bradycardia was seen without any other arrhythmias. The underlying mechanism or pathogenesis of cardiac arrhythmias might be related to Cholinergic over activity.

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### ILEUS DUE TO LARGE BOWEL OBSTRUCTION BY TAKING ACTIVATED CHARCOAL THAT USED FOR MUSHROOM POISONING

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**Introduction:** The disease caused by intake of some toxic compounds of capped mushrooms are called mushroom poisoning or misetismus (1). The clinical of the patient can vary from gastrointestinal complaints to severe cytotoxic table as multiorgan failure or can progress to death with the ingestion of wild mushroom. There is no antidote or cure in the standard treatment strategy for patients with mushroom poisoning. Plasma amatoxins are excreted by the kidneys; therefore to avoid deterioration of the patient's renal function, 3-6 ml/kg/h urination should be provided. Other therapeutic agents are silybinin, penicillin G, vitamin C, corticosteroids, thioctic acid and N-acetylcysteine (2). In addition, plasmapheresis, hemoperfusion and haemodialysis are also treatment options. In case of severe liver failure, liver transplantation is the only form of treatment.

**Case Report:** 35 year old female was admitted to the emergency department with nausea and vomiting 6-8 hours after eating mushrooms that she collected from nature. The nasogastric lavage was performed in emergency department and 50 gr activated charcoal given 4 times with 4-6 hour intervals. When active complaints resolved, patient hospitalized for follow up 2nd day of hospitalization, abdominal pain, nausea, vomiting, abdominal tenderness occurred in the patient. There was dilatation of the bowel loops and air-fluid levels in standing direct abdominal radiograph. There was petrified activated carbon obstructing the passage in the rectal touche. After the defecation, the patients' symptoms improved, and the air-fluid level disappeared in the control radiographs.

**Discussion and Conclusion:** In this report, we present a case of ileus due to large bowel obstruction induced by activated charcoal which is used in wild mushroom consumption in all types of mushroom poisoning and many other intoxications upon oral intake. Oral given activated charcoal can cause very rarely intestinal obstruction in small intestine or in large bowel so we want to emphasize that there is a need to be vigilant in this regard.

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## MANAGEMENT OF RESPIRATORY COMPLICATIONS AFTER THORACOTOMY

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**Objective:** To assess the incidence and clinical implications of Postoperative Pulmonary Complications (PPC-s) after thoracotomy and to identify possible risk factors. Postoperative complications were defined as those occurring within 30 days of thoracotomy

**Material and Methods:** 80 Patients with lung cancer which underwent thoracotomy during 2013-2014. a) Pneumonectomy-10 patients, b) Bilobectomy-15 patients, c) Lobectomy-26 patients, d) Wedge Resection-22 patients e) Segmentectomy-7 patients.

After operation, PPC-s can be reduced by respiratory therapy and physiotherapy and by an excellent analgesia. Physical status: ASA-I, ASA-II. Nonsmoking >8 weeks.  $PO_2 > 60$  mmHg.  $CO_2 < 45$  mmHg.  $FEV1 > 75\%$ .  $FEV1/FVC > 75\%$  Atelectasis may be an acute or chronic condition.

**Results:** a) Atelectasis-23 patients, b) Prolonged air leak-4 patients, c) Bronchopleural fistula-1 patient, d) Acute respiratory failure-1 patient, e) Pulmonary embolism-1 patient, f) Acute pulmonary edema-2 patients. g) Bronchospasm-3 patients, h) Purulent pleuritis-1 patient, i) Pneumothorax-2 patients.

**Discussion and Conclusion:** PPC-s are frequent and can cause severe morbidity or mortality and increase the cost of care. PPC-s may be reduced by minimally invasive surgery, short acting anaesthetics and careful use of neuromuscular relaxants.

Post-surgical atelectasis is treated by physiotherapy. An incentive spirometer is often used as part of the breathing exercises. People with chest deformities or neurologic conditions that cause shallow breathing for long periods may benefit from mechanical devices that assist their breathing. One method is continuous positive airway pressure helps ensure that the alveoli do not collapse. This is helpful, as partially-inflated alveoli can be expanded more easily than collapsed alveoli. Sometimes additional respiratory support is needed with a mechanical ventilator. The primary treatment for acute massive atelectasis is correction of the underlying cause. A blockage that cannot be removed by coughing or by suctioning the airways often can be removed by bronchoscopy. Chronic atelectasis often is treated with antibiotics because infection is almost inevitable. In certain cases, the affected part of the lung may be surgically removed when recurring or chronic infections become disabling or bleeding is significant. If a tumor is blocking the airway, relieving the obstruction by surgery, radiation therapy, chemotherapy, or laser therapy may prevent atelectasis from progressing and recurrent obstructive pneumonia from developing.

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## CLINICAL APPROACH TO ANTI-NMDA-RECEPTOR ENCEPHALITIS IN ALBANIAN PATIENT

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**Introduction:** Anti-N-methyl-D-aspartate receptor (anti-NMDA-R) encephalitis is an immune-mediated syndrome that remains under-recognized. This syndrome has been predominantly described in young females with a constellation of symptoms, including personality changes, autonomic dysfunction and neurologic decompensation. We describe the first classic presentation of anti-NMDA-R encephalitis in our service.

**Case Report:** A 35 -year-old woman, previously recognized with psychotic disorders and for obesity manifested confusion, wild attitude, agitation, auditory hallucinations and fever. Monoclonic seizures were also observed, so brain computerized tomography (CT) and MRI were immediately requested. In 5 days we noticed progressive worsening of consciousness (according to GCS she was admitted with 9 -10 points and she rapidly went to 7 -8 ). She was immediately intubated in the ICU (A/C, VT 650 ml, Fr14,  $FiO_2$  100%, PEEP 6 mmH<sub>2</sub>O)

The patient at this point underwent to a general consult, which considered the case as a probable meningoencephalitis of unknown origin, in which dominated the psychotic syndrome. Treatment with antibiotics, antivirals, antiinflammatory drugs and supportive intensive care therapy was started for this presumed meningoencephalitis.

Ten days after intubation, the patient undergoes tracheostomy. Meantime, the protocol of neuroinfection resulted negative for Borrelia, Enteroviruses, TB and WNE and the CSF culture resulted sterile. Serological tests for TB, HIV, Varicella, Borreliosis resulted negative. Ceruloplasmin and Cupruria ranged between normal values. BhCG and CA 19-9 also resulted in normal values. Hemocultures and uroculture were dynamically taken according to their protocols. Continuous EEG demonstrated non-convulsive status epilepticus. The patient stayed at the ICU for 46 days, 28 of them in supportive ventilation. Dynamically changes in therapy were successful in preventing nosocomial infections, in keeping airways free without barotraumatic complications and ending with minimal sequelae.

**Discussion and Conclusion:** Due to our good recognition of neuroinfections, this pathology was conceived as a rare one in the first place. The psychotic syndrome which dominated the clinical report demanded for continuous and multidisciplinary consults. Among these consults the neurologic one was the most important which orientated us to the one possible "clinical match", NMDA Encephalitis.



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**EXAMINATION OF AUTONOMIC NERVOUS SYSTEM ACTIVITY WITH HEART RATE VARIABILITY BY HOLTER MONITORIZATION IN PATIENTS UNDER MECHANICAL VENTILATION IN INTENSIVE CARE UNIT**

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**Objective:** Continuous ECG monitoring is an effective tool for assessing the frequency and duration of autonomic nervous system activity. In this study, we aimed to observe the autonomic nervous system activity changes in patients with invasive mechanical ventilation in the intensive care unit (ICU) by examining the parameters of heart rate variability (HRV).

**Material and Methods:** After obtaining ethical approval, 100 patients older than 18 years and at least 24 hours followed up in ICU, were divided into two groups. Patients with respiratory failure were intubated and received mechanical ventilation for at least 24 hours in Group M and non-intubated ICU patients during hospitalization enrolled in Group K. Patients were excluded if they had cardiac arrhythmias or coronary artery disease. ECGs of patients in both groups were recorded for 24-hour-period with 3-channel ambulatory holter ECG recording devices (NorthEast's DR200/HE, NorthEast Monitoring, Inc.). Group M occurred from 41 patients and Group K from 42 patients. The same type of mechanical ventilators were used in all patients. Patients undergoing mechanical ventilation, ventilated in a same mechanical ventilation mode (P-SIMV) and parameters (frequency: 14 min<sup>-1</sup>, PEEP: 5 cmH<sub>2</sub>O and tidal volume: 6-8 ml kg<sup>-1</sup>).

**Results:** The groups were similar in terms of demographic characteristics and indications for admission to ICU. HRV variables which consisted of LF, HF, HFn, LF<sub>n</sub>, VLF, TP, the LF/HF ratio and global sympathetic index, were compared and there was no significant difference between two groups. In addition, there was no statistically significant difference between two groups for the number of atrial arrhythmia, maximal, minimal and average heart rate, RR, QT and QTc intervals. Patients in Group M have higher ventricular arrhythmia than in Group K (59,53±107,46 vs 54,95±185,14 and p=0,0083).

**Discussion and Conclusion:** According to the results of our study, there was no change in the autonomic nervous system activity during mechanical ventilation treatment in hemodynamically stable patients without cardiac disease in ICU.

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**ANAPHYLAXIS AVOIDANCE AND MANAGEMENT OF LATEX ALLERGY**

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**Introduction:** The estimated incidence of anaphylaxis during general anesthesia is 1:10 000–20 000. Anaphylactic reactions to latex are due to the formation of IgE antibodies to the antigens of *Hevea Brasiliensis*, the source of latex. Higher rates of latex sensitivity have been reported in women, most notably during cesarean delivery<sup>1</sup>. In this case, we presented an emergency cesarian sectio with latex allergy.

**Case Report:** A 34-year-old G2P1 woman with history of bronchial asthma under spinalanesthesia. The patient diagnosed that sensitivity to latex by allergy physician and submitted a recommendation to avoid products containing latex and environments that are not latex-free, and carry an epinephrine autoinjector with her at all times. Premedication regimen including corticosteroid and antihistaminic were administered. Operation room was cleaned and latex free gloves and catheter were prepared. On admission, blood pressure was 110/60 mmHg with Hb 12.8 g/dl. At 9.45 pm, spinal anaesthesia was performed with 2.2 ml of 0.5% bupivacaine, the woman underwent a caesarean delivery and gave birth to live baby. After the birth, 0.3ml adrenalin was administered intramuscularly. Ten minutes after the starting of the surgical procedure, persistent hypotension was seen. Also 0.01 µg/kg/min adrenalin infusion was started.

**Discussion and Conclusion:** It is important to recognize that cutaneous symptoms, bronchospasm, hypotension, cardiovascular collapse, and cardiac arrest can all occur as isolated feature. Avoidance is clearly the main prophylactic measure to prevent adverse reactions. The operating room should be free of latex items and the patient should be the first case of the day in order to reduce the risks. It is not always possible to avoid latex completely like this emergency case; some authors report anaphylaxis due to unintentional exposure to airborne latex particles, which may endanger fetal life. The avoidance of talc reduces the number of adverse latex reactions to 3.6%. In this case, hypotension was prolonged and monitored for 24 hours after the procedure.

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### PERIORBITAL NECROTIZING FASCIITIS CAUSED BY STREPTOCOCCUS PNEUMONIAE

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**Introduction:** Necrotizing fasciitis (NF) usually occurs in the perineum, lower limbs or abdominal wall, and NF of the head and neck, particularly involving periorbital and orbital structures, is considered rare. *Streptococcus pneumoniae* may cause soft tissue infections, but it is rare associated with NF. The aim of this communication is to report the occurrence of a rare case of periorbital (NF) caused by *Streptococcus pneumoniae*.

**Case Report:** Among 27 cases of NF, diagnosed and treated in our service during a period of time of four years (2000-2014), we choose a 43 years old immunocompetent man, presented to our service after a period of 12 hours of shivering, complaining of pain and swelling of his left eyelid including the face. There was no history of insect bite or trauma of that area. Oral temperature was 39.2°C, pulse was 94 b/min, respiratory rate was 27 b/min, and blood pressure was 96/47 mmHg. There was no nuchal rigidity or lymphadenopathy. Left part of face was significantly edematous, with erythema and few bullous elements filled with a sero-hemorrhagic liquid, as well as induration going down up to mid-neck. It was extremely tender, and no passive movement could be elicited. Initial laboratory investigations showed: white blood cell count of 18,300/mm<sup>3</sup> (79% neutrophils, 16% lymphocytes, and 5% monocytes), hemoglobin concentration of 11.5 g/dl, hematocrit of 34.5%, and platelet count of 259,000/mm<sup>3</sup>. Liver chemistry values were within normal limits. Bedside ultrasonography showed a diffuse thickening of the subcutaneous tissue accompanied by a thin layer of fluid. CT-scan of the head showed no signs of retrobulbar tissues involvement. Visual acuity was normal. NF was suspected clinically and Ceftriaxone plus Metronidazole were started immediately. *Streptococcus pneumoniae* isolated in blood culture and liquid of vesicles was sensible to Penicillin, Cefotaxim, Ceftriaxon, Vancomycin, and Ciprofloxacin. The outcome of NF was towards a total recovery after a local plastic surgery, as well.

**Discussion and Conclusion:** NF needs an early diagnosis besides and a promptly and aggressive surgical intervention, because it might leads towards a severe sepsis and multiple organ failure with a high mortality rate of 12-57% of cases.

### MANAGEMENT OF NON-INVASIVE MECHANICAL VENTILATION IN AN ELDERLY PATIENT WITH H1N1 PNEUMONIA

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**Introduction:** Media sensationalism on the H1N1 outbreak may have influenced decisional processes and clinical diagnosis.

**Case Report:** A 82 year old female patient with congestive heart failure and hypertension was admitted to the emergency department with dyspnea and cough. She was then admitted to the infectious diseases clinic with diagnosis pneumonia. H1N1 considered as a factor. Swab samples were taken. The second day of hospitalization, the patient had increased respiratory distress. She was admitted to the intensive care unit. Her general condition was moderate, had clear consciousness, oriented, cooperated. The HR: 108 min<sup>-1</sup>, BP: 156/80 mmHg, SpO<sub>2</sub>: 89%, respiratory rate: 26 min<sup>-1</sup> were measured. First venous blood gas result was as pH: 7.21, PO<sub>2</sub>: 53 mmHg, PCO<sub>2</sub>: 86 mmHg. There were crackles in the lower-middle zone of the right lung and rhoncus in the lower zones bilaterally. Pretibial edema was not observed. There was widespread infiltration, especially obvious in the right lower lobe. Urine output was normal. Piperacillin-tazobactam 3x4,5 mg iv and oseltamivir 2x75 mg PO were started. External CPAP was applied 3-4 times a day. CO<sub>2</sub> retention and saturation were recovered and the patient did not require intubation. On the third day in intensive care unit, cultures of swab samples revealed positive H1N1. General condition of the patient improved gradually with ongoing antibiotic and antiviral therapy. She did not need external CPAP anymore. On the sixth-day, patient was transferred to the infectious diseases clinic. Three days later she was discharged home.

**Discussion and Conclusion:** Early and rapid diagnosis of H1N1-related respiratory insufficiency needs rapid screening. However, clinicians need to rule out false positive and negative cases by RT-PCR on oral/nasal fluids or bronchoalveolar lavage specimens.

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### FROM RESPIRATORY DISTRESS TO DIAGNOSIS OF AMYOTROPHIC LATERAL SCLEROSIS: A CASE REPORT

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**Introduction:** Amyotrophic lateral sclerosis (ALS) is a motor neuron disease caused by neuron loss in medulla spinalis and brain stem. Disease presents with muscle weakness and atrophy, mental and memory functions remain intact. It can cause respiratory failure in advanced stages.

**Case Report:** A 59-years old female patient admitted to our ICU because of respiratory distress after posterior vertebral instrumentation operation. Patient was operated one week ago because of lumbar disc herniation and spinal stenosis. She had respiratory distress after operation and her status worsened thus she was intubated and admitted to ICU. The patient had a history of hypertension. Thorax CT scan and MRI showed minimal bilateral pleural effusion which did not explained her severe clinical condition. Possible cardiac etiology was ruled out with normal electrocardiography and echocardiography. Cerebral CT and MRI scans were also normal. While the patient was mentally cooperated and had purposeful motor function after sedation was ceased; she experienced respiratory failure after extubation and had to be intubated again. Detailed medical history obtained from her relatives revealed she had an undiagnosed hoarseness for the last year. After this clinical clue we performed an electromyography and it was diagnostic for amyotrophic lateral sclerosis. The patient was hospitalized in our ICU connected to ventilator for 3 months and died because of pneumonia and sepsis.

**Discussion and Conclusion:** It was remarkable that respiratory failure, which is most commonly a late stage symptom, was the diagnostic symptom in our case. We present this report in which we aimed to discuss respiratory distress and ALS in a different perspective.

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### ACUTE ADRENAL CRISIS, A LIFE THREATENING SITUATION:AN OVERVIEW ON CLINICAL CASES HOSPITALIZED IN ENDOCRINOLOGY DEPARTMENT AT UHCM

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**Objective:** Acute adrenal crisis (AC) is a rare life-threatening condition that requires immediate treatment. Delay of diagnosis of primary adrenal insufficiency (PAI) leads to AC which is potentially lethal complication.

**Material and Methods:** In this retrospective study, we analyzed data of AC patients hospitalized in Endocrinology Department at University Hospital Center "Mother Teresa" Tirana, during 2009-2012.

**Results:** We analyzed data from 8 patients, 6 of them were diagnosed for the first time with PAI in our department and continued to be under endocrinologist care. Median age at diagnoses was 51-60 years; 4 females, 4 males ( F/M 1:1). Period of time to diagnose PAI exceeds 6 months in every patient and 12 months in 6 patients. Precipitating causes were mainly hepatitis (4 patients), stressful events (2 patients) and sudden onset of apparently unexplained AC was also reported (2 patient). Anorexia, weight loss, vomiting, skin hyperpigmentation, arterial hypotension, hyponatremia ( $129 \pm 125$  mEq/L) and hyperkalemia ( $5 \pm 0.4$  mEq/L ) with signs of hyperkalemia in ECG (peaked T wave) occurred in all patients. The titer of 21-hydroxylase antibodies was significant in 5 patients; in 2 not determined; in 1 patient Mountaux test and HIV positive. The most often concomitant endocrine disease was Hashimoto thyroiditis (5 patients), diabetes mellitus type 1 (2 patients), 2 patients without any other autoimmune endocrine disease. Acute hepatic disease was the most often incorrect diagnosis. AC was treated with iv hydrocortisone and 0.9% saline with good improvement within 12 h in 4 patients.

**Discussion and Conclusion:** The main clinical features of PAI are non-specific, thus often leading to misdiagnosis and invasive diagnostic work up. Our results indicated that training of primary care physicians to diagnose and to treat early the adrenal insufficiency is essential. However, autoimmune AI is the predominating form and these patients are at higher risk of developing other autoimmune diseases. To draw attention, in patients with hypothyroidism and PAI, initiation of treatment with thyroxin before treatment of adrenal insufficiency with hydrocortisone could insert the body in metabolic stress and stimulate Addisonian crisis.

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### BONSAI VICTIMS: A NEW EXPERIENCE IN OUR INTENSIVE CARE UNIT

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**Introduction:** Synthetic cannabinoid (SC) use is an important public health care problem worldwide as well as Turkey and their use among youth is increasing rapidly.

**Case Report:** Forty years old male patient was brought to emergency room after 25 minutes of CPR with Glasgow coma scale 3. He did not have any cardiac risk factors. Arterial blood gas analysis upon admission was; pH 7.172, pCO<sub>2</sub> 38 mmHg, pO<sub>2</sub> 80 mmHg, HCO<sub>3</sub> 15 mmol/L, Base (ecf) 11 mmol/L. Vital signs were stable, coronary angiography was normal. On 4th day of admission he was defibrillated once with 270 joules. On 5th day patient was extubated and discharged from ICU on 10th day. Medical history obtained from his friends and family revealed SC use. The patient confirmed this after gaining his consciousness.

**Discussion and Conclusion:** SCs can cause altered consciousness and their use is becoming more common among young people. Acute coronary syndromes due to SC are thought to be caused by their negative inotropic effects, bradycardia, and hypotension. Myocardial infarction was reported in three patients who used SC for 3 months. However wider studies did not report any relation between myocardial infarction and SC. Bonsai use should be considered in especially young patients with altered consciousness and patients admitted with cardiac arrest who do not have any cardiac risk factors.

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### A CASE REPORT OF ACUTE COLCHICINE INTOXICATION

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**Introduction:** Colchicine is commonly used in gout, pseudogout attacks, Familial Mediterranean Fever (FMF) and Behcet's Disease. Colchicine intoxication is rare but important because it affects multiple organs and can be life-threatening. In this report we present a case of seventeen year old patient followed in intensive care unit (ICU) due to colchicine intoxication.

**Case Report:** Seventeen year old female patient was brought to emergency room with nausea and vomiting 12 hours after she took 50 tablets of 25 mg colchicine. On the first day of admission to ICU her coagulation parameters started to deteriorate. Her liver enzymes started to increase on second day and peaked on 5<sup>th</sup> day. As from 3<sup>rd</sup> day of admission WBC and platelet counts started to decrease, precursor cells were suppressed in peripheral smear. Patient's hemodynamic parameters, arterial blood gas analysis, renal function tests and urine output were normal. The patient's general status was improved on 8<sup>th</sup> day and she was discharged from ICU to internal medicine ward with full recovery.

**Discussion and Conclusion:** Colchicine is used for gout arthritis, pseudogout attacks, FMF and Behcet's Disease. Toxicity risk due to acute overdose is higher in patients who use colchicine routinely (2). Colchicine is toxic to intestinal mucosa, bone marrow, coagulation cascade, gastrointestinal system and cardiovascular system. Metabolic abnormalities are common.

In conclusion patient's respiratory, vascular and fluid and electrolyte balances should be monitored closely even if their general statuses are stable upon admission because multiple systems can be affected in the upcoming days.

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## NEAR INFRARED SPECTROSCOPY IN CARBONMONOXIDE POISONING

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**Introduction:** Carbonmonoxide leads to injury in central nervous system cells by causing impairment in cell energy metabolism and intracellular production of oxygen free radicals(1). In the treatment of carbonmonoxide poisoning, hyperbaric oxygen is used. Near infrared Spectroscopy(NIRS) is used as a supportive method to assess of hyperbaric oxygen treatment(2). NIRS is a noninvasive method which enables continuous monitorization of cerebral oxygenation. In this case report, monitorization of a case of carbondioxide poisoning treated by hyperbaric oxygen by using NIRS is presented.

**Case Report:** A 23 - year - old female patient was found with lost consciousness in a room heated with stove and was brought to emergency service with open consciousness and limited cooperation. In physical examination, there was no abnormal findings other than perspiration and cyanotic appearance. The blood pressure was 90/50 mmHg, heart rate 95 beat/min, SpO<sub>2</sub> %80 and respiratory rate 35/min. Arterial blood gas values were pH 7.37, pO<sub>2</sub> 104 mmHg, pCO<sub>2</sub> 22 mmHg, SpO<sub>2</sub> %97.3, COHb 48.8mmol/l, lactate 6.16mmol/l.

The patient was admitted to intensive care unit with the presumptive diagnosis of carbon monoxide poisoning and when respiratory distress increased, she was intubated under elective conditions. Sedation was initiated with 5mg/kg/hour intravenous thiopental infusion. According to blood gas values, hyperbaric oxygen treatment was considered, NIRS monitorization was carried out for the measurement of cerebral oxygenation prior to treatment. Patient was evaluated with arterial blood gas measurement and NIRS monitorization. On the third day of treatment, hyperbaric oxygen treatment was stopped according to control diffusion MR and clinical evidence. Patient was extubated on fourth day and was discharged with recommendations from the intensive care unit.

**Discussion and Conclusion:** Hyperbaric oxygen treatment is used commonly in carbonmonoxide poisoning. In the evaluation of response to treatment, the monitorization of carboxyhemoglobin is carried out via arterial blood gas. NIRS may also be used as a supplementary method in the monitorization of the response to hyperbaric oxygen treatment(2). NIRS may be a promising technology to measure the oxygen levels in target tissues in hyperbaric oxygen treatment. It is our suggestion that NIRS may be used as a guiding method in the evaluation of response to hyperbaric oxygen treatment.

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## LOW DOSE RISPERIDONE-INDUCED NEUROLEPTIC MALIGN SYNDROME IN PARKINSON DISEASE: A CASE REPORT AND REVIEW OF LITERATURE

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**Introduction:** Neuroleptic malignant syndrome (NMS) is a rare but life-threatening complication of antipsychotic therapy (1). NMS is characterized by alterations in mental status, elevated creatine phosphokinase and white blood cell count in addition to fever, muscle rigidity, autonomic dysfunction. Risperidone is an atypical antipsychotic which is a selective monoaminergic antagonist (2).

**Case Report:** Sixty-eight years old male patient who did not have any systemic illnesses other than Parkinson's disease was brought to emergency room with severe tremor, fever, impaired consciousness and rigidity in neck, arm and leg muscles. The patient was diagnosed with Parkinson's Disease 10 months ago and medical therapy with levodopa benserazide, rasagilinesylate and ropinirole was prescribed. The patient did not use his medication regularly. He applied to psychiatry outpatient clinic with lack of sleep and depressive complaints 3 days ago, diagnosed with psychotic major depression and was started on risperidone. Risperidone was given 0.5 mg for the first day and continued with 1 mg/day afterwards. However 3 days after risperidone treatment muscle rigidity, impairment in consciousness and fever developed. Physical examination revealed GCS 9, hyperthermia (39°C), labile blood pressure, tachycardia (124/minute) and tachypnea, generalized rigidity in extremities and tremor. Abnormal laboratory findings upon admission were creatine kinase (CK) 3670 u/L, WBC 15600, AST 210 u/L, ALT 50 u/L. Cranial CT scan revealed cortical atrophy. There were not any pathological findings in chest X-ray, thorax CT scan, CSF analysis, urinalysis. The patient was admitted to ICU and risperidone therapy was discontinued. On second day of his admission CK levels were decreased to 1350 u/L. However acute respiratory failure developed on the third day of ICU and the patient died on 9th day of admission.

**Discussion and Conclusion:** Risperidone treatment should be approached with caution because NMS risk can be higher in patients with Parkinson's Disease and sensitivity to antipsychotic drugs can be increased especially in elderly patients. It should be kept in mind that even lower doses of risperidone can cause NMS.

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OP - IV

1

## A COMPARISON OF THE EFFICACY OF MACINTOSH LARYNGOSCOPE, TRUVIEW EVO<sub>2</sub> AND MCGRATH VIDEOLARYNGOSCOPY IN PAEDIATRIC CASES

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**Objective:** The aim of this study was to compare the ease of intubation entry and the glottic view provided by Macintosh Laryngoscope, TruView EVO<sub>2</sub> and McGrath Videolaryngoscopy in the management of the paediatric airway.

**Material and Methods:** The study included 90 paediatric cases aged 4-10 years who were to undergo endotracheal intubation for surgery. The cases were allocated to 3 groups; Group1 (n=30) Macintosh Laryngoscope, Group2 (n=30) TruView EVO<sub>2</sub> and Group3 (n=30) McGrath videolaryngoscope. Before this study, the operators had performed 20 intubations each with the TruView EVO<sub>2</sub> and McGrath Videolaryngoscope. The demographic data of the patients, the Mallampati and Cormack Lehane scores, EtCO<sub>2</sub>, SpO<sub>2</sub> and haemodynamic values were recorded. The time of intubation (the time from the laryngoscope entering the mouth until the tube is seen to have passed the vocal cords), how many attempts were made for intubation, the percentage of glottic opening (POGO) seen with the laryngoscope and the Intubation Difficulty Scale (IDS) scores were recorded. If intubation could not be made in 3 attempts or took more than 180 seconds, it was accepted as failed intubation.

**Results:** In the Macintosh group, the EtCO<sub>2</sub> values at 3 and 5 minutes after intubation were found to be statistically significantly low. The Mallampati and Cormack Lehane scores were similar in all the groups. The POGO scores in the Macintosh group were statistically significantly low ( $p < 0.05$ ). The IDS scores in the TruView group were statistically significantly high ( $p < 0.05$ ). The time of intubation was found to be statistically significantly shorter in the McGrath videolaryngoscopy group ( $p < 0.05$ ). The number of attempts for intubation was similar in all 3 groups.

**Discussion and Conclusion:** The results of this study showed that the POGO scores in the Macintosh laryngoscopy group were lower than those of the other two groups. There was felt to be a need for external laryngeal pressure at a higher rate in the TruView EVO<sub>2</sub> group. Although better visualization of the oropharyngeal, glottic structures was obtained with videolaryngoscopy methods, they did not sufficiently facilitate intubation as they are indirect methods and there was a lack of experience.

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## IS THERE A ROLE FOR AIRWAY ULTRASONOGRAPHY IN THE ASSESSMENT OF VOCAL CORD MOBILITY AFTER THYROID SURGERY?

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**Introduction:** We report the preliminary results on 22 consecutive cases from a prospective randomized study comparing the ultrasonography (US) and direct laryngoscopy (DL) techniques in terms of effectiveness and incidence of adverse events during the assessment of vocal cord mobility after thyroid surgery.

**Material and Methods:** After obtaining ethical approval and informed consent, ASA I-II adults scheduled for thyroidectomy were randomized into 2 groups; Group US and Group DL. Patients with vocal cord palsy, head and neck deformity, anticipated difficult airway and hypertension were excluded. Standard monitorization, anesthesia induction and maintenance techniques were used in all patients. At the end of surgery a remifentanyl infusion was continued after extubation. Assisted mask ventilation was applied for 2 min; the mobility of the vocal cords was assessed thereafter according to group allocation. Group US: a 5-12 MHz linear transducer was placed horizontally at the middle of the thyroid cartilage, a cephalad-caudal tilt was applied to visualize the vocal cords. Group DL: the laryngoscope was advanced towards the vallecula until the glottis was visualized. The visualization of the vocal cords, hemodynamic parameters, adverse events and the duration of the assessment were compared.

**Results:** Patient characteristics and surgical data were similar between groups. US and DL were equally effective in visualizing the vocal cords. Symmetrical abductive and adductive vocal cord motion was observed in 7 patients both in Group US and DL (70% and 58% respectively,  $p = 0.580$ ). The duration of the assessment was longer in group US compared with group DL ( $7.8 \pm 1.9$  min and  $1 \pm 0.0$  min respectively,  $p = 0.01$ ). Groups were different with respect to heart rate and blood pressure alterations during assessment; Group DL was hemodynamically instable compared with Group US. The incidence of adverse events during assessment was higher in group DL. Hypertension, desaturation, tachycardia and coughing were observed in 10, 10, 8 and 7 patients respectively in Group DL. Breath-holding and desaturation was observed in 1 patient in Group US.

**Discussion and Conclusion:** Ultrasonography is an effective method for the assessment of vocal cord mobility after thyroid surgery and the incidence of adverse events is lower compared with DL.

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### EARLY TRACHEOSTOMY IN CARDIOVASCULAR INTENSIVE CARE UNIT

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**Introduction:** Tracheostomy should be considered to replace endotracheal intubation in patients requiring prolonged mechanical ventilation. In the past, although tracheostomy was delayed as long as possible because of the likely complications, it is currently the most common procedure for ventilator-dependent patients. However, the optimal timing and method of tracheostomy remains controversial. In this case report, we present the anesthetic management of a patient who needed prolonged mechanical ventilation after cardiac surgery.

**Case Report:** A 61-year-old male with a history of both restrictive and obstructive pulmonary disease was scheduled for CABG and aortic valve replacement surgery. At the end of surgery the patient was transferred to the ICU. After initial surgery three further operation was performed in order to control bleed within 48 hours. While he was following with endotracheal tube in ICU, several weaning trials were failed. Therefore, the patient was decided to remain intubated for a few days more. Meanwhile, the patient was sedated with short-acting opioids. But, weaning trail was performed daily. Percutaneous tracheostomy was performed at the end of the first week in mind the patient's need for mechanical ventilation may take longer. Because the patient's neck was too short and recently he had a cardiac surgery with sternotomy which was too close to the likely tracheostomy line, percutaneous tracheostomy was the selected method. He did not need any sedation after tracheostomy procedure. His respiratory physiotherapy and nutrition has also become easier. Then, the patient was decanulated at the end of the third months.

**Discussion and Conclusion:** Tracheostomy has potential advantages such as early oral nutrition, decreasing the need for sedation, improves patient comfort, lower airway resistance and as a result of these it may shorten ICU and hospital stay. Recent clinical studies showed that the patients who are expected to need prolonged mechanical ventilation support may advantage from early tracheostomy. In our patient, we both avoid possible mediastinal infection and manage the weaning procedure successfully with early percutaneous tracheostomy.

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### CASE REPORT: THE ROLE OF FIBEROPTIC BRONCHOSCOPY FOR DIFFICULT INTUBATION IN ENLARGING NECK MASS

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**Introduction:** Difficult airway management is a dilemma for anesthesiologist. Although practice guidelines and algorithms may help in such situations, the anesthesiologist's judgment and vigilance remain the primary means to save lives.

**Case Report:** We encountered an enlarging neck mass that was compromising the airway. Therefore, there were few safe strategies for airway management for general anesthesia. The patient, 76 years old was elected for extirpation of enlarging mass in right submandibular region. On the preoperative anesthesia control was inspected an enlarging mass in submandibular region, which also lies in this side of neck .

There has been assessed laboratory values and other examination .The patient was Mallampati III, which means difficult intubation expected. During induction of anesthesia the oral and nasal intubation attempt failed, so fiberoptic bronchoscopy intubation was indicated. The patient has been intubated successfully by awake fiberoptic bronchoscopy in another day

**Discussion and Conclusion:** Management of the difficult airway presents a great dilemma for the anesthesiologist. Practice guidelines and algorithms may help in such situations.

However, the anesthesiologist's judgment and vigilance remain the primary means to safe airway management. Neck masses from different sources may affect the airway and are potential causes of a difficult airway. There are few options for securing the airway in a patient with enlarging and airway-compromising anterior neck mass. These patients may not tolerate the supine position due to tracheal compression.

The utility and safety of performing tracheostomy in the awake patient prior to induction of general anesthesia are debatable, due to the location of the mass and the displaced anatomy it produces. Awake fiberoptic intubation remains a safe and effective method in experienced hands. A case of difficult intubation due to an enlarging neck mass is discussed, which describes the role of fiberopticbronchoscopy for managing this difficult airways situation.

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### COMPARISON OF THE MCGRATH SERIES 5 VIDEOLARYNGOSCOPE TO THE STANDARD MACINTOSH LARYNGOSCOPE FOR THE INTUBATION OF THE OBESE PATIENTS

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**Objective:** It is considered that evidence is required for effectiveness of using videolaryngoscopy in obese patients' difficult intubation management. In this study we aim to compare the effectiveness of McGrath Series 5 videolaryngoscope to the standard macintosh laryngoscope for the intubation attempts of the obese patients.

**Material and Methods:** In this randomized, prospective and single blind study, 84 female patient with ASA I-III, aged between 18-65 yr, BMI  $\geq 30$  kg/m<sup>2</sup> were included. Patient were divided into two group as intubated with videolaringskop(VL) and macintosh laryngoscope(ML). Modified mallampati score(MMS), neck circumference, sternomental(SMD) and thyromental(TMD) distances, Modified Cormack lehane grading(CL), intubation difficult scale(IDS), laryngoscopy time and complications of the laryngoscopy such as trauma in the lip and teeth, soft tissue hemorrhage were recorded.

**Results:** By comparison with predictors of the difficult intubation, while MMS and TMD were similar. While comparing in terms of difficult laryngoscopy intubation VL significantly decreased CL grade( $p=0.022$ ) with better vision of glottis view. There was no significant difference in IDS between groups( $p=0.616$ ); In any of the patient with determined difficult intubation score higher than 5 ( $DIS>5$ ) were encountered failed intubation. Laryngoscopy time was significantly longer in the VL group( $ML= 14.6\pm 4.7s$ ,  $VL=23.4\pm 9.3s$ ). Although there was not significant difference between groups statistically for complications, soft tissue hemorrhage was detected in greater number of patients in VL group. ( $ML n=1$ ,  $VL n=4$ )

**Discussion and Conclusion:** Consequently, videolaryngoscope improved the glottis view in the attempts of intubation of the obese cases which were estimated difficult intubation management. However only improved view of the glottis, could not provide superiority for intubation success. The main goal of anesthesiologists is a successful intubation and to secure airway as soon as possible adding to the providing vision of the glottis. Therefore, further studies are needed to develop the devices to facilitate intubation in obese patients.

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### PROGRESSIVE HEMATOMA IN ANTERIOR NECK AFTER ENDOVASCULAR TREATMENT OF MIDDLE CEREBRAL ARTERY ANEURYSM

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**Introduction:** Cervical hematoma due to superior thyroid artery (STA) dissection can be a life threatening condition because of airway compromise. It is encountered mostly after thyroid surgeries, traumas or tumors and rarely spontaneously (1). This case report is the first presentation of cervical hematoma as a complication of endovascular treatment of cerebral aneurysms.

**Case Report:** A 49 year-old woman was scheduled for stent placement under general anesthesia for middle cerebral artery aneurysm. She had hypertension and a history of stroke. In addition, balloon angioplasty was performed for treatment of stenotic right internal carotid artery. The day before intervention, metoprolol, acetyl salicylic acid and 300 mg clopidogrel treatment was started. General anesthesia was achieved with 2% sevoflurane and remifentanyl infusion. She was intubated with a 7.5 mm endotracheal tube without difficulties. The procedure was completed without complications. Three hours later, dyspnea developed and physical examination revealed progressive swelling and stiffness in the neck. Endotracheal intubation was performed with a 6 mm diameter uncuffed. The vocal cords were completely closed due to compression, Cormack Lehanelaryngoscopic view was Grade II. There was no leak around the endotracheal tube. The rapidly performed CT scans showed an enormous hematoma around the neck and extravasation of contrast medium through superior thyroid artery (STA). The patient was transported to interventional radiology for STA embolization. After embolization, the patient was taken to the ICU as intubated and sedated. Surgical exploration of the hematoma was not recommended by the ENT surgeons and radiologists, because she was on clopidogrel. After two days, the patient's trachea was extubated safely ensuring that the swelling was sufficiently ceased and leak detected around the endotracheal tube.

**Discussion and Conclusion:** Surgical exploration and evacuation of the hematoma is usually suggested to facilitate the extubation. Since our patient was using clopidogrel, the surgery was unsafe. Tracheotomy may also be difficult or impossible under antiplatelet medication. Securing the airway rapidly by endotracheal intubation is the most crucial point in the management of cervical hematomas. Diagnostic and therapeutic procedures should be performed only afterwards.

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## OP - IV

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**LMA FOR SUBGLOTTIC LASER SURGERY:  
ADVANTAGES AND LIMITATIONS****A.HOXHA<sup>1</sup>, L. GRAZHDANI<sup>2</sup>, N. QYRA<sup>2</sup>, G. KUÇAJ<sup>2</sup>,  
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**Objective:** Traditional small number IOT routinely used in such settings limits the view of operative area (1,2). LMA provides safe ventilation without intrusion into surgical area, but this may raise problems to anesthesiologist. Aim of study is to observe advantages and limitations of ventilation through LMA for subglottic LASER procedures.

**Material and Methods:** Ventilation patterns obtained in 36 subglottic LASER procedures were studied. All BGA prior to surgery were normal. After standard induction of anesthesia, LMA was inserted and TCI propofol anesthesia was maintained during the procedure. Ventilation:  $FiO_2$  0,3,  $V_t$  6-8 ml  $kg^{-1}$ , PEEP 5cmH<sub>2</sub>O. Fiber bronchoscope (6Fr) is passed through "swivel" adapter into ventilation circuit and LMA. Times of procedures and ventilation data were analyzed and statistical significance revealed.

**Results:** Use of LMA left all the area free for surgery without concerns for ventilation of the patient. So, number of patients needed another surgery is decreased (only 6 through 30 compared to 5 from 12 when IOT was used). Another advantage we observed was longer time of the procedures (mean time  $1.47 \pm 0.29h$ , max 3h 47min).

Insertion of instrument in the airway increased the pressure (for LMA 3,5-5,0;  $\Delta press + 12.76$ ,  $p < 0.01$ ), but only in the circuit and ventilation adjustments were needed to maintain  $EtCO_2 < 48mmHg$  (max value observed after corrections of parameters). Suction used during the procedure had important impact on ventilation:  $V_{exp}$  dropped significantly ( $\Delta V_{exp}$   $44.6 \pm 18\%$ ,  $p < 0.01$ ) and  $EtCO_2$  showed the same trend ( $\Delta EtCO_2$   $25.6 \pm 12.8mmHg$ ,  $p < 0.01$ ). Correction of ventilation was needed to maintain normal  $SpO_2$ . Corrections were sufficient to maintain normal/near normal BGA.

**Discussion and Conclusion:** Use of LMA was a suitable choice for our patients scheduled for subglottic LASER surgery diminishing number of the stages and providing better surgical approach into operation area. Insertion of fiberscope increased significantly circuit resistance, but not in patient's airway. Suction during the procedure produced important rearrangements of ventilation and  $EtCO_2$  monitoring, urging necessary adjustments of ventilation. Anyway with proper adjustments of ventilation parameters made no significant alterations of BGA were observed.

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## OP - IV

8

**COMPARISON OF INTUBATION  
PERFORMANCE OF ANESTHESIA  
RESIDENTS WITH KING VISION AND  
MCGRATH SERIES  
5 VIDEOLARYNGOSCOPE ON MANIKIN****M. ÇAKIRCA, I. AYTAÇ, A. POSTACI, S. SEVİM,  
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**Objective:** McGrath Series 5 videolaryngoscope consists of an angle blade and a camera that improved glottic visualization and it requires styletted endotracheal tube. King Vision videolaryngoscope has a tube channel in the right side of the blade which holds the endotracheal tube and directs it towards the vocal cords. In this manikin study, we compare the intubation performances of anesthesia residents with two different videolaryngoscopes.

**Material and Methods:** Fifteen anesthesia residents who have no previous experience on McGrath Series 5 (VL) and King Vision (CVL:channeled VL) videolaryngoscope; attempted 3 consecutive intubation for each devices on Manikin. Laryngoscopy time (duration between the insertion of laryngoscope in mouth to passing of the tracheal tube through vocal cords). After that we confirmed tube location with ventilation of manikin lung using ambu and intubation success rate was recorded. Laryngoscopy time longer than 60 sec and to give up the try were considered as failed intubation. Time of failed attempts were removed the statistically analyze. The Grading Scale of Intubation Difficulty (GSID) was rated on a 5-point scale.

**Results:** Laryngoscopy time was longer in CVL group but this result was statistically insignificant. (VL; 19.18 sec (4.7-57.8), CVL; 23.85 sec (6.5-42.0),  $p=0.076$ ). Intubation were successfully performed in 86.6% of VL group where as 100% of CVL group. All intubation were performed within 60 sec in both groups. We found significantly lower GSID scores in CVL group (VL;easy:9, moderate:6; KVL;very easy:4, easy,11;  $p=0.006$ )

**Discussion and Conclusion:** King Vision VL improved GSID scores comparing to McGrath Series 5 VL but it did not effect laryngoscopy time and intubation success rate. It may depends on lack of stylet requirement with King Vision because endotracheal tube placed in channel can easily move through the trachea. This study showed that use of King Vision VL by anesthesia residents could have advantages about ease of application because of its tube channel.

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**COMBINED GENERAL AND EPIDURAL ANESTHESIA VERSUS GENERAL ANESTHESIA ALONE IN COLORECTAL CANCER SURGERY**

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**Objective:** The purpose of our study is to compare two different methods of anesthesia in colorectal cancer surgery and to evaluate advantages and limitations of each method on recovery characteristics and course of early postoperative period in these patients.

**Material and Methods:** 40 patients scheduled to undergo elective colorectal resections were randomized to receive either combined general and epidural anesthesia followed by epidural analgesia (GA \_ EA group) or general anesthesia followed by systemic morphine analgesia (GEN group), 20 patients in each group. Induction of general anesthesia was performed the same way ( fentanyl, thiopental, pancuronium) in both groups. Total doses of fentanyl and muscle relaxants were registered intraoperatively to maintain adequate anesthesia. Recovery characteristics were also evaluated. Visual analogue scale (VAS) was used to compare intensiveness of postoperative pain between two groups during 24 hours postoperatively. Side effects of both analgesia techniques were evaluated.

**Results:** Total doses of fentanyl (0,2-0,3 mg) and pancuronium (6-8 mg) for were significantly lower in GEN \_ EA group as compared with GEN group (0,4-0,5 mg) and (10-12 mg) respectively ( $p < 0.001$ ). Tracheal extubation time was  $5 \pm 2$  min in GEN \_ EA group to compare with  $14 \pm 1.7$  min in GEN group. VAS pain scores at rest and on coughing were significantly better in GEN - EA group to compare with GEN group ( $p < 0.01$ ). Adverse effects such as nausea and vomiting occurred in 10 (50%) patients of GEN group to compare with 5 (25%) patients in GEN \_ EA group ( $p < 0.05$ ). Sedation level during 24 hours postoperatively was also more profound in GEN group.

**Discussion and Conclusion:** General and epidural anesthesia has demonstrated beter recovery characteristics than general anesthesia alone. Postoperative epidural analgesia was more effective for postoperative pain management with fewer adverse reactions to compare with systemic opioid analgesia.

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**SINGLE DOSE HYPERBARIC PRILOCAINE DOES NOT CAUSE HISTOPATHOLOGIC DAMAGE IN RAT INTRATHECAL MODEL**

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**Introduction:** The aim of this study was to investigate the neurotoxicity of intrathecal hyperbaric prilocaine in a rat spinal model.

**Material and Methods:** Twenty five rats were randomized into 5 groups and received intrathecal single dose hyperbaric prilocaine 2% (group HP; Prilotekal®, 2%, 20 mgmL<sup>-1</sup>, Mercury Pharma UK), plain prilocaine 2% (group P; Citanest® 2%, 20 mgmL<sup>-1</sup>, Astra Zeneca, Ilac Sn, Istanbul), 25% glucose dissolved in distilled water (group G) or saline (group S) following laminectomy, the volume of the injected solutions was 0.12 µLg<sup>-1</sup> body weight, another control group underwent only surgery (group C). Neurotoxicity was assessed with motor function and histopathological evaluation of the spinal cord. Hind-limb motor function was evaluated by walking behavior. Twenty four hours after the injection, the lumbar segment of the spinal cord with anterior and posterior roots, and the dorsal ganglion were harvested by laminectomy under microscopy and examined by light microscopy with respect to histopathological changes.

**Results:** Time to ambulation was longer in group HP and group P. Median time to ambulation; 35 min (22-40) in group P and 30 min (25-40) in group HP and 10 min (10-15) in group G, no motor block was detected in group S and group C ( $p < 0.001$ ). The groups were similar with respect to histopathological changes. No obvious difference were detected between treatment groups. Scattered neuronal degeneration was observed only in 1 rat in group HP, group P and group G ( $p = 0.504$ ).

**Discussion and Conclusion:** Single dose hyperbaric prilocaine administered intrathecally at clinical relevant dose and concentration does not cause histopathological changes in the rat spinal cord.

## OP - IV

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**THE EFFECT OF NORMAL SALIN AND RINGER'S LACTATE ON METABOLIC ACIDOSIS IN PATIENTS UNDERGOING TOTAL KNEE ARTHROPLASTY WITH TOURNIQUET APPLICATION UNDER SPINAL ANESTHESIA**

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**Objective:** In this study, we investigated the changes in the acid-base balance in patients undergoing total knee arthroplasty with tourniquet application between isotonic sodium chloride solution and ringer's lactate infusion associated with inflation and deflation of the tourniquet.

**Material and Methods:** ASA physical status I-II 60 patients, age >40, undergoing total knee arthroplasty with tourniquet application under spinal anesthesia were included to the study. Patients randomised into two groups. ASA physical status, age, sex, height, weight, anesthesia, surgical and tourniquet time were recorded. Premedication was administered 30 minutes prior to surgery. We performed spinal anesthesia after 10 ml kg<sup>-1</sup> isotonic sodium chloride iv infusion to group one and 10 ml kg<sup>-1</sup> ringer's lactate iv infusion to group two. 10 ml kg<sup>-1</sup> h<sup>-1</sup> infusion were given to each groups. All patients have underwent artery cannulation with local anesthesia for repeated measurements of arterial blood gases. Venous blood samples were obtained from the antecubital vein. Arterial and venous blood samples taken before tourniquet inflation (1), before tourniquet deflation (2), 1 (3), 15 (4) and 30 minutes after tourniquet deflation. Heart rate, blood pressure, SpO<sub>2</sub> and EtCO<sub>2</sub> values were recorded.

**Results:** There was no significant difference between the groups for age, gender, height and weight, ASA, anesthesia, surgical and tourniquet time. In group one, pH values were significantly lower and chlorine values were significantly higher from group two. In group one, pH values after tourniquet deflation were significantly lower from pH values before tourniquet deflation. There was no significant difference between the groups, in heart rate, blood pressure and lactate levels.

**Discussion and Conclusion:** In our study, patients undergoing total knee arthroplasty under spinal anesthesia with tourniquet application, infusion of isotonic sodium chloride solution caused hyperchloremic metabolic acidosis. It's shown that metabolic acidosis doesn't occur in the ringer's lactate group.

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**DIFFERENTIAL DIAGNOSIS OF A PATIENT WITH HEADACHE, FEVER AND MENINGISMUS AFTER SPINAL ANAESTHESIA**

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**Introduction:** Headache after lumbar puncture is a common occurrence of spinal anaesthesia. But other uncommon diagnosis such as migraine, chronic and pregnancy-related hypertension, venous sinus thrombosis, intracranial tumors, intracranial hematoma, chemical or infectious meningitis can be considered. The aim of this paper is to discuss about differential diagnosis of a patient with headache, fever and meningismus signs after spinal anaesthesia.

**Case Report:** A 33 year old, ASA I, 33 weeks pregnant patient with a diagnosis of preeclampsia underwent emergency cesarean section(C/S) with spinal anesthesia and was referred to our hospital four days after C/S. At physical examination C1-C2 tenderness, stiffness of the neck and Kernig 's sign was positive and increasing head and neck pain was found. Fever was 38.4°C, blood pressure was 110/ 70mmhg. Leucocyte count was 13600 10<sup>3</sup> / mm<sup>3</sup> and other blood chemistry tests were within normal limits. Abdominal ultrasound could detect neither abscesses nor fluid collection. The pressure of CSF was 9 cmH<sub>2</sub>O at the lumbar puncture. CSF smear did not suggest meningitis. At patient's cranial CT scan, diffuse dural thickening and left frontal subdural collection was detected. The patient was referred to neurosurgery and surgery was not considered.

**Discussion and Conclusion:** After spinal anesthesia, continued atypical headache and presence of tinnitus must alert against an underlying subdural hematoma. Early diagnosis can be made by history of the patient combined with neurological and radiological imaging methods. Cerebral subdural haematoma as a serious complication of spinal anesthesia must be kept in mind and may mimic postdural puncture headache.

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## CLINICAL IMPACT OF PREOPERATIVE CARBOHYDRATE DRINKS IN PATIENTS UNDERGOING COLORECTAL AND CHOLECYSTECTOMY OPERATIONS

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**Objective:** Carbohydrate-rich liquid drinks (CRLDs) have been recommended to attenuate insulin resistance by shortening the preoperative fasting interval. The aim of our study is to measure the effect of preoperative oral administration of CRLDs on the well-being and clinical status of patients.

**Material and Methods:** A randomized, double blind, prospective study of patients undergoing open colorectal operations (CR) and open cholecystectomy (CH) was conducted. Patients were divided into three groups: study, placebo and control. The Simplified Acute Physiology Score changes (SAPS)-II between the three groups were studied to evaluate clinical status of the patient. Visual analogue scale (VAS) for seven parameters of patient wellbeing (thirst, hunger, anxiety, mouth dryness, nausea, weakness and sleep quality) were recorded and compared for two different time periods (up to 24 h postoperatively and from 36 to 48 h postoperatively). postoperative complications and time to need in regaining daily activities-also recorded.

**Results:** 142 American Society of Anesthesiology (ASA) Physical Status of I to II class patients were enrolled in the study, 71 with colorectal surgical interventions and 71 with open abdominal cholecystectomy interventions. There were no significant differences in postoperative SAPS-II scores or lengths of hospital stay (LOS) between the groups. In CR patients, the degree of thirst was partially improved by drinking CRLDs ( $p = 0.027$ ). On the other hand, in CH patients; feelings of thirst, hunger, mouth dryness, nausea and weakness showed significant improvement ( $p < 0.05$ ). Study groups didn't show statistical difference in postoperative complications neither in regaining daily activities compared with placebo or control group. Also, there was no difference in length of hospital stay.

**Discussion and Conclusion:** Oral administration of carbohydrate-rich liquid drinks improve the well-being in patients undergoing CH, but the effect is less evident in patients undergoing CR. No significant improvements were seen in clinical status, in length of hospital stay, postoperative complications and in regaining daily activities in each groups included in the study.

## THE ROLE OF ANESTHETISTS, KNOWLEDGE AND ATTITUDES OF OUR PATIENTS TOWARDS ANESTHESIA

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**Objective:** In this study, we aimed to investigate the patients' Anesthesia knowledge and concerns about Anesthesiologist, which we provided health service to them.

**Material and Methods:** The patients over the age of 18 who admitted to anesthesia outpatient center for preoperative evaluation were asked to fill out a survey on a voluntary basis in Kecioren Education and Research Hospital during a month. 113 patients who filled out a survey completely were included in the study.

**Results:** The mean age was  $41.3 \pm 17.7$ . Sixty-five were male patients (57.5%), and 48 were female (42.5%). 61.1% of patients (69) had previously received anesthesia for any reason. 7 of those who received anesthesia (6.2%) said that they did not know anesthesia technique, although 50 (44.2%) received general anesthesia, 21 (18.6%) received central blocks, 7 (6.2%) had a history of sedation. When asked that who would give anesthesia to you. Answers were that 61 patients (54%) said a doctor, 6 (5.4%) nurses, while 46 patients (40.7%) did not know the person who gave anesthesia. When asked that who would follow up your vital signs during the surgery, 34.5% (39) replied as surgeon, 3% as nurse, while only 28.3% (32) replied anesthesiologist. When asked; would you like to be informed about anesthesia, they replied as yes (67.3%), no (5.3%), no matter (27.4%). 61.3% patients said to choose the type of anesthesia, 81.0% of which preferred to be given general anesthesia. When asked about neuraxial block, 38 patients worried about being paralyzed, 30 patients worried about inadequate anesthesia, while 28 patients worried to be aware of pain and operation, while 14 patients were afraid of back pain after the operation. 21 patients did know the reason for the fear.

**Discussion and Conclusion:** According to these results, patients in preoperative evaluation had a low level of knowledge about anesthesia, the role of the anesthesiologists, and serious concerns of the general and regional anesthesia. Therefore, patients should be well informed about anesthetic management in preoperative period so that patients' compliances are improved in every period of anesthesia.

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## COMPARISON OF MEPERIDINE WITH TRAMADOL FOR TREATMENT OF SHIVERING DURING SPINAL ANESTHESIA

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**Objective:** Shivering is an unpleasant and frequent complication in the postoperative period. However, in a shivering patient, oxygen consumption may increase by 200% to 500%. Thus, in a patient with already limited myocardial oxygen supply because of arteriosclerosis, shivering may further compromise myocardial function.

The aim of this study was to evaluate the efficacy and side effects of Tramadol comparing with Meperidine for the treatment on post-spinal shivering in urology.

**Material and Methods:** In this prospective, controlled, randomized, double-blind clinical trial 400 patients, ASA physical status I or II, aged 20-65 years, scheduled for elective urologic surgery under spinal anesthesia were investigated. Patients were randomly divided into two groups. Meperidine (Group M, n =200) and Tramadol (Group T, n = 200) groups. Group M and T received meperidine 0.5 mg/kg or Tramadol 0.5 mg/kg respectively, in 10 ml of isotonic saline intravenously. The observation times were between 1 min and 45 min. All drugs were infused for treatment of shivering after spinal anesthesia. Blood pressures, heart rates, body temperatures and side effects (pruritis, somnolence, dizziness, nausea, vomiting) and the duration of shivering control were evaluated and recorded.

**Results:** There were no significant differences between two groups in age and weight of patients. Blood pressure, body temperature, and arterial oxygen saturation did not have a clinically significant change and they were not different between the two groups. The time elapsed from treatment to ceased shivering was significantly shorter ( $p < 0.001$ ) more in Meperidine group. The response rate (shivering ceased after treatment in 15 min) was 97.2% and 76.9% for groups M and T respectively. It was observed that the mean response time was significantly less in Group M ( $1.59 \pm 0.79$  min) compared to Group T ( $4.83 \pm 2.7$  min) and Group C ( $15.53 \pm 1.7$  min). Dizziness was not statistically significant between groups. Pruritis was not seen in any group.

**Discussion and Conclusion:** We conclude that Meperidine is a better alternative than Tramadol for treatment of shivering in patients during spinal anaesthesia ( $P < 0.001$ ). While side effects were similar in both groups.

## CONTEMPORARY LEGAL ISSUES IN FORENSIC CADAVER ORGAN DONORS

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**Introduction:** In Turkey, the brain death criteria are determined by the regulation of organ and tissue transplant employments but in forensic cases the condition is not clear. The aim of this presentation is draw attention to the judicial problems via this brain death case whose organs could not be used for transplantation because of some legal barriers.

**Case Report:** A patient without any known disease brought up to the emergency department with asystole. After resuscitation she had taken to the intensive care unit. Blood and urine samples were taken for possible drug intoxication. Anti-edema therapy because of diffuse brain edema was rapidly begun. On the 3<sup>rd</sup> day of admission, brain death was confirmed with Glasgow Coma Score 3 and neurosonologic imaging. After her family's confirmation, tissue samples were taken and recipient donor seeking was begun for transplantation. Forensic Medicine Institute and public prosecutor were informed. However "patient legally lives" decision was aroused and concluded that the organs could not be used in transplantation. At the 12<sup>th</sup> day of hospitalization cardiac arrest was occurred and autopsy procedures were initiated.

**Discussion and Conclusion:** Brain death cases are the most important resources for organ transplantation. In the first clause of the 'regulation of organ and tissue transplant employments' the principles of inspection and the implementation of the transplant services have been identified but in forensic deaths the situation is not clear. In Turkish Criminal Law, it's defined that the prosecutor's approval should be taken before getting organs for transplantation in forensic cases. However in the process of getting permissions it must be notified that the risk of losing the vitality of the organs is increased. In this period prosecutor-forensic expert cooperation should be provided in a short time. In conclusion, the laws of transplantation rules in forensic cases with undetermined cause of brain death should be clearly identified. We believe that with the new regulations, the number of cadaver donor can be increased.

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**ANGIOTENSIN II RECEPTOR SUBTYPE-1 ANTAGONISTS USED CHRONICALLY IN THE HYPERTENSIVE GERIATRIC PATIENTS IS ASSOCIATED WITH GREATER HEMODYNAMIC FLUCTUATIONS AFTER ANESTHETIC INDUCTION**

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**Objective:** Cardiovascular complications account for 25-50% of deaths following noncardiac surgery. Regardless of the level of preoperative blood pressure control, many patients with hypertension display an accentuated hypotensive response to induction of anesthesia.. The aim of this study is to emphasize; hypertensive geriatric patients treated chronically with angiotensin II receptor subtype-1 antagonists show greater hemodynamic fluctuations.

**Material and Methods:** In our prospective study we analyzed the prevalence and severity of hypotension after applied standardized anesthesia protocol of induction of general anesthesia for elective abdominal surgery in 25 geriatric patients treated with angiotensin converting enzyme inhibitors (ACEI) till the morning of surgery named group A. Their hemodynamic response pre and after induction was compared with the second 25 geriatric patients treated with angiotensin II receptor subtype-1 antagonists (ARA) named group B. Measurement times of BP were: T1(basic time); T2 (enter to o.th); T3(end of induction); T4 (laryngoscopy);and T5 (5 min after intubation). Data are presented as means values in % and  $\pm$  standard deviation.  $P \leq 0.05$  was considered significant.

**Results:** Systolic, diastolic and mean blood pressure showed significant reduction for T1, T3 and T5 in group B (23 of 25)  $P \leq 0.05$  compared with the group A (14 of 25).

**Discussion and Conclusion:** ACEI have been shown to prolong survival in patients with congestive heart failure or left ventricular dysfunction and to have less hemodynamic fluctuations after induction of GA.

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**DETECTION OF CEREBRAL PERFUSION DURING HEAD-UP POSITION BY NEAR INFRARED SPECTROSCOPY IN A PATIENT UNDERGOING THYROIDECTOMY**

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**Objectives:** Although it is well known that the central nervous system is one of the most important endpoints for the majority of anesthesiologists. It is still one of the least monitored parts of the body in routine anesthesia practice. In addition, routine anaesthesia monitoring may not be sufficient in detecting ischaemic brain damage. Particularly, the effects of changes in head and neck position on brain perfusion, and its clinical outcomes have not been well described yet. In recent years, a new, non-invasive, continuous monitoring system of cerebral oxygen saturation through the scalp and skull, called as near infrared spectroscopy (NIRS), has been increasingly used in various type of operations such as shoulder surgery, coronary artery by-pass and congenital heart surgery. In this paper, we aimed to investigate the effect of head and neck positioning on cerebral perfusion during thyroidectomy in the beach chair position.

**Material and Methods:** A 39-year-old female patient was underwent total thyroidectomy for multinodular goiter. NIRS was used for the monitorization of cerebral oxygen saturation in operation. 20% decreases of regional oxygen saturation ( $rSO_2$ ) or greater from baseline were defined as a cerebral desaturation event.

**Results:** Mild decreases in  $rSO_2$  (L60 10%, r68 7%) was detected by NIRS after the changing of the position, In contrast, no significant decrease were observed in the peripheric oxygen saturation values.

**Discussion and Conclusion:** Head and neck positioning causes a negative effect in cerebral saturation. NIRS seems to be an effective method in detecting the changes in cerebral perfusion and can be safely used in operations performed via head and neck position.

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## THE EFFECT OF MATERNAL PREOPERATIVE ANXIETY ON HYPOTENSION AFTER SPINAL ANAESTHESIA IN CAESARIAN DELIVERY

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**Objective:** Maternal hypotension is the most common side-effect of spinal anaesthesia in caesarean delivery. We performed a prospective study in women undergoing in caesarian delivery to assess effect of preoperative maternal anxiety in hypotension.

**Material and Methods:** We enrolled 101 healthy gravid women (ASA I) undergoing elective caesarian delivery under spinal anaesthesia during the 2 years period 2013-2014. We used direct psychological measures of anxiety: Verbal analogue scale (VAS) anxiety score. The data were organized into ordinal groups for low, medium and high anxiety (VAS: low 0-3, medium 4-6, high 7-10). Hydration was made with 1500ml of Ringer's lactate before spinal anaesthesia. Spinal anaesthesia was performed in the sitting position at L3-L4 interspace using G26 pencil point needle. We used 15mg hyperbaric bupivacaine with 0.2mg morphine and 10µg fentanyl. Hypotension was treated by ephedrine 5mg bolus, followed by 1mg ml<sup>-1</sup> infusion if necessary (51 patients), or phenylephrine 100µg bolus, followed by 16µg min<sup>-1</sup> if necessary (50 patients). Maternal Systolic arterial pressure (SAP) was measured at baseline, immediately before anaesthesia and every minute after spinal anaesthesia until delivery, heart rate continuously. We assessed the effect of anxiety on the maximum percentage change in maternal systolic arterial pressure.  $P < 0.05$  was considered significant.

**Results:** There was a significant effect of preoperative anxiety on change in systolic arterial pressure ( $P = 0.003$ ).

**Discussion and Conclusion:** Preoperative maternal anxiety had a significant effect on hypotension after spinal anaesthesia in elective caesarian delivery.

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## THE EFFECTS OF DIFFERENT TYPES OF MUSIC AND QURAN ON HEART RATE VARIABILITY INDEX AND HEMODYNAMIA PATENTS IN GENERAL ANESTHESIA

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**Objective:** Operation is a reason for anxiety and anesthesiologists use kinds of medicine to decrease anxiety. The music is usually used for calmness also Quran has sedative effects. During general anesthesia sense of hearing could have effects on autonomic nervous system. Heart rate variability index (HRI) has been used for showing autonomic system activities. We examined if music and Quran could be used as a way to decrease anxiety index during general anesthesia.

**Material and Methods:** ASA I-III, age range 18-65 years, 80 patients randomly divided into 4 groups. Group kuran (q), group classical (k), group control (c), group rock (r); Holter EKG monitoring was started 5 minutes before anesthesia induction. Choice of music, as a relaxing and comfortable sound level was also asked. Standard and Holter ECG were recorded. Anesthesia was maintained by sevoflurane in O<sub>2</sub>-air. Arterial blood pressures, SPO<sub>2</sub>, ETCO<sub>2</sub>, PEAK airway pressures were recorded at preoperatively, after intubation and 5., 15., 30., 45., 60. minutes. For the evaluation of heart rate variability in time and frequency based analysis was used. Time-based analysis, SDNN (all normal RR intervals of the standard deviations), SDANN (all records each 5-minute segment of the normal RR intervals of the standard deviations), pNN50 (50 msec vary successive RR intervals of the rate), RMSSD (successive RR intervals of the mating intervals the difference between the square root of) parameters were evaluated. Frequency-based analysis, the power (<0.4 Hz), HF (high frequency: 0.15-0.4 Hz), LF (low frequency: 0.04-0.15 Hz), VLF (very low frequency: 0.003-0.04 Hz), ULF (extremely low frequency: < 0.003 Hz) parameters were evaluated.

**Results:** SDNN three groups had also showed significant differences compared to control group. In our study, patients under general anesthesia between the groups in heart rate variability (HRV) values compared to the value of RMSSD who played in the group difference was statistically significant compared to other groups.

**Discussion and Conclusion:** Listening Quran or soft music could be valuable methods reduce anxiety during general anesthesia with limited arrhythmia.

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## CLINICAL EXPERIENCE FROM TRANEXAMIC ACID INTRAOPERATIVE USAGE IN THA, TKA

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**Objective:** Tranexamic acid (TXA) is an antifibrinolytic drug used as a blood-sparing technique in many surgical specialties. The principal objective of our meta-analysis was to compare total blood loss of patients receiving allogeneic blood transfusions with and without the use of TXA for knee (TKA) and hip (THA) arthroplasty. The objective of this study was to determine if tranexamic acid (TXA) applied topically reduced postoperative bleeding and transfusion rates After Primary Total Hip Arthroplasty (THA) And Primary Total Knee Arthroplasty (TKA).

**Material and Methods:** Studies included two groups of patients underwent primary unilateral TKA or THA; the study involved the comparison of a TXA treatment group to a control group who not received TXA; outcome measures included total blood loss TBL, number of patients receiving allogeneic blood transfusions, and/or incidence of thromboembolic complications.

**Group 1** Thirty patients were received 1000 mg Tranexamic acid as a bolus intravenous injection 30 min before the incision. The intraoperative and postoperative blood loss and the number of blood transfusions required were recorded. The patients were screened for deep venous thrombosis with bilateral compression ultrasonography on the 10th postoperative day. The hemoglobin level was measured preoperatively and on the 3rd postoperative day. The D-dimer levels were measured preoperatively and 24-h postoperatively.

**Group 2** Thirty patients were not received Tranexamic acid. The patients were screened for deep venous thrombosis with bilateral compression ultrasonography on the 10th postoperative day. The hemoglobin level was measured preoperatively and on the 3rd postoperative day. The D-dimer levels were measured preoperatively and 24-h postoperatively.

**Results:** The mean blood loss was significantly higher in the non-TXA patients in both TKA and THA groups. Postoperative transfusions decreased dramatically with TXA, dropping from 10% to 0%, and from 15% to 5%, in the TKA and THA groups, respectively. Topical application of TXA significantly reduces postoperative blood loss and transfusion risk in TKA and THA.

**Discussion and Conclusion:** A single preoperative bolus dose of Tranexamic acid reduces intraoperative, postoperative total blood loss and transfusion requirements in primary cementless total hip replacement surgery without any increased risk of thrombus formation.

## A CASE OF MALIGNANT TRACHEA ESOPHAGEAL FISTULA CAUSED BY ADVANCED LUNG TUMOR

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**Objective:** Malignant respiratory digestive fistulas are late complication of advanced malignant tumors. Trachea perforations might also produce clinical findings like fistula. Perforation might develop as a complication particularly in some situations such as challenging intubation cases and tracheal diverticular. We intend to present a tracheoesophageal fistula case noticed during intubation.

**Case Report:** 59 year-old male patient with lung tumor was urgently examined with the requirement of intubation. It was learned that as the biopsy material had been insufficient, no histopathological diagnosis could be made, and RT had been taken on his thorax then, and the patient had not visited the hospital and received treatment for 2 months. The patient arrived in the hospital again when he had fatigue, swallowing difficulty and oral intake disorder, and he was immediately hospitalized, and his treatment began. It was learned that he was taken to intensive care unit when he developed clouding of consciousness and respiratory distress. Chest radiography (figure 1) of the patient showed pneumatic infiltration, and the patient had the values WBC:330 PLT:20000 Hb:9,9 and ALBUMIN:2,2. It was regarded that the patient developed leucopenia not because of malignancy but because of pneumonia. The patient was then successfully intubated in the first attempt with spiral tube no. 8 following iv induction. SpO<sub>2</sub> which was 83 reached to a maximum of 94 with 60 percent oxygen. The occurrence of unavoidable air leak in spite of inflating the pilot balloon at a high pressure indicated a possible tracheal perforation in the patient. The endoscopic examination (figure 2) showed 5 cm long esophageal defect starting from the point of 20 cm expanding to right bronchus, carina and mediastinum. The patient's tracheoesophageal fistula was confirmed in CT report (figure 3). Neither esophageal nor tracheal stent could be placed in the patient due to the width of the defect. It was decided to sustain his treatment with lung protective ventilation.

**Discussion and Conclusion:** In this case, insertion of the endotracheal tube was accomplished by laryngoscopy. In complicated cases, tracheal intubation can be performed under the guidance of fiber optic bronchoscope (1). Ventilation maintenance through esophagus by intubation of the distal trachea when proximal trachea is destructed is possible (2). Approximately 16% of MTEF are related to a primary lung neoplasm (2). Cancer patients are more prone to develop wall perforation. Therefore, careful attention must be exercised, and air leak which continues even after intubation tube cuff is sufficiently inflated should be interpreted to indicate a perforation or fistula, and the patient must be referred for examination.

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### IMPORTANCE OF EVALUATION OF HYPONATREMIA IN ADULT PATIENTS OF TERTIARY SERVICE

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**Objective:** Natrium is the most important extra cellular kation of our body. He is decisive in osmolarity, hidroelectrolitic balance and homeostasis. Hiponatremia or hipernatremia is present where our body feed- back mechanisms cannot correct this situation. We will pay attention hiponatremia, because it is much more frequent than hipernatremia. Evaluation of mechanisms, rapidity of installation(chronic or acute hiponatremia), level of hiponatremia (mild, moderate, profound), presence or not of clinical neurological signs, are very important. These complex evaluation is a condition for right treatment and prevention of neurological signs (confusion, coma, seizures, central pontinemyelinolysis) and mortality.

**Material and Methods:** We have analysed and compared plasma natremia concentration that were measured at "Mother Teresa"University Hospital Center patients. Natremia were measured with electrochemical method (with ion selective electrode).

**Results:** We have compared control group values of natremia in 30 adults, and hiponatremia in 234 patients, 53 of them were neurosurgical patients, 24 of them were with chronic ethylism, 68 of them were with renal failure, 30 of them were with type II diabetes, and 50 of them were with liver cirrhosis.

**Discussion and Conclusion:** By this comparison we've emphasized importance and features of this examination.

Due to craniofacial deformities, like micrognathia. Bilateral vocal cord paralysis, frequent bronchospasm attacks, hyperkalemia with succinylcholine, interaction between the metabolisms of anticonvulsant and anesthetic medications are some of the problems with these patients' anesthetic management. Malign hyperthermia after anesthesia induction was reported. The patient must be positioned carefully because of joint deformities and osteoporosis. Suitable anesthetic management should be selected.

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### THE EFFECTS OF TOTAL INTRAVENOUS, LOW FLOW AND HIGH FLOW ANESTHESIA APPLICATIONS ON MIDDLE EAR PRESSURE

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**Objective:** The aim of this study is comparing the changes of middle ear pressure during the low flow anesthesia. We want to prove if the low flow anaesthesia is more protective than the high flow or not.

**Material and Methods:** This was a prospective, case-control study. A total of 60 patients with no middle ear pathology scheduled for tiroidectomy surgery were included in the study. Group I (n = 30) received high flow desflurane, group II (n = 30) received low flow desflurane and TIVA applied to Group III (n: 30). Baseline tympanometry (otoflex 100, Otometrics R) was performed before the anaesthesia(T1) on both ears, and tympanometry was repeated 10 minutes (T2) after the administration, 5 minutes before the extubation (T3), 5 (T4), 10 (T5), 30 (T6) minutes after the withdrawal of anaesthetic agents. Data were analyzed using the Mann-Whitney U (inter-group) and the Wilcoxon test (intra-group) procedures.

**Results:** No meaningful difference was observed between the groups in terms of age, sex, weight, height, BMI values, surgery and anaesthetic durations according to clinical and demographic comparisons (p>0,05). At all measurement times there is no difference between the groups except T2. In Group I middle ear pressure values were measured to be greater than Group II and III (p<0,001).

**Discussion and Conclusion:** Acar et al. demonstrated the effects of two different inhaler agents on middle ear pressure. Desflurane is more increased than isoflurane on intra-tympanic pressure and isoflurane may be used more safely than desflurane in middle ear operations. The low effect of isoflurane on intra-tympanic pressure can be explained by the high blood/gas partition coefficient compared to desflurane (1). In this study the Group with high flow desflurane anesthesia post induction ear pressure values is shown to be higher than Group with TIVA and low flow desflurane.

In conclusion TIVA and low flow desflurane is found to be safer than high flow desflurane.

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## RELATIVE RISK OF SEPSIS AND MORTALITY IN RELATION TO MODERATE, CRITICAL AND OVERALL HYPERGLYCEMIA

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**Objective:** The hyperglycemic condition from dysregulated glucose homeostasis has been defined stress hyperglycemia. In 2012 American Burn Association (ABA) Burn Quality Consensus defines that stress hyperglycemia has been associated with several adverse effects include poor wound healing, infection, sepsis and death(1).

The aim of this study is to evaluate the Relative Risk (RR) of sepsis and mortality for patients with hyperglycemia during the burn disease.

**Material and Methods:** This is an observational prospective cohort study. Population is composed of adults hospitalized in ICU of the Service of Burns near University Hospital Center, Tirana, Albania for 5 years (2010-2015). Patients are grouped according glucose values on three categories: Patients with Euglycemia (80-120 mg/dL), Moderate Hyperglycemia (121-180 mg/dL) and Critical Hyperglycemia (> 180 mg/dL). The latest group is treated with Insulin therapy. The RR and 95% confidence interval (CI) are calculated according to Altman,1991(2).

**Results:** The total number of patients were 346 from which 90 (26%) were diagnosed with sepsis according ABA definitions. Mortality was 14,5%. RR is presented taking as referent the Euglycemia group (Table1).

Table 1

Glucose values Categorization	SEPSIS (n=90)				
	No	Yes	Relative Risk	(% CI)	p value
Euglycemia (n=204)	172	32	1.0(Referent)		
Moderate Hyperglycemia (n=118)	74	44	2.3	1.6 to 3.5	<0.0001
Critical Hyperglycemia(n=24)	10	14	3.7	2.3 to 5.9	<0.0001
Overall Hyperglycemia Moderate & Critical (n=142)	84	58	2.6	1.7 to 3.7	<0.0001
	Mortality,deaths (n=50)				
	No	Yes	Relative Risk	(% CI)	p value
Euglycemia (n=204)	187	17	1.0(Referent)		
Moderate Hyperglycemia(n=118)	89	29	2.9	1.6 to 5.1	0.0001
Critical Hyperglycemia(n=24)	20	4	2	0.7 to 5.4	0.1759
Overall Hyperglycemia Moderate & Critical(n=142)	109	33	2.7	1.6 to 4.8	0.0002

**Discussion and Conclusion:** We observe increase risk for sepsis and mortality for patients with hyperglycemia (Moderate and Critical) during the disease. We did not observe increase risk for mortality for patients with critical Hyperglycemia because this is the group of patients treated with insulin therapy. The study address the impact of the insulin treatment of stress induced hyperglycemia on mortality.

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## IMPORTANCE OF PERIOPERATIVE GLYCEMIC CONTROL IN PATIENTS WHO UNDERGO UROLOGY PROCEDURES

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**Objective:** Surgery and anesthesia invoke a neuroendocrine stress response with release of counter-regulatory hormones results in peripheral insulin resistance, increased hepatic glucose production, impaired insulin secretion and fat and protein breakdown with potential hyperglycemia and even ketosis. Balancing the risks of hypoglycemia against the known benefits in morbidity and mortality is the goal and although intensive glycemic control continues to be standard of care, current consensus guidelines recommend less stringent glycemic goals, typically between 80-150 mg/dL. There is limited evidence to characterize the impact of perioperative hyperglycemia and insulin on adverse outcome in patients with and without diabetes, diabetes undergoing urologic procedures. The purpose of this study was to evaluate the relationship of perioperative hyperglycemia, degree and time of hyperglycemia and impact of perioperative insulin administration on complications undergoing elective urologic procedures.

**Material and Methods:** We evaluated the relationship of perioperative hyperglycemia (>180mg/dL) and insulin administration on infections for patients undergoing elective urologic procedures. Participants were 100 patients.

**Results:** Of 100 patients (55.4± 15.3 years; 78.2% man) with a serum glucose determination on the day of surgery, postoperative day 2, 31.2% of patients was hyperglycemic had a significantly increase risk of infection (odds ratio (OR) 2.01; 95% confidence interval (CI), 1.63-2.44). Increase risk of poor outcomes was observed both for patients with and without diabetes. Those with hyperglycemia on the day of surgery who received insulin had no significant increase in infection (OR 1.28; 95% CI, 0.89-1.87). A dose effect relationship was found between the effectiveness of insulin –related glucose control (worst 180-250 mg/dL, best <130 mg/dL) and adverse outcomes. 16.7% vs 9.2%, P<0.001. We found that for every 10 unit increase in blood glucose levels, there was a 8% odds of infection (OR, 1.02; 95% CI, 1.02-1.08).

**Discussion and Conclusion:** Perioperative hyperglycemia was associated with adverse outcomes in urologic procedures in patients with and without diabetes. However, patients with hyperglycemia who received insulin were at no greater risk than those with normal blood glucoses. It may be possible that the administration of insulin is a marker for better perioperative care in general and that some noninsulin benefits were conferred to patients who were given insulin.

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## ANESTHETIC MANAGEMENT OF A PATIENT WITH PARKINSON'S DISEASE: A CASE REPORT

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**Introduction:** Parkinsons' disease (PD) is a neurodegenerative disease of the central nervous system caused by the lost of dopaminergic fibers in basal ganglia of the brain. The optimal management of patient with PD is challenge and controversial for Anesthesiologic. Most of the anesthetic drugs interact with the antiparkinson drugs and can induces several respiratory, cardiovascular and neurological disease. We summarize a case of advanced PD, for abdominal laparotomy. Enteral route of levodopa administration, was used under general anesthesia (GA).

**Case Report:** A 68 years old female with advanced PD (Hoehn and yahr stage IV) presented to surgery emergency with complication of abdominal pain , jaundice and vomiting for the past 2 days. After diagnosed and taking informed consent patient was scheduled for laparotomy (Cholecystectomy, Choledochotomy, Choledocholitectomy, choledochoduodenostomosis) surgery under GA). She had been suffering from PD for 6 year, was well controlled with oral administration of levodopa, four times daily and leponex one time daily. The patient was taken his usual medication, before the operation. On arrival to the OR anesthesia was induces with propofol 150mg, fentanyl 200 mcg and vecuronium 6mg to facilitate tracheal intubation. Anesthesia was maintained with O<sub>2</sub> +air+isoflurane +vecuronium and remifentanyl with infusion. One tablet of levodopa was given through the nasogastric tube intraoperatively every 2 hourly. Surgery lasted for around 4.5 h with no adverse event. Immediately after surgery, patient went in ICU for ventilator support in good hemodynamic condition. The patients was extubated after 12 h of surgery. After the surgery administration of levodopa through nasogastric tube was continued. After 24 h patient was shifted from the ICU. His postoperative course was uneventful.

**Discussion and Conclusion:** We report the perioperative treatment of a patient with advanced PD, by using administration through nasogastric tube of levodopa intraoperatively and in the early postoperative course. Anesthetic management in this report is easy, practical and prevented the exacerbation of parkinsonian symptoms during the postoperative period. This patient underwent laparotomy abdominal surgery, administration of levodopa through nasogastric tube, was able to prevent any exacerbation of symptom during intraoperative and postoperative period.

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## A CASE OF "ANESTHESIA MUMPS" AFTER PERCUTANEOUS NEPHROLITHOTOMY

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**Introduction:** The swelling of the salivary glands known as anesthesia mumps, is a rare complication observed during surgery. However, it could also be detected during postoperative early period or a few weeks after surgery (1) (p3). The common characteristics of these patients is increased intra-oral pressure due to insufficient muscle relaxation, or oral dehydration. We would like to present a case of anesthesia mumps detected in the early postoperative period in a patient undergoing percutaneous nephrolithotomy.

**Case Report:** A 54-year-old female patient, with normal history was operated on under general anesthesia for percutaneous nephrolithotomy. She was placed into the prone position at 25th minute following intubation and the body regions such as head and face that are subject to pressure were supported with a soft gel rolling pad, the left side being dependent. Following anesthesia of 85 min in duration, the patient was turned to supine position and extubated without any problem. Simultaneously, a red, painless, firm swelling was detected over the parotid gland. However, there was no temperature rise or crepitation with palpation. By parotid gland ultrasonography at the postoperative 1st hour, a few intraglandular lymph nodes with hilar vascularization were observed on superficial region of left parotid gland. The amylase and WBC were normal as 38 U/L and 6.98 K/u L, respectively. Thus, she was diagnosed as unilateral anesthesia mumps. Although the redness disappeared at postoperative 24th hour, the swelling continued until to the sixth day. Finally, she recovered without any medication.

**Discussion and Conclusion:** Anesthesia mumps might be observed in all age groups and under all kinds of anesthesia types (p2-16). The most important approach during this period is to identify risks with early diagnosis for appropriate therapy in the prevention of other complications and also, decreasing the anxiety of patients and their relatives related to the situation.

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### HOW DOES PNEUMOPERITONEUM AFFECT CEREBRAL OXYGENATION AND COGNITIVE FUNCTIONS?

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**Objective:** There are various factors affecting cerebral metabolism during operations. Anesthetic management is important in the protection of cerebral auto-regulation). We aimed to investigate the changes created in cerebral oxygenation, detected by "Near Infrared Spectroscopy" (NIRS) in patients undergoing laparoscopic cholecystectomy with either inhalational or intravenous anesthesia, as well as patients' cognitive functions postoperatively.

**Material and Methods:** ASA I-II, 18-65 years, 60 patients were included into the study. All of the patients were monitored by BIS (Bispectral index) and NIRS. They were randomly divided into two equal groups. For anesthesia induction, both groups received IV 2 mg kg<sup>-1</sup> propofol and 1 µg kg<sup>-1</sup> remifentanyl. For maintenance, patients in the first group (Group D) were under desflurane anesthesia while the ones in the second group (Group P) received propofol infusion. BIS values were maintained between 40-60. The patients were mechanically ventilated with 33 % O<sub>2</sub>, 67 % air. ETCO<sub>2</sub> values were planned to be kept between 30-35 mmHg by adjusting the respiratory rate. Intraoperatively; vital signs, intraabdominal pressures, ETCO<sub>2</sub> values, NIRS values (right and left hemispheres) were recorded. During recovery, postoperative Aldrete score, VAS (Visual Analogue Scale) and adverse effects were noted. At postoperative 1<sup>st</sup> and 24<sup>th</sup> hour, MMT (mini mental test) was performed to all patients as well as preoperatively.

**Results:** ETCO<sub>2</sub> values were significantly higher at 10 min after insufflation and 5 min after reverse Trendelenburg positioning in Group P. Also, extubation time, eye opening, hand holding, obedience to verbal command, telling the name and date of birth were earlier (p<0.05). There was not a significant difference between the groups in the aspect of cerebral oxygenation of each hemisphere. In both groups, MMT levels at postoperative 24<sup>th</sup> hour, were significantly higher in comparison to preop and postop 1<sup>st</sup> hour levels.

**Discussion and Conclusion:** Neither total intravenous anesthesia nor inhalational anesthesia provided adverse effects in hemodynamics, cerebral oxygenation and cognitive functions in laparoscopic cholecystectomy operations. However, these results should be confirmed by cerebral oxygen monitorization in elderly patients with a history of cognitive dysfunction and neurological diseases.

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### EVALUATION OF ONE-YEAR ANESTHESIA REPORTS IN PATIENTS AGED ABOVE 80 YEARS

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**Objective:** By improvements in life conditions and medical quality, the geriatric population increases each year. Recently, patients >80 years (y) have increasingly encountered not only emergency surgery, but also elective procedures (1). The mortality risk in patients aged above 80 y is two-fold higher than patients aged between 65-69 y. The current study aimed to evaluate the anesthetic methods and types of surgeries in patients above 80 years.

**Material and Methods:** The patients aged above 80 y, who underwent non-cardiac surgery in a one-year period were evaluated in terms of age, anesthetic method, type of surgery, and the number of patients requiring intensive care admissions. The results were represented as number and percentage.

**Results:** 408 patients aged above 80 (205 males, 203 females) who had undergone non-cardiac surgery were included in the study. The mean age was 83.7±3.5 y, while it was 84.2±3.1 y in females, 83.2±3.2 y in males. 178 patients (43.6%) were operated on in orthopedics, 100 (24.5%) were operated on in urology, 64 (15.7%) were operated on in other fields. 53 patients (13%) were emergency cases and 355 (87%) were elective cases. Spinal anesthesia, general anesthesia, sedoanalgesia, and general anesthesia with LMA were performed in 35%, 49%, 4.4%, and 9.8% of the patients, respectively. 14.2 % of the patients were followed up in the intensive care unit. Spinal anesthesia and general anesthesia were performed in 1.4% and 23% of the patients who were transferred to the intensive care unit, respectively. Intra-operative colloid solutions were administered to 20.8% of the patients and erythrocyte suspension was administered to 11%.

**Discussion and Conclusion:** In case of stress, like surgery and anesthesia, the elderly population could not respond sufficiently due to the changing physiological features and presence of comorbid diseases. A multidisciplinary approach should be considered during the preparation of these patients for surgery and anesthesia.

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## THORACOTOMY RELATED CENTRAL VENOUS CATHETER MIGRATION AND ACUTE RENAL FAILURE

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**Introduction:** Central venous catheter (CVC) is a catheter placed into a large vein in the neck (jugular vein), chest (subclavian vein or axillary vein) or groin (femoral vein). There are several situations that require insertion of a CVC, mainly to administer medications or fluids, obtain blood tests, and measure central venous pressure.

**Case Report:** A 83-year-old male patient was admitted to intensive care after gastric cancer surgery with a right thoracostomy tube and right internal jugular CVC. His preoperative check-up was unremarkable. Intraoperatively, 8 units of packed red blood cells and 4 units of fresh frozen plasma were given via CVC. His venous blood gas was normal and blood urea nitrogen (BUN): 33 mg dl<sup>-1</sup>, creatinine (Cr): 1.1 mg dl<sup>-1</sup> and hemoglobin (Hb): 10.9 g dl<sup>-1</sup>. The drainage from chest tube was 1500 ml in the first 16 hours. Hydration was performed when the patient's heart rate was around 120 min<sup>-1</sup>. On the second day of the patient's follow-up; BUN: 53 mg dl<sup>-1</sup>, Cr: 2 mg dl<sup>-1</sup> and urine output were reduced. Hb decreased to 9.1 g dl<sup>-1</sup>. The drainage from chest tube continued in haemorrhagic and lipemic form which was occurred 3800 ml. Thoracic surgery decided re-operation because of high drainage. The patient developed respiratory distress, propofol and rocuronium were given but there was no drug effect. CVC controlled with blood aspiration but it was unsuccessful. It was thought that CVC might have been migrated, then removed and another CVC was inserted into the right femoral vein. After this process patient's chest tube drainage reduced, urine output and laboratory work-up came to normal values. The patient was extubated on day 6 and was discharged to surgery service.

**Discussion and Conclusion:** Complications such as pneumothorax, infection, hemorrhage and migration can be seen related to CVC and can be associated with insertion, indwelling, or extraction. In our case it is thought that CVC migrated after thoracotomy and caused acute renal failure because of inadequate volume infusion.

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## ANESTHETIC APPROACH TO THE PATIENT WITH REFRACTORY AUTOIMMUNE HEMOLYTIC ANEMIA SCHEDULED FOR SPLENECTOMY

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**Objective:** A decision to remove the spleen should be based on severity of the hemolytic process, failure to respond to other therapies, and the potential for achieving significant improvement in anemia and other associated cytopenias. We intend to share anesthesia method for the patient who has been monitored due to refractory autoimmune hemolytic anemia being planned to have splenectomy.

**Case Report:** 59 year-old male patient who is to have splenectomy had no history of regular medication use or disease. He was admitted to the emergency complaining about fatigue, and the tests conducted showed Hb:3,5 and platelet value: 50,000. The patient had high indirect bilirubin and LDH. The patient whose direct and indirect coombs tests were positive was admitted to hematology service with hemolytic anemia diagnosis. Because of no respond to intravenous immunoglobulin and prednisolon treatment, a splenectomy operation was planned. Anesthesia induction was conducted through Fentanyl 1 µg kg<sup>-1</sup>, Propofol 1 mg kg<sup>-1</sup>, Rocuronium bromide 0.5 mg kg<sup>-1</sup> and Midazolam 0.1 mg kg<sup>-1</sup>. The patient was successfully intubated in the first attempt. Total intravenous anesthesia (TIVA) was administered to the patient as a continuation of anesthesia with Remifentanyl 0,125 µg kg<sup>-1</sup> h<sup>-1</sup> and Propofol 1-2 mg kg<sup>-1</sup> h<sup>-1</sup>. Vital findings were stable throughout the operation. Following clamping of the splenic artery, the patient was given a total of 1000 ml crystalloid, 1 unit of ES and 3 units of platelet apheresis. 1750 gr of splenic tissue was removed during the operation. Blood gases were normal in 2 blood samples taken from radial artery with 45-minute interval. At the end of the surgery which lasted 90 minutes, the patient was sent to the ward with stable vital findings and overall good condition. He was vaccinated with pneumococcal and influenza vaccines, and discharged on day 5 being healed.

**Discussion and Conclusion:** The existence of antibodies occurring in the blood in hemolytic diseases might create challenges for the transfusion to the patients (1). Points that require careful attention are measures such as providing sufficient oxygenation to the patient and reducing blood loss, and avoiding hypothermia and acid-base balance disorders.

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## THE COMPARISON OF TOTAL INTRAVENOUS ANESTHESIA AND SEVOFLURANE ANESTHESIA EFFECTS ON POSTOPERATIVE RECOVERY BY QUALITY OF RECOVERY (QOR-40) SCORES IN LAPAROSCOPIC CHOLECYSTECTOMY

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**Objective:** The aim of this study is to compare the effects of total intravenous anesthesia and sevoflurane anesthesia that were used for anesthesia management in patients undergoing laparoscopic cholecystectomy on postoperative 24th hours quality of recovery scores

**Material and Methods:** 40 voluntary patients who were undergoing electively laparoscopic cholecystectomy under general anesthesia were included to study. Patients were equally randomized to two groups: propofol and sevoflurane group. After pre-oxygenization, 2 mg kg<sup>-1</sup> propofol, 1 µg kg<sup>-1</sup> remifentanyl by infusion and 0.6 mg kg<sup>-1</sup> rocuronium were given intravenously to patients for induction. Anesthesia was maintained by 3 mg kg<sup>-1</sup> h<sup>-1</sup> propofol and 0.25 µg kg<sup>-1</sup> h<sup>-1</sup> remifentanyl infusion in group P. In group S anesthesia was maintained by 0.5 MAC sevoflurane and 0.25 µg kg<sup>-1</sup> min<sup>-1</sup> intravenous infusion of remifentanyl. After the surgery the patient was extubated and taken to the PACU. In PACU quality of recovery were evaluated by Modified Aldrete Score, presence of pain, nausea and vomiting in every 5 minutes. When the Modified Aldrete Score was 8 points recorded. After 24 hours, patients were evaluated by the QoR-40 survey in their clinic.

**Results:** There was no statistically significant difference in haemodynamic values between two groups for blood pressure except 5 and 30 minutes' values and for heart rates except post-intubation 1 minutes' values. Time of Modified Aldrete Score >8, nausea, vomiting, pain scores and total postoperative 24 hours QoR-40 scores were not different between the groups. However we found that in emotions parameters questions of feeling of loneliness and difficulty falling asleep scores were greater in group P than group S and in pain parameter; headache question scores were greater in group S than group P

**Discussion and Conclusion:** According to our study propofol and sevoflurane anesthesia maintains the intraoperative haemodynamic in laparoscopic cholecystectomy. Also there is no difference between two groups for recovery in PACU, nausea, vomiting, pain parameters and quality of recovery scores that is evaluated in patients' clinics after 24 hours. This short-acting agents provide rapid recovery.

## A RARE COMPLICATION OF CARDIOPULMONARY RESUSCITATION: TENSION PNEUMOTHORAX

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**Introduction:** Chest compressions during cardiopulmonary resuscitation (CPR) can be traumatic. We report a rare complication of CPR in which the patient experienced 2 rib fractures associated with tension pneumothorax.

**Case Report:** An 83 year-old-man with a history of chronic obstructive pulmonary disease (COPD) and chronic renal disease was accepted with respiratory insufficiency. In a few minutes, he developed hypotension, bradycardia, and hypoxia. As a consequence of cardiac arrest, basic life support was performed. He was intubated and cannulated. He recovered cardiac output before he arrested again. A total of 8 mg of adrenaline and 2 mg of atropine were administered. Intravenous fluids were started and spontaneous circulation was established with two additional 1 mg doses of adrenaline. It was realized that the left side of the chest had little movement while the right side was hyperexpanded. The highest oxygen saturation on the monitor was 80%. Chest radiograph showed a right sided pneumothorax. A 14G intravenous cannula was inserted through the second right intercostal space in the mid-clavicular line. Afterwards, an intercostal tube was inserted in the same place. Nevertheless, the patient died approximately 30 hours after admission.

**Discussion and Conclusion:** Tension pneumothorax is a well known complication of intermittent-positive-pressure ventilation (IPPV) and chronic lung disease. The combination of chronic lung disease and asynchronous cardiac compressions with IPPV further increases the risk. The ipsilateral lung collapses and mediastinum is displaced away from the affected side. When such a diagnosis is considered, the correct course of action is immediate decompression before obtaining radiological confirmation. Tension pneumothorax may be difficult to diagnose and therefore, maybe missed during a complex resuscitation attempt. Since diagnosis is difficult during ongoing resuscitation, either a chest tube or intercostal cutdown can be considered following needle thoracocentesis to exclude tension pneumothorax as a probable cause of refractory cardiac arrest in high-risk patients.

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## TRANSTHORACIC ECHOCARDIOGRAPHY GUIDED CENTRAL VENOUS CATHETER PLACEMENT IN PLASMAPHERESIS PERFORMED PREGNANT PATIENT

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**Introduction:** The proper placement of central venous catheters is confirmed by methods such as fluoroscopy, angiography and chest X-ray. In cases where the patient is pregnant, the use of these methods has drawbacks. Transthoracic echocardiography can easily be used instead of these methods. With the help of transthoracic echocardiography, proper placement of the guide wire, skin-cava-atrial junction distance measuring and placing the catheter in the direction with the verification of the location can be achieved and possible complications can be minimized.

**Case Report:** Hemodialysis catheter placement was planned to a 38 years old pregnant woman, in whom anti-D immunoglobulin was not applied in the first pregnancy, and had central venous hemodialysis catheter inserted with the guidance of transthoracic echocardiography for the purpose of plasmapheresis. In the operating room the patient monitored with electrocardiogram, non-invasive blood pressure, and pulse oximeter. After initial injection of 3 ml 2% lidocaine for skin infiltration, guidewire was advanced in the right subclavian vein through the needle. Before dilatation orientation of the guidewire was confirmed by using transthoracic echocardiography then an 12F dialysis catheter was placed in the right subclavian vein using Seldinger technique with aseptic precautions. The catheter was advanced until the tip image was seen at the entrance of right atrium in echo view. The catheter was then fixed with sutures in place. The catheter was used for plasmapheresis without any complications.

**Discussion and Conclusion:** Typically, chest X-ray is performed to confirm desired position of the catheter because of its easier accessibility and also exclude pneumothorax at the same time. In this case, because the patient was pregnant, the procedure could not be performed under fluoroscopy. As in pregnant patients if the conventional radiological methods cannot be used; with the help of transthoracic echocardiography, proper placement of the guide wire, skin-cava-atrial junction distance measuring and placing the catheter in the direction with the verification of the location can be achieved and possible complications can be minimized.

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## DO WE NEED GUIDELINES? RESULTS OF A QUESTIONNAIRE AMONG ANESTHESIOLOGISTS IN ANKARA

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**Objective:** In medical practice guidelines used to be handy and accessible tools for decades. They provide international standardization, rational implications about specific patient management, and also they are reliable mentors for young physicians in challenging cases. In this study we embark on a quest about if we use international guidelines in our practice or if we need our national ones. So we develop a questionnaire to assess the thoughts of anesthesiologists about these questions.

**Material and Methods:** The data in this study provided by 127 anesthesiologists in Ankara, Turkey. The questionnaire was in Turkish. Job information; the rank, time of work as an anesthesiologist in year and which type of hospital they still work in and 7 questions were aimed to reach the thoughts of anesthesiologists about the use of guidelines.

**Results:** A total of 127 anesthesiologists participated in the study. Most of them were resident anesthesiologists (55,1%); 29,1% were specialists, 15,7% were academic member. Most of them were in the first 5 years of their job (56,7%). Our first question was 'Do you think the usage of guidelines is suitable in anesthesia practice?'. Most of them answered it "Yes" (96,9%). Second question was 'Are the guidelines still in usage sufficient for practice?', 57,5% said 'No'. The third question was 'Do you have information about the guidelines in usage?' and 83,5% said 'Yes'. Among the 'Yes' answerers 39,6% said 'I always use them'. The other question was 'Do you use the TARD's guidelines?' and 59,8% said 'Yes', among the 'Yes' answerers 16% said that TARD's guidelines are 'easily accessible'. The answer of 'Is there any need of guidelines about CVS anesthesia?' question was 'Yes' (91,3%). The last question was 'If you think there is need of a new guideline, in which topic of anesthesia?'. Most of participants (9,4%) said 'pediatric and congenital cardiovascular surgery', 7,9% said 'anesthesia management during CABG'.

**Discussion and Conclusion:** With our results, we concluded that guidelines are suitable but not sufficient in anesthesiology for today. There is need of guidelines that are wide extended, correlate with national practices and include the latest knowledge.

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## SEDO-ANALGESIA IS PREFERABLE FOR ELECTROPHYSIOLOGICAL STUDY FOR WOLF-PARKINSON WHITE SYNDROME

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**Introduction:** Noncomplex ablations include procedures for AV nodal reentry tachyarrhythmias, atrial flutter, and tachycardia mediated by accessory pathways, such as Wolff-Parkinson-White Syndrome (WPWS). Ablation catheters are deployed under fluoroscopic guidance via large peripheral veins (usually the femoral vein). These procedures commonly are performed under sedation and generally take less than 2 hours to perform WPWS is the most common ECG abnormality of pre-excitation and, it is associated with very specific, clearly identifiable arrhythmias. We presented a case report.

**Case Report:** A 14yr-old, 42 kg, girl, with WPWS scheduled for EP procedure. Because of her situation we decided to achieve this intervention under sedation with local anesthesia. Patient monitored with 5 lead ECG, pulse oximeter, non-invasive blood pressure. He was premedicated 1 mg midazolam iv. and sedation was induced propofol 1 mg/kg and ketamine 1 mg/kg iv.; maintained with intermittent bolus dose of propofol. Oxygen was supplied by a simple facemask at 4 L/min. Procedure was uneventful and after procedure she was transferred to cardiac intensive care unit without any problem.

**Discussion and Conclusion:** Most cardiac catheter procedures can be performed under sedation although general anesthesia may be preferable for longer cases or in patients with major comorbidities. For atrial ablation procedures, minimizing patient movement and respiratory motion (which can be significant with a partially obstructed airway in sedated patients) is especially important. Although carefully titrated sedation can be used for these procedures, general anesthesia with endotracheal intubation may be preferable because of their long duration, patient comorbidities, or the use of TEE. Anesthesia in these patients is potentially hazardous, and may theoretically trigger attacks of SVT by producing sinus tachycardia or ventricular ectopic beats. These may be poorly tolerated if inhalational agents with a depressant effect on the myocardium are used. It has been suggested that the aim of anesthetic management should be the avoidance of tachyarrhythmias and sympathetic stimulation. Opioids may attenuate increases in heart rate by increasing parasympathetic tone. Propofol with ketamine has provided near to ideal combination to provide deep sedation with adequate analgesia and stable haemodynamics in a spontaneously breathing patient.

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## PULMONARY COMPLICATION AFTER UPPER ABDOMINAL SURGERY AND RISK FACTORS THAT CAN BE ASSESSED

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**Objective:** We aim to validate postoperative pulmonary complication in elective upper abdominal surgery and observe their associations with preoperative variables.

**Material and Methods:** One hundred six patients were prospectively analyzed during the preoperative period and followed up postoperatively for pulmonary complications. They were followed in a protocol including a clinical questionnaire, physical, examination, thoracic radiogram and spirometry at preoperative period. The main variables measured were: clinical and functional subjects characteristics at preoperative, type of surgery, duration of surgery, time spent in intensive care unit and hospitalization and the occurrence of pulmonary complication.

**Results:** The postoperative pulmonary complication rate was 28%. Pneumonia was the most frequent event 31% followed by atelectasis 25%, bronchoconstriction 20%, acute respiratory failure 12%, prolonged mechanical ventilation 8% and bronchial infection 4%. In the multiple logistic regression the significant predictors for postoperative pulmonary complication were: age above 65 years old, duration of surgery >210 minutes and previous chronic pneumopathy.

**Discussion and Conclusion:** There are three major clinical risk factors for pulmonary complications following upper abdominal surgery: Age higher 65 years old, duration of surgery more than 210 minutes and pneumopathy. Postoperative pulmonary complication is the significant marker for mortality.



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**IMPACT OF EPHEDRINE AND PHENILEPHRINE ON MATERNAL AND FETAL OUTCOME DURING MANANGEMENT OF HYPOTENSION AFTER SPINAL ANESTHESIA FOR CESAREAN DELIVERY**

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**Objective:** Phenylephrine and ephedrine are both used to control maternal arterial blood pressure during spinal anesthesia for cesarean delivery. We compare the efficacy and safety of phenylephrine and ephedrine on mother and baby, during the management of hypotension on spinal anesthesia for cesarean delivery.

**Material and Methods:** We enrolled 101 healthy pregnant women -ASA I (randomly divided in two groups), during the 2 years period 2013-2014, undergoing elective caesarian delivery under spinal anaesthesia. Exclusion criteria were: active labor, chronic hypertension and preeclampsia, other active medical disorders requiring regular medication. Assessed outcome variables were: maternal hypotension, nausea, vomiting, decreased consciousness level, bradycardia, as well as the neonatal umbilical cord blood pH values and Apgar scores minute 1 and 5. Hydration was applied with 1500ml of Ringer's lactate before spinal anaesthesia. Spinal anaesthesia was performed in the sitting position at L3-L4 interspace using G26 pencil point needle. We used 15mg hyperbaric bupivacaine combined with 0.2mg morphine and 10µg fentanyl. Hypotension was treated with (Gr. 1 = nr 51 patients ): ephedrine 5mg bolus, followed by 1mg/min infusion if necessary, or (Gr. 2 =nr 50 patients) phenilephrine 100µg bolus, followed by 16µg/min if necessary. Maternal Systolic arterial pressure (S-AP) was measured at baseline immediately before anaesthesia and every minute after spinal anaesthesia until delivery, heart rate continuously. Data were analyzed using the SPSS 15.0.  $P < 0.05$  was considered significant.

**Results:** There was no difference in treatment of hypotension between ephedrine and phenilephrine groups ( $p=0.42$ ), bradycardia was present more in phenilephrine group, but without significance ( $p=0.6$ ). There was no difference between two groups on maternal nausea ( $P=0.57$ ), vomiting ( $P=0.25$ ) and decreased consciousness level ( $p=0.06$ ). Neonatal outcomes: there was no difference between two groups on Apgar score at min 1 ( $p=0.61$ ) and min 5 ( $p=0.20$ ). Neonates of mothers who received phenylephrine had higher umbilical arterial pH values than those with ephedrine ( $p=0.01$ ), but the risk of true fetal acidosis (pH umbilical arterial  $< 7.2$ ) was similar in both groups ( $p=0.06$ ).

**Discussion and Conclusion:** Our data suggested no difference on maternal and fetal outcome, between ephedrine and phenylephrine on efficacy for management of hypotension after spinal anesthesia for cesarean delivery.

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**REHABILITATION OF PATIENTS WITH PHYSICAL AND NEUROPSYCHIC TRAUMA**

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**Objective:** Rehabilitation is an integral part of the treatment of patients with physical and neuropsychic trauma. The increasing number of accidents makes it necessary the intervention of a multidisciplinary group of physicians. The purpose of the study is to evidence the importance of early rehabilitation of patients with complex traumas.

**Acute phase:** 1. Defection for a much shorter time of mechanical ventilation, which leads to atrophy of the diaphragm myofibrils in any pulmonary infection and contamination of endotracheal tube. 2. Increase the functional capacity of patients in general and to maintain or restore the respiratory parameters. 3. Transfer from intensive care unit as soon.

**Subacute and chronic phase:** To prevent or limit the duplication of articular problems such as articular contractures, calcification of muscles and tendons, as any delay can be corrected with difficulty or may require surgical intervention may become more invalidating. 2. To prevent deep venous thrombosis and pulmonary embolism due to prolonged immobility, of course right venous and edema associated with lack of muscle tone. 3. To prevent or limit the formation of decubitus related to immobility or incorrect positioning.

**Material and Methods:** The study includes 110 patients with polytrauma assisted during 2014. Cranial trauma evaluated with GCS (Glasgow Coma Scale) 3-8 points, five brain death, dead during the first week, 15 irreversible coma, 55 patients were directly assisted in N/surgery for head and vertebral column trauma. 20 patients with trauma to the vertebral column were combined with fractures of lower limb (16M / 4F)

**Results:** Lower limb fractures and poly-interventional surgical: Time of rehabilitation procedures 4- 6 weeks, Positive results by 80%. Neuropsychic and cranio-cerebral trauma: Rehabilitation time 6 months – 1 year, Positive results 60-65% therefore seen as a disability is high, In the first place was motor vehicle accidents, The average age  $32 \pm 6$ , Report Male - Female 3 : 1, The patients were followed for a period of up to 1 year, The patients failed to follow after discharge (spend in foster care).

**Discussion and Conclusion:** The drawbacks of the study is that there are no rehabilitation centers for post-hospital follow patients.