



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo



[www.epc2019.org](http://www.epc2019.org)



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## INVITATION LETTER

Dear Colleagues,

It is our great privilege and honor to invite you to the **1<sup>st</sup> Eurasian Pediatrics Congress** that will be held at Pristina- Kosovo between the **17<sup>th</sup> - 20<sup>th</sup> of October, 2019**.

Thanks to our congress which is hosted by the Kosovo Pediatric Association we intend to move our historical, cultural and geographical similarities also on the scientific platform.

Global pediatric diseases of the globalized world and the management of pediatric diseases frequently seen in our geography will be discussed in our congress. We would like to realize a congress which is both scientifically successful and productive and socially rich in Pristina, which is a beautiful city in terms of culture, history and natural beauties.

We will be happy and honoured with your participation in our congress.

Regards,  
Prof. Dr. Ali Bülbül  
Co-Chairman of 1<sup>st</sup> Eurasian Pediatric Congress

Dear Colleagues and Friends,

We are honored to invite you to attend the **1<sup>st</sup> Eurasian Pediatric Congress and 7<sup>th</sup> Pediatric School**, scheduled for **17<sup>th</sup> - 20<sup>th</sup> of October, 2019** at Venus Hotel & Congress Centre in Pristina, Republic of Kosovo.

We are looking forward to welcoming you to this wonderful event that is committed towards scientific empowerment and spreading knowledge. This event promises to be a very special one, not only for its high scientific content, but also for the presence of international professors and lecturers.

It will be an incredible opportunity to learn, to participate and to network with those who are at the forefront of our field. The scientific program will provide you with the most advanced knowledge and cutting edge in the pediatric field.

We look forward to having the pleasure and excitement of welcoming you to Pristina.

Enjoy the congress!  
With warm regards,

Prof. Dr. Ramush Bejiqi  
President of Kosovo Pediatric Society  
Co-Chairman of 1<sup>st</sup> Eurasian Pediatric Congress



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## ORGANIZING COMMITTEE

Abdurrahim Gerguri  
Ali Bülbul  
Arbnore Batalli  
Avdi Avdiu  
Avdi Murati  
Drita Telaku-Qosaj  
Faton Krasniqi  
Flora Selimi  
Gezim Krasniqi  
Hajdin Ymeri

Halim Toro  
H. Sinan Uslu  
Mergime Batusha  
Muharrem Avdiu  
Murat Elevli  
Naim Zeka  
Nazan Dalgıç  
Ragip Retkoceri  
Ramush Bejiqi  
Remzije Koci

Shukrije Dedinca  
Teuta Hoxha  
Teuta Kamberi  
Urata Efendia  
Valbona Stavileci  
Vjosa Kotori  
Vlora Ismaili  
Xhevdet Gojnovci  
Yıldız Yıldırım

(Name Alphabetical)

## SCIENTIFIC COMMITTEE

Abdurrahim Gerguri (Kosovo)  
Adil Umut Zubarioğlu (Turkey)  
Aferdita Mustafa (Kosovo)  
Ali Bülbul (Turkey)  
Alketa Hoxha (Albania)  
Alper Güzeltaş (Turkey)  
Arlinda Maloku (Kosovo)  
Armend Vuçiterna (Kosovo)  
Aspazia Sofijanovska (Macedonia)  
Besa Poçesta (Macedonia)  
Bojko Bjelakovic (Serbia)  
Dildar Bahar Genç (Turkey)  
Donjeta Bali (Albania)

Drita Telaku-Qosaj (Kosovo)  
Filip Duma (Macedonia)  
H. Sinan Uslu (Turkey)  
Ilirjana Bakalli (Albania)  
İlke Mungan Akın (Turkey)  
Maja Nikolic (Serbia)  
Murat Elevli (Turkey)  
Naim Zeka (Kosovo)  
Nazan Dalgıç (Turkey)  
Nebojsa Kavacic (Montenegro)  
Nijazi Gashi (Kosovo)  
Ozan Özkaya (Turkey)  
Ragip Retkoceri (Kosovo)

Ramush Bejiqi (Kosovo)  
Sani Bajramin (Macedonia)  
Shendvere Doqiqi Hasani (Kosovo)  
Shqipe Spahiu (Kosovo)  
Sonja Bojadigieva (Macedonia)  
Şebnem Özdoğan (Turkey)  
Veselinka Djuricic (Montenegro)  
Violeta Grajqevci (Kosovo)  
Virgjina Hasbata (Kosovo)  
Vlora Ismaili (Kosovo)  
Xhevdet Gojnovci (Kosovo)  
Yakup Ergül (Turkey)  
Yıldız Yıldırım (Turkey)

(Name Alphabetical)

## LOCAL SECRETARIAT

Aferdita Pireva  
Alije Keka  
Arbana Baloku  
Atifete Ramosaj

Blerta Elezi Rugova  
Emirjeta Bajrami  
Jehona Haxhiu  
Leonora Zogaj

Lindita Ryva  
Vlora Nimani

(Name Alphabetical)



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## 17 OCTOBER 2019

### 12:00-12:15 Opening Ceremony

**Ali Bülbül**

*Co-Chairman of 1<sup>st</sup> Eurasian Pediatric Congress*

**Ramush Bejiqi**

*President of Kosovo Pediatric Society*

*Co-Chairman of 1<sup>st</sup> Eurasian Pediatric Congress*

**Cevdet Erdöl**

*Rector, University of Health Sciences (SBU)*

### 12:15-13:15 Panel: Pediatric Neonatology - I

**Chairs:** Ali Bülbül, Aspazia Sofijanova

12:15-12:35 Neonatal Transport in Turkey *Sinan Uslu*

12:35-12:55 Noninvasive Ventilation Helping Many Conditions and as Trend in Neonatal Medicine *Aspazia Sofijanova*

12:55-13:15 Total Parenteral Nutrition in Newborn *Umut Zubarioğlu*

### 13:15-14:15 Panel: Pediatric Neonatology - II

**Chairs:** Emrah Can, Alketa Hoxha

13:15-13:35 Incidence of NEC in Preterm Infants *Alketa Hoxha*

13:35-13:55 RDS in Preterm Infants *Shpetim Salihu*

13:55-14:15 Perinatal Asfixia, Our Experience *Faton Krasniqi*

14:15 Lunch



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## 18 OCTOBER 2019

### 09:00-10:20 Panel: Pediatric Gastroenterology

**Chairs:** Nafiye Urgancı, Bojko Bjelakovic, Sonja Bojadgieva, Veselinka Djuricic

09:00-09:20	Risk Assessment and Clinical Management of Heterozygous FH in Children and Adolescents	Bojko Bjelakovic
09:20-09:40	Human Milk from Immunological Aspect	İlke Mungan Akın
09:40-10:00	Enteral Nutrition in Children	Sonja Bojadgieva
10:00-10:20	Spinarza, Step Ahead, Our Experience	Veselinka Djuricic

### 10:20-10:35 Coffee Break

### 10:35-12:15 Panel: Pediatric Pulmonology

**Chairs:** Seda Geylani Güleç, Drita Telaku, Ilirjana Bakalli

10:35-10:55	Wheezing in Children	Şebnem Özdoğan
10:55-11:15	Accuracy of Lung Ultrasound in Diagnosis of Lung Disease in Children	Drita Telaku
11:15-11:35	Childhood Tuberculosis	Nazan Dalgıç
11:35-11:55	Treatment of Acute Bronchiolitis in ICU - from Guidelines to Practice	Ilirjana Bakalli
11:55-12:15	Hereditary Angioedema in Children	Shendvere Hasani

### 12:15-12:30 Coffee Break

### 12:30-13:30 Oral Presentations - I

**Chair:** İlke Mungan Akın

#### OP-01 The Effect of Vitamin D Levels on Premature Retinopathy

Didem Biçer, Adil Umut Zübarioğlu, Ebru Türkoğlu Ünal, Ali Bülbül

#### OP-03 The Effects of Total Parenteral Nutrition on Plasma Aluminum Level in Premature

Semra Bahar, Ali Bülbül, Umut Zübarioğlu, Sinan Uslu, Ebru Türkoğlu Ünal, Evrim Kıray Baş

#### OP-04 The Effect of Delivery Mode on Mortality in Premature Infants

Sinan Uslu, Lütüye Şahin Keskin, Ebru Türkoğlu Ünal, Evrim Kıray Baş, Ayşegül Uslu, Ali Bulbul





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## 18 OCTOBER 2019

**OP-05 Relationship Between Socio-Demographic Characteristics and DENVER Developmental Screening Test II**

Vedat Baş, Hatice Çetin Hakyemez, Tuğba Eles Baysal, Ecem Naz Cınbız, Yeşim Oğuz, Tuğçe Günsar

**OP-06 The Prevalence of Bacterial Strains Isolated from Urine Cultures and Their Antibiotic Susceptibility Patterns Among Children with Urinary Tract Infection**

Behçet Şimşek

**OP-07 Neonatal Respiratory Morbidity Outcomes of Infants of Diabetic Mothers**

Evrin Kiray Baş, Sinan Uslu, Ali Bülbül, Ebru Türkoğlu Ünal, Gizem Kara Elitok, Ahmet Tellioğlu

**OP-08 Evaluation of Renal Functions in Asphyxiated Newborns**

Evrin Kiray Baş, Ali Bülbül, Sinan Uslu, Ebru Türkoğlu Ünal, Gizem Kara Elitok, Esra Ağırşöl

**OP-09 Characteristics of Newborns with Indirect Hyperbilirubinemia in our Neonatal Intensive Care Unit**

Evrin Kiray Baş, Ebru Türkoğlu Ünal, Sinan Uslu, Ali Bülbül, Hasan Avşar, Melek Selalmaz

**OP-10 Catheter Ablation of Focal Atrial Tachycardia with Limited Fluoroscopy in Children (2 Years Of Experience)**

Gülhan Tunca Şahin, Yakup Ergül

**13:30-14:30 Panel: Social Medicine**

**Chairs:** Nebojsa Kavaric, Maja Nikolic, Sani Bajrami

13:30-13:50 Public Health Aspects of Nutrition in Children

13:50-14:10 Communicative Challenges of Immunization

14:10-14:30 Natality in North Macedonia

Maja Nikolic  
Nebojsa Kavaric  
Sani Bajramin

**14:30-15:30 Lunch**

**15:30-16:30 Panel**

**Chairs:** Sokol Buba, Vjosa Kotori, Diamant Shtiza

15:30-15:50 Hypospadias in Childhood

15:50-16:10 Diabetic Ketoacidosis

16:10-16:30 Hypertension: As a Silent Killer

Sokol Buba  
Vjosa Kotori  
Diamant Shtiza



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## 19 OCTOBER 2019

### 09:00-10:00 Panel: Pediatric Cardiology

**Chairs:** Alper Güzeltaş, Ramush Bejiqi, Murat Elevli

09:00-09:20	Primary and Secondary Pulmonary Hypertension in Children	Ramush Bejiqi
09:20-09:40	Follow up to Congenital Heart Defects by Pediatricians	Alper Güzeltaş
09:40-10:00	Arrhythmias in Children: Case by Case	Yakup Ergül

### 10:00-10:15 Coffee Break

### 10:15-11:15 Panel: Pediatrics Hematology/Nephrology

**Chairs:** Hasan Dursun, Donjeta Bali

10:15-10:35	Children with Kidney Stones	Ozan Özkaya
10:35-10:55	Management of Hemangiomas in Children	Bahar Genç
10:55-11:15	The Role of Primary Care Pediatrician in Care for Children with Malign Disease	Donjeta Bali

### 11:15-12:15 Oral Presentations - II

**Chair:** Nazan Dalgıç

#### OP-11 Ultrasonographic Postoperative Evaluation of Diaphragm Function of Patients With Congenital Heart Defects

Erkut Öztürk, İbrahim Cansaran Tanıdır, Alper Güzeltaş

#### OP-12 Transseptal Puncture for Catheter Ablation of Left Sided Arrhythmias in Children; Single-Center Experience

Yakup Ergül, Hasan Candaş Kafalı

#### OP-13 Evaluation of Temperature Measurement Methods in Children Between 6 Months-6 Years

Ayşegül Uslu, Sinan Uslu, Faruk Akçay, Nimet Pınar Yılmazbaş, Gülşen Sezer

#### OP-14 The Experience of Self-Infusion Education in Pediatric Hemophilia Patients and Their Parents

Emine Türkkkan

#### OP-15 Relationship Between Mode of Delivery and Early Morbidity of Premature Infants

Lütfiye Şahin Keskin, Sinan Uslu, Hasan Avcı, Evrim Kıray Baş, Ebru Türkoğlu Ünal, Ayşegül Uslu, Ali Bülbül



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## 19 OCTOBER 2019

- OP-16 Comparison of ABO and Rh Group Incompatibility for Neonatal Indirect Hyperbilirubinemia**  
Evrin Kıray Baş, Ali Bülbul, Sinan Uslu, Ebru Türkoğlu Ünal, Bülent Güzel, İlkay Özmeral Odabaşı
- OP-17 Frequency of Hypoglycemia in Small for Gestational Age (SGA) Infants**  
Evrin Kıray Baş, Ali Bülbul, Sinan Uslu, Ebru Türkoğlu Ünal, Bülent Güzel, Ahmet Tellioğlu, Şehrinaz Sözeri
- OP-18 Comparison of Nutritional Characteristics of Infants with or without Rop**  
İlkay Özmeral Odabaşı, Hasan Sinan Uslu, Semra Tiryaki Demir, Evrim Baş, Ebru Ünal, Bülent Güzel, Ahmet Tellioğlu, Ali Bülbul
- OP-19 The Impact of Passive Smoking on the Development of Lower Respiratory Tract Infection in Infancy**  
Vedat Baş, Ahmet Arvas, Emel Gür
- OP-20 Polycythemia in Small for -Gestational-Age (SGA) Infants**  
Evrin Kıray Baş, Sinan Uslu, Ali Bülbul, Ebru Türkoğlu Ünal, İlkay Odabaşı Özmeral, Esra Ağırööl, Hasan Avşar, Vesile Kantaş
- OP-21 Effect of Demographic Characteristics and Maternal Factors on Platelet Transfusion in Newborn**  
Bülent Güzel, Sinan Uslu, Selda Arslan, Evrim Kıray Baş, İlkay Özmeral Odabaşı, Hasan Avşar, Ebru Türkoğlu Ünal, Ayşegül Uslu, Ali Bülbul
- OP-22 The Association Between Thrombocytopenia Severity and Platelet Transfusion Frequency with the Respiratory Support in Newborns**  
Bülent Güzel, Sinan Uslu, Selda Arslan, Evrim Kıray Baş, İlkay Özmeral Odabaşı, Hasan Avşar, Ebru Türkoğlu Ünal, Ayşegül Uslu, Ali Bülbul
- OP-23 Clinical Evaluation of Preseptal Cellulitis in Childhood; Comparison of Risk Factors and Prognostic Factors in the Development of Orbital Infection**  
Lida Bülbul, Canan Hasbal Akkuş, Neslihan Özkul Sağlam, Gizem Kara Elitok, Ceren Can, Zahide Mine Yazıcı, Nevin Hatipoğlu, Sami Hatipoğlu





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## 19 OCTOBER 2019

**12:15-12:30 Coffee Break**

**12:30-13:50 Neurology Session**

***Chairs:** Filip Duma, Naim Zeka, Abdurrahim Gerguri*

12:30-12:50	Canabis Sativa as a Medical Indication in Neurologic Problems	<i>Filip Duma</i>
12:50-13:10	Struge Weber Syndrome and Epilepsy	<i>Naim Zeka</i>
13:10-13:30	Diagnostic Approach and Treatment of Septicemia in Children	<i>Petrit Gjaka</i>
13:30-13:50	X-Linked Hyper IgM Syndrome-Our Case	<i>Shqipe Spahiu-Konjusha</i>

**13:50-14:00 Closing Ceremony**

**14:00 Lunch**

**20:00 Gala Dinner**

## 20 OCTOBER 2019

**09:30-10:30 Local Oral Presentation**

**10:30-12:00 Social Events**



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## NEONATAL TRANSPORT IN TURKEY

H. Sinan Uslu

Sisli Hamidiye Etfal Education and Research Hospital, Department of Pediatrics, Division of Neonatology, Istanbul, Turkey

### Introduction:

The neonatal transport is one of the most important issues for perinatal care. In utero transport of newborn is the best and the safest way to transport a sick neonate. On the other hand, neonatal transport may be inevitable because of factors including inability to predict risk, the occurrence of risk at the time of delivery, and the fact that the center where the delivery takes place is inappropriate for the baby's risk status.

The quality of stabilization, resuscitation, and care given during neonatal transport affects the mortality and morbidity of the sick newborn. In a successful postnatal transport, the objective is to enable the baby to receive care under the best conditions like to Neonatal Intensive Care Unit (NICU) during transport. Transport of newborn has made great progress in the last 10 years in our country, but it is still far from ideal.

### Definition:

Neonatal transport: Transport of a sick newborn by a dedicated medical team whose status is critical to another appropriate center for followup, care, and treatment.

### Importance:

Organizing neonatal transport is very important. Because transport itself may be the cause of mortality and morbidity.

### Legal basis of transport in Turkey:

The legal basis for transport in Turkey is very strong. There are about 10 administrative legal official content. This includes too many procedures.

### Administrative structure:

Currently, the three-way e-mail/phone call (On-Call) system is being applied. Accordingly, the physician who wishes to refer their patient should call the regional 112 Emergency Service command center and/or send a patient transport request form to the mail address specified for the relevant region. The officer in the command center finds an available place primarily in a public institution where a neonatologist works and subsequently in private healthcare centers, if necessary, considering available bed status in accordance with the letter "Neonatal Transports" of the Directorate General for Health Services dated 21.06.2016 (Number 83913885-649.99-E99-364) and informs the physician who wishes to refer their patient by e-mail and/or phone.

112 land ambulances wait regionally at specific strategic stations. Air ambulance areas are available in 17 different centers. They act to receive the babies from the center determined according to the central command.

Although some regional differences exist, neonatal transports between public healthcare institutions are realized by way of ground (mostly vehicles with red bands) and air ambulances affiliated to the 112 head physicians who are employed by the Turkish Republic Ministry of Health Emergency Health Services Branch Office. There is no standard definition related to the necessary personnel, medical devices, and consumable materials required only for neonatal transport for ambulances. A Standard informed consent form is being used for neonatal transport. 112 command control centers exist for local or regional transport of all patients. However, a separate central system established for organization of neonatal transport does not exist. Private healthcare institutions carry newborns with their own ambulances. Standards for the personnel, medical devices, consumable materials, communication, and informed consent form to be used during neonatal transport do not exist and the process is limited with individual or institutional practices.



# I<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Systems integrity

Significant progress has been achieved in the last 10 years as a result of the expansion of quality newborn services. But this progress is not enough. While the legal organization is very strong and too many procedures are available, the technical and personnel infrastructure is still insufficient. There is a need for a dedicated and trained teams. The most basic approach is to define perinatal organization and regionalization. Thus, Turkey will be a rational example in terms of neonatal transport organization of the most important pillars of perinatal care for other countries.

## References:

- Narli N, Kırımı E, Uslu S. Turkish Neonatal Society guideline on the safe transport of newborn. Turk Arch Ped 2018;53(Suppl 1):S18-S31.
- Uslu S, Yüksel M, Uslu A, et al. Public operation of neonatal transport in Istanbul. Nobel Med 2017; 13: 54-60.
- Uslu S, Yüksel A, Uslu A, Turan B, Meral Sezer G, Bulbul A, Egici MT, S. Albayrak S, Bektemur G. Current Process of Neonatal Intensive Care Services in Istanbul. IJSR. 2016;5(2):494-7.
- Uslu S, Aldudak B, Özdemir H. The effects of improvement efforts on regional neonatal transport conditions in Diyarbakır. Turk Arch Ped 2011; 46: 196-201.
- Okan F, Uslu S, Nuhoglu A. Yenidoğan kliniğine sevk ve transport edilen hastaların irdelenmesi. Çocuk Dergisi 2005; 3: 195-200.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Total Parenteral Nutrition; Controversies and Recommendations

**Adil Umut Zübarioğlu**

Istanbul Yeni Yuzyil University, Faculty of Medicine, Department of Pediatrics

In recent years there has been a significant increase in survival of very low birth weight and critically ill infants. In addition to the survival of these babies, their growth and development in the first weeks is critical for maintaining their life's quality and health.

Nutrition Committee of American Academy of Pediatrics recommends that; Postnatal feeding of very low birth weight infants should be equivalent to intrauterine feeding of the fetus at the same gestational week to ensure postnatal growth rate reaching intrauterine growth rate. Breast milk is the ideal food for premature and sick term babies as well as healthy term babies. It is also recommended that, as much as possible, breast milk should be given as soon as possible after birth. In clinical practice, most of the time it is not possible to achieve this ideal recommendations.

There is a risk of growth retardation in the postnatal period due to inadequate and inappropriate feeding of premature infants, especially infants with very low birth weight and extremely low birth weight. Long-term neurodevelopmental effects of this extrauterine growth retardation in premature infants have been demonstrated. So, a new feeding strategy is needed to grow up these babies who can not be enterally fed.

### TOTAL PARENTERAL NUTRITION

Intravenous administration of all nutrients required to meet the metabolic requirements of newborns and to ensure their growth who cannot be enterally fed.

Parenteral nutrition (PN) was first used in neonates almost 50 years ago. It has proven to be a life saving tool in preterm infants who are unable to tolerate sufficient enteral feeds to meet their nutritional needs.

However, the limitations, toxicities and complications of PN have become increasingly recognized. As a result, the practice of PN continues to evolve as new products and technologies become available.

### **Targets of Neonatal TPN**

- Ensuring optimum growth and development
- Switching to enteral nutrition without complications
- Support of all immature systems due to prematurity
- Coping with major congenital anomalies and preparing and supporting the nutrition and metabolic status at the highest level before / after surgery

### **The purposes of TPN contents**

- Calorie for energy and growth
- Carbohydrates and lipids to prevent hypoglycemia and supply energy
- Protein that contains *essential amino acids* to provide positive nitrogen balance for growth
- Fatty acids to prevent essential fatty acids deficiency and to increase non protein energy
- To provide *minerals, electrolytes, vitamins and trace elements* for growth and development



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Indications

For most preterm infants, PN should be considered as a short-term bridge to provide nutritional support until full enteral nutrition can be provided.

Such instances include;

- *Immediately after birth*; to provide essential nutrition as enteral feeds are commenced and advanced
- During periods of *acute gastrointestinal malfunction*; (septic ileus or NEC)
- When infants are felt to be '*too sick*' to receive enteral feeds

In a small subset of infants prolonged periods of PN may be required.

- These infants typically have congenital or acquired gastrointestinal malformations, including short bowel syndrome.

The risks associated with PN increase with the dose and duration. The goal of care should always be to move to full enteral nutrition as quickly as possible.

## TND Nutrition Group Recommendations for Preterms

Component (kg/day)	ELBW (<1000 g)			VLBW (<1500 g)		
	Day 1	Day 2-7	Growth	Day 1	Day 2-7	Growth
Energy (Kcal)	40-50	70-80	90-100	40-50	60-70	90-100
Protein (g)	2-3	3,5	3,5-4,0	2-3	3-3,5	3-3,5
Glucose (g)	7-10	8-15	13-17	7-10	8-15	13-17
Lipid (g)	2	2-3	3-4	2	2-3	3
Na (meq)	0	2-4	3-7	0	0-4	3-5
K (meq)	0	0-2	2-3	0	0-2	2-3
Ca (mg)	20-60	60	60-80	20-60	60	60-80
P (mg)	0	45-60	45-60	0	45-60	45-60
Mg (mg)	0	3-7,2	3-7,2	0	3-7,2	3-7,2





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Incidence of NEC in preterm infants, a study at UHOG “Koco Gliozheni” in Tirana

**Alketa Hoxha**

Lecturer at UMT

Neonatologist-UHOG “Koco Gliozheni” in Tirana

### **Background:**

NEC is one of the most common pathologies affecting preterm infants, associated with very high morbidity and mortality. It is an inflammatory bowel disease, often accompanied by sepsis and complicated by perforation, peritonitis and death. Despite significant neonatal advances, NEC is often an incurable disease due to unknown etiology and lack of preventive and therapeutic strategies.

### **Aim:**

To shed light on the incidence of NEC in premature babies at the UHOG “Koco Gliozheni” in Tirana.

### **Methodology:**

A retrospective study was conducted at NICU, at UHOG “Koco Gliozheni” in Tirana, and covers the period between January 2018-December 2018. Early-born infants’ cards during this period, grouped by age group and weight group were studied. The total number of cards included in the study is 259. Bell’s classification with its stages was used to establish the diagnosis. The infants included in the study were compared regarding the variables: mean age at birth, mean birth weight, gender (F / M), mortality, day care in the neonatal intensive care unit, neonatal morbidity associated with NEC, and various complications.

### **Results:**

During this period, 3868 babies in total were born at the “Koco Gliozheni” University Obstetric-Gynecological Hospital. Preterm-born infants, age 22 ÷ <37 weeks are a total of 265 infants. Preterm-born babies transferred to NICU were 259 babies in total. Preterm-born babies with a diagnosis of NEC have a total of 0 babies. According to the NICU protocol, it was found that the only food used in premature and especially premature babies is breast milk. Day care in the NICU, before the baby has excitus ranges from 0.5 days (a baby with congenital polyanomalies) to 46 days after birth.

### **Conclusions:**

The incidence of NEC in preterm-born babies at NICU, at UHOG “Koco Gliozheni” is very low, almost zero. The life expectancy of preterm-born babies has increased in NICU in our country. Breastfeeding-only feeding is almost the only feeding applied to NICU. Breast milk contains unmatched and highly valuable values that prevent the emergence of NEC in preterm born babies.

### **Keyword:**

NEC, NICU, preterm babies, breast milk.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## **Novel recommendations for risk assessment and clinical management of Heterozygous FH children and adolescents. Wait and see approach?**

**Bjelakovic Bojko**

Clinic of Pediatrics, Clinical Centre Nis, Serbia

Heterozygous Familial hypercholesterolaemia (FH) is among the most common autosomal dominant metabolic disorders, affecting approximately 1:250 to 1:500 of the population. It is characterized by elevated low-density lipoprotein cholesterol (LDL-C) levels from birth and a significantly higher lifetime risk of developing early atherosclerosis and cardiovascular disease (CVD). The majority of published data on long-term cardiovascular outcomes in FH patients are based on cholesterol-year-score postulate and Simon Broome registry data, claiming that the mortality associated with Coronary Heart Disease (CHD) in the pre-statin era was a 100-fold higher in the age group of 20-40 years and four-fold higher in the 40-59 year age group. Although such epidemiological data based on population-level approach, support the association between chronically elevated LDL-C and overall CV risk, it seems that substantial numbers of patients continued to have clinical events in the treatment groups. Given recent insight into the heterogeneity of clinical phenotype, absence of genotype-phenotype correlation, the limitations of “the sensitivity and specificity” of cut off LDL-C values to select at risk HeFH children, we could infer that many low risk FH children with high LDL-C levels would be inappropriately targeted for treatment and many high-risk children with low LDL-C values will be oversight and left untreated.

Additionally, statins as the first-line therapy in Heterozygous Familial Hypercholesterolaemia (HeFH) patients show less health benefits than previously thought.

A possible alternative to solve these limitations could be based on a patient centered approach by identification of early, asymptomatic vascular or cardiac disease likely to progress to manifested events. In this regard, a better characterisation of the individual vascular phenotype changes which are necessary precondition for developing future CV disease may serve as a starting point to define candidates for early intervention.

I critically reviewed the currently available data on the clinical utility of most commonly used methods to evaluate vascular and endothelial health as well as surrogate CV changes of HeFH subjects to provide novel clinical guidance for improved risk assessment and appropriate treatment planning.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Human Milk From Immunological Aspects

**Ilke Mungan Akin**

Assoc Prof Neonatology  
University of Health Sciences

Human milk, which is composed of 87% water, 7% carbohydrates, 4% lipids and only 1% of proteins, is a miracle liquid with the capacity of active protection against infections, immune regulatory and long term immunological effects.

### **Immunological Proteins of Human Milk**

976 different human milk proteins are defined to have immune functions. Each of them with a higher concentration in colostrum and a constant decrease towards mature milk is protected against direct proteolysis in GIT with the help of increased pH leading to decreased proteolysis in the stomach and presence of antityripsin/antichymotrypsin in human milk.

Lactoferrin, alpha-lactalbumin, sIgA, Osteopontin are specifically much more studied ones among these proteins, which will be briefly discussed.

### **Human Milk Oligosaccharides**

These make up the 3rd highest solid concentration (5-15 g/l) of human milk after lactose (70 g/l) and lipid (40 g/l). They were first defined as glycans containing 2-10 glucose molecules. But now it is known that they are only synthesized in mammary glands from lactose, which is sporadically bound with  $\beta$ -1,6 galactose to N-acetyl glucosamine and fucose/or sialic acid in addition. 2 major HMO families defined as acidic or neutral according to presence of sialic acid. Fucosylated, sialylated or both forms of HMO are defined. More than 200 types of HMO are defined. They are thought to be biologically inactive, but now it is well known that they are a part of innate immunity with pathogen trapping receptors, direct signalling capacity and major role for a healthy microbiome as a prebiotic.

### **Cells of Human Milk**

We can talk about stem/progenitor cells and non stem cells composed of immune and non-immune cells. Non-immune cells are lactocytes, liminal epithelial cells, myoepithelial cells etc. Immune cells are leukocytes, polymorphonuclear cells and lymphocytes. Cellular part of human milk is continuously changing among mothers, Daily an even within a single day according to lactation stage, health status of the mother and the baby, nutrition, lipid concentration. Especially in the early neonatal period most of the HM cells pass intactly through intestinal barrier.

### **miRNA**

They are very short (19-24 nucleotide) non-protein coding RNA's, which were first thought to be present only intracellularly, but now recognized within many biological secretions such as milk and milk is the richest miRNA resource with >1400 mature miRNA. They are 1/3 of whole human genome to regulate the gene expression of pluripotent genes and to control post-transcriptional protein synthesis.

### **Conclusion**

Human milk is far beyond a simple liquid baby feeding which can never be simulated. Any molecule found in human milk should be useful either for growth or immunity, or sometimes for both. There are still too many things to discover.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Enteral Nutrition in Children

**Sonja Bojadzieva**

University Children's Hospital, Skopje, North Macedonia

Enteral Nutrition is nutrition that involves the delivery of nutrients via feeding tubes and provision of specialised oral nutritional supplements. Enteral nutrition is indicated when energy, and nutrient requirements cannot be met by regular food intake in a patient with at least a partially functional gut. EN is indicated in the patient with at least a partially functional gut and insufficient normal oral intake. Nutrition screening is very important for early detection of children at risk of malnutrition in order to reduce or prevent protein and / or calorie malnutrition. Enteral Nutrition can be provided by replaceable tubes (nasogastric, nasoduodenal, nasojejunal), or via gastrostomy or enterostomy. Enteral feeds supply a balanced mix of all of the essential nutrients needed for meetings physiological requirements and growth. Enteral feeds are designed to serve as the sole source of nutrition even during prolonged periods of time. Standard formulas contain complete protein: mixed; Isolated: Contains isolated proteins such as soy, casein; Hydrolyzed formulas: Contain hydrolysates of amino acids and small peptides. Modulated: containing specific nutrient (protein, lipid).

Enteral tube feeding may be poorly tolerated for a number of reasons. The complications are variable from the tube, skin infections, local treatments, skin granuloma, perforation, tube dysfunction, complications with nutrition such as reflux and diarrhea, Refeeding syndrome and others. Home Enteral Nutrition should provide EN at home which include provision of effective nutritional support, promotion of patient and family autonomy, ensuring safe, maximising the potential for improved lifestyle and optimised disease management. Monitoring the patients and laboratory examinations and uses of determine protocols could minimize complications.

Key words: Enteral Nutrition, children, tube



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Spinraza in SMA - our experience

**Veselinka Lola Djurisić**

Institute for children's disease, Clinical centre of Montenegro, Podgorica, Montenegro  
Ljubljanska bb, Podgorica

**Introduction:** Spinal muscular atrophy (SMA) is a rare, but progressive disease that is sometimes with fatal outcome. Children with SMA are born without SMN1 gene, and disease is manifested with slow, but progressive atrophy of muscles and loss of basic life functions, such as walking, food digesting, swallowing and breathing.

Nusinersen is a medication that modulates gene activity, and therefore better functioning of nervous system is possible, along with slowing the progression of disease and alleviation of symptoms.

The medication is administered intrathecally directly to the central nervous system, and the therapy is life-long. It is especially important to start therapy during the childhood.

At this moment, medication marketed as Spinraza is the first and only medication for SMA.

**Material and methods:** This is a case study considering application of Nusinersen at patients with SMA type II and III. In our institution, Institute for children's health, Clinical Center of Montenegro in Podgorica, Montenegro there are three patients on Spinraza course therapy. All three patients are males, aged 2, 8 and 15 years with previously diagnosed SMA II and III.

The administration of this medication was made on 1<sup>st</sup>, 14<sup>th</sup>, 28<sup>th</sup> and 63<sup>rd</sup> day and it was performed in hospital. All the courses with all the children went without any side effects. The challenge for medication administration was a patient with lumbosacral spine surgery, so the first day course was more difficult than others. All the patients were tested using Hammersmith Functional Motor Scale for SMA (HFMS) after 4<sup>th</sup> course of therapy and showed significant improvement in motor function.

**Conclusion:** The administration of Nusinersen showed positive experience in clinical use of this medication, even in case of patient with challenging application, along with improvement of motor function on related tests.





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Wheezing in Pre-school Children

Şebnem Özdoğan

Şişli Hamidiye Etfal Training&Research Hospital , Istanbul, TURKEY

Wheeze can be defined as a musical sound, high-pitched and continuous, emitting from the chest during breath exhalation resulting, irrespective of the underlying mechanism, from narrowing of intrathoracic airway and expiratory flow limitation. Wheezes can originate from airways of any size throughout the proximal conducting airways. Although this definition is well known, it may be poorly understood and defined by parents and, therefore, if based only on parental report children may be considered as experiencing wheeze when they, actually, do not. It is important that a health professional values the wheeze to confirm or reject the diagnosis, always considering that even not all physicians are equally precise in valuing the severity of wheeze. Recurrent wheezing is a common condition in paediatric practice and some studies have shown that one in three children has at least one episode of wheezing prior to their third birthday, with a prevalence of 50% at the age of 6 years.

Pre-school wheeze is also referred to as reactive airways disease. Asthma is considered the most common condition presenting with wheezing, nevertheless not all the children with wheezing are affected by asthma: though many young children wheeze during viral respiratory infections, only a minority of them experience childhood asthma.

### The Phenotypes of Wheezing

In the mid-1990s, the group led by Martinez, in Tucson, introduced a classification of children based on retrospective symptom, among 1246 new-borns followed for lower respiratory tract infections based on the presence of wheezing symptoms during the first 3 years of life and again at age 6 years . This classification is based on the onset and duration of symptoms and groups the children in three categories; Transient early wheezing, Non-atopic wheezing and atopic wheezing/asthma. Although several phenotype classifications have been described, none have been validated to identify individuals responding to specific therapeutic approaches.

### Assessment of Preschool Wheezing

#### History and physical examination

A careful history-taking is a pivotal diagnostic instrument in the assessment of preschool wheeze, particularly in those who are not wheezing during the consultation . It is of primary importance to determine the frequency and severity of respiratory symptoms, their association with trigger factors such as physical exercise, viral infections, smoke and environmental allergens as well as the presence of a history of eczema or a parental history of asthma, eosinophilia, allergic rhinitis, and wheezing without colds. Although no evidence is available regarding the usefulness of physical examination in wheeze assessment, it is important to recognize unusual or atypical features that would suggest another underlying condition. A clinical index has been also proposed to define the risk of asthma development in the single patient according to the criteria of the Modified Asthma Predictive Index (mAPI). This index is based on the identification of risk factors during the first 3 years of life for development of asthma at school age. A positive API at age of 3 years is associated with 76% of chance of asthma development, compared with a less than 5% chance of active asthma at school age in children with a negative mAPI index.

### Investigations

Most preschool children with wheeze do not require any investigations. Not all wheezing is due to asthma or viral infections. Children with typical and atypical wheeze may have characteristic clinical features and physical findings.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

- Poor response to asthma medications, including inhaled bronchodilators, inhaled glucocorticoids, or systemic glucocorticoids.
- A history of neonatal or perinatal respiratory problems and wheezing since birth, which suggests a congenital abnormality.
- Wheezing associated with feeding or vomiting, which can result from gastroesophageal reflux (GER) or impaired swallowing complicated by aspiration.
- A history of choking, especially with associated coughing or shortness of breath. These findings suggest FBA, even if it does not immediately precede onset of wheezing symptoms.
- Wheezing with little cough. This finding suggests a purely mechanical cause of obstruction, such as small airways or a vascular ring, rather than asthma, in which cough is a prominent component in children.
- Symptoms that vary with changes in position, which may be caused by tracheomalacia, bronchomalacia, or vascular rings.
- Poor weight gain and recurrent ear or sinus infections, which suggest CF, immunodeficiency, or ciliary dysfunction.

The differential diagnoses of atypical wheeze will include upper airway abnormalities, gastroesophageal reflux, bronchopulmonary dysplasia, pulmonary oedema secondary to cardiac disease, foreign body aspiration, tuberculosis, and other causes of pulmonary suppuration.

## Treatment

The treatment of recurrent wheezing pre-school children is controversial. Once other causes of wheezing that simulate asthma have been ruled out, treatment to control wheezing should be initiated. Treatment is based on reducing inflammation, maintaining pulmonary function and quality of life, preventing exacerbations and providing drugs free from adverse events or with minimal adverse events. Inhaled corticosteroids are the first-line medications for controlling asthma in all age groups, assuming that the diagnosis is correct. Failure to respond after 6 weeks on IC demands prompt clinical assessment, rather than increased dosage. If treatment is started with IC, but there is no beneficial effect whatsoever, clinical guidelines recommend that they should be withdrawn.

## References

- 1- Al-Shamrani A, Bagais K, Alenazi A, Alqwaiee M, Al-Harbi AS. Wheezing in children: Approaches to diagnosis and management. *Int J Pediatr Adolesc Med.* 2019;6(2):68–73. doi:10.1016/j.ijpam.2019.02.003
- 2- Kwong CG, Bacharier LB. Phenotypes of wheezing and asthma in preschool children. *Curr Opin Allergy Clin Immunol.* 2019 Apr;19(2):148-153.
- 3- Global Initiative for Asthma (GINA). Pocket Guide for Asthma Management and Prevention in Children 5 Years and Younger, updated April 2015. Available from [www.ginasthma.org](http://www.ginasthma.org).
- 4- National Asthma Education and Prevention Program. Expert Panel Report 3 (EPR-3): Guidelines for the Diagnosis and Management of Asthma-Summary Report 2007. *J Allergy Clin Immunol.* 2007 Nov;120(5 Suppl):S94-138.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Accuracy of Lung Ultrasound in diagnosis of lung disease in children

**Drita Telaku**

Pediatric Clinic, University Clinical Centre of Kosovo, Pristina, Kosovo

**Introduction:** In recent years, a new imaging application has been introduced in clinical practice—lung ultrasound. Several studies have demonstrated that lung ultrasound is an accurate and reliable technique for the diagnosis of lung diseases. Other advantages of lung ultrasound include that it is non-ionizing, easy to operate, and the imaging is performed in real-time, thus making it as a potential tool to be used in neonatal intensive care units and pediatrics as well. **Objective** In this lecture we will introduce the current state of knowledge about lung ultrasound, show the imaging of typical cases and provide a very good starting point for residents or novices to get a better understanding of lung ultrasound.

**Explanation:** All diagnostic ultrasound methods are based on the principle that ultrasound is reflected by an interface between media with different acoustic impedance. Ultrasound is limited in normal aerated lungs because no acoustic mismatch occurs in the ultrasound beam when it encounters air. The pleural line and repetitive hyperechoic horizontal lines (A-lines) can be visualized by ultrasound. When the air content decreases, i.e., subpleural interstitial edema, the ultrasound beam generates an acoustic mismatch between the fluid interfaces surrounded by air and reflects repeatedly at the deeper zones. This phenomenon creates vertical reverberation artifacts called B-lines. B-lines are hyperechoic, laser-like images that originate from the pleural line and reach the edge of the screen, moving with respiration. B-lines are correlated with lung interstitial fluid content, and their number increases with decreasing air content. When the air content further decreases, i.e., lung consolidation, lung parenchyma is directly visualized by opening an acoustic window on the lung. Lung consolidation is described as a region of hypoechoic, poorly defined or wedge-shaped borders. The presence of air bronchogram or vascular pattern may help to identify the etiology of the consolidation. **We** can perform focused or diagnostic lung ultrasound or both called point of care ultrasound. Lung ultrasound has high accuracy in diagnosing lung diseases in neonates and children.

**Key words:** Lung ultrasound, lung disease, neonates, children



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Childhood Tuberculosis

**Nazan Dalgıç**

Associate Professor of Pediatrics, Pediatric  
Health Science University Faculty of Medicine, Pediatric Infection Clinic  
Şişli Hamidiye Etfal Training&Research Hospital, Istanbul, TURKEY

Tuberculosis (TB) is a major public health problem, invading all age groups world-wide. It is an opportunistic infection affecting the individuals alone or with co-infections. Childhood TB is a neglected aspect and a significant health problem in epidemic areas. It constitutes more than 20% of TB incidence. Pediatric TB exists in the shadow of adult TB. Accurate estimates are hindered by under-recognition and challenges in diagnosis. Making the diagnosis of pulmonary tuberculosis in children can be difficult because microbiological confirmation is not often achieved. Diagnosis is therefore often based on clinical features in combination with chest radiograph findings. Chest radiographs can demonstrate lymphadenopathy of the hilar and para-tracheal regions on the anteroposterior view, and subcarinal lymphadenopathy on the lateral view. In case of exposure, evidence of infection can be obtained using the tuberculin skin test (TST) or an interferon-gamma assay (IGRA). There is no evidence to support the use of IGRA over TST in young children. TB suspicion should be confirmed whenever possible, using new available tools, particularly in case of pulmonary and lymph node TB. Induced sputum, nasopharyngeal aspiration and fine needle aspiration biopsy provide a rapid and definitive diagnosis of mycobacterial infection in a large proportion of patients. Analysis of pediatric samples revealed higher sensitivity and specificity values of molecular techniques in comparison with the ones originated from adults. To date, an accurate diagnostic test to confirm TB in children does not exist. Treatment is lengthy but outcomes are generally favorable with timely initiation. Children require higher drugs dosages than adults. Short courses of steroids are associated with TB treatment in case of respiratory distress, bronchoscopic desobstruction is proposed for severe airways involvement and antiretroviral therapy is mandatory in case of HIV infection. Post-exposure prophylaxis in children is a highly effective strategy to reduce the risk of TB disease. The optimal therapy for treatment of latent infection with a presumably multidrug-resistant *Mycobacterium tuberculosis* strain is currently not known.

The accelerated reductions in global TB incidence required to achieve the End TB Strategy goal will result in reductions in the burden of childhood TB. Contact screening and preventive therapy have emerged as important components of TB burden reduction, and family-centered approaches could be an effective route in delivering these activities. Lack of accurate diagnostics for children remains a critical barrier and a need remains for better collaborative and supportive links between the child health and TB control sectors. Irrespective of whether the ambitious targets can be achieved, the unprecedented opportunities provided by the End TB Strategy must be embraced.

### Kaynaklar

1. Seddon JA, Graham SM. Childhood TB: can the End TB Strategy deliver?. *Trans R Soc Trop Med Hyg* 2016; 110: 155-7.
2. Mandal n, Kumar P, Gautam S, Das S, Hussain T. Diagnosis and treatment of paediatric tuberculosis: An insight review. *Critical Reviews in Microbiology* 2017; 43: 466-480.
3. Kritsaneepaiboon S, Andres MM, Tatco VR, Lim CCQ, Concepcion NDP. Extrapulmonary involvement in pediatric tuberculosis. *Pediatr Radiol* 2017; 47: 1249-1259



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## The management of acute bronchiolitis in PICU – from guideline to the practice

**Ilirjana Bakalli**

Pediatric Intensive Care Unit

UHC“Mother Theresa”, Tirana, Albania

### Background

Numerous studies about bronchiolitis treatment have been done in order to could conclude in guidelines. Despite guidelines, studies have shown a wide variation in diagnosis and treatment of bronchiolitis associated with increased hospitalization, related more with individual preferences than with the gravity of the patients.

### Aim

The aim of our study was to correlate therapeutic choices to the severity of clinical presentation in children with bronchiolitis in our PICU and to compare this treatment with the current bronchiolitis' guidelines.

### Methods

Are included all children admitted at our PICU with “Acute Bronchiolitis” during the period: January-December 2018. We evaluated the gravity, the use of antibiotics, cortisone, bronchodilators and their effect on the clinical course of the child. We made the severity assessment according the suggestions of New Zealand and Scotland guideline. All treatments are compared to American Academy of Pediatrics bronchiolitis Guideline.

### Results

During the study period 89 cases with bronchiolitis are admitted at our PICU. According to the severity: 38% were mild forms (without indication for hospitalization), 62% of cases - moderate and severe forms. Mean starting RDAI score was 8 points, 42% of cases presented with a RDAI score >9 points at time of ICU admission. 100% of cases have received antibiotics, whereas only 58.4% have complications. To be appreciated is the fact that antibiotic use before admission was only 19% of cases. There is an overuse of cortisone in 90% of cases, whereas 38% were mild forms, only 13.4% represent recurrent bronchiolitis and only 21% present previous health problems. Bronchodilators are used in 100% of cases with a preference for Salbutamol use in 51.7% of cases, followed by Adrenaline in 28.1% of cases. In was noted clinical improvement in 59.5% of cases after 24 hours of treatment. Mean RDAI 24 hours after treatment was 6.8 points. From data's comparison of Salbutamol to Adrenaline, a statistically significant difference was observed in favor of Salbutamol. ( $P=0.003$ ,  $OR=4.8.95\%$  CI (1.71-13.9).

### Conclusions

Despite guidelines and numerous studies, we strongly confirm the large use of drugs in bronchiolitis by our pediatricians. Doctors continue to treat bronchiolitis according to personal experiences with overuse of antibiotics, cortisone and bronchodilators.





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Pediatric Hereditary Angioedema HAE

**Shendvere Hasani**

Erzen Hasani, Drita Qosaj

Hereditary angioedema (HAE) resulting from the deficiency of the C1 inhibitor (C1-INH) is a rare, life-threatening autosomal genetic disorder affecting an estimated 1:10000 to 1: 50000 patients. In approximately 50% of cases clinical manifestation may appear during childhood. Attacks are unpredictable: increase over 24 hours and are self limited: resolve over 2 to 4 days. They are unresponsive to treatment with antihistamines, corticosteroids and epinephrine and thus associated with considerable morbidity and mortality

Its pathophysiology is based on C1-INH deficiency that provokes a cascade of uncontrolled activation of enzymes of plasma. Bradykinin –an important inflammatory mediator formed by the action of the plasma enzyme kallikrein causes neutrophil chemotaxis, capillary dilatation with plasma leakage and smooth muscle relaxation which are all been linked to other forms of angioedema.

Signs and symptoms are present in subcutaneous tissue, abdominal organs and upper airway and tongue. For diagnosing we use clinical manifestations, the family history as well as findings of complement and molecular genetic studies. Establishing the diagnosis early and initiating follow-up care as soon as possible are indispensable for preserving the patients quality of life. The diagnosis can be made pre and postnatal. According to level of complement and other genetic testings there are two types of HAE : type I and Type II HAE attacks may be frequent and/or severe, but highly variable between patients and within families. It is characterised with peripheral angioedema, abdominal attacks, laryngeal attacks etc. The initial phase of therapy is primary prevention- that is identification and when possible elimination of triggering factors. Prophylaxis can be short-term, long-term, intermittent and also emergency therapy. It is very important to educate patients on Home-based management and need for follow-up visits.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Public Health Aspects of Nutrition in Children

**Maja Nikolić**

School of medicine, University of Niš

Eating habits in childhood have a significant impact on the health and quality of life in adulthood, especially in the prevention of noncommunicable diseases. From birth to 6 months, recommendations focus on optimal breastfeeding practices and from 6 months through at least 24 months, the recommendation is to continue breastfeeding but gradually introduce complementary foods. In the countries in transition, the unfavorable social, political and economical circumstances have mostly adverse effects on the children's nutrition. Nutritional transition and insufficient physical activity have been changing the health status of children. Over the last four decades, childhood overweight/obesity has dramatically increased, becoming a significant public health concern. Obesity prevention might benefit from awareness of typical overweight development patterns when designing intervention studies or planning and timing multidisciplinary school health check programs. Micronutrient deficiencies account for an estimated one million premature deaths annually, highlighting the need for food policies that focus on improving nutrition rather than simply increasing the volume of food produced. An important issue is that many children in developing countries are already nutritionally depleted by the end of the first year of life, because maternal malnutrition can cause low fetal accumulation of nutrient stores and secretion of inadequate amounts of some micronutrients in breast milk. Improvement of maternal diet and micronutrient status is required to remedy this situation. The aim of the paper is to present the actual data about nutritional status and eating habits of children, and activities for healthy eating in children that were conducted on a global and local levels. Based on the analysis of available data, previous experiences in this area and current scientific knowledge, the public health approach for improving children's nutrition was considered. Children's eating patterns are strongly influenced by characteristics of both the physical and social environment, as well as inter-sectorial cooperation in the community.

*Key words: childhood, nutrition, public health*



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## NATURAL GROWTH OF POPULATION AND NATALITY

**Sani Bajrami**

Faculty of Medical Sciences, UT, Northern Macedonia

### ABSTRACT

**INTRODUCTION:** The analysis of the statistical mobility of the population in the Republic of Northern Macedonia for a certain period of time retrograde, readily confirms the transition phase in which we are moving, based on determinants such as natural population growth and birth rate through which Obviously, the obstetricians who come up against the trends of population growth, while at the same time demographic surveys enable us to predict demographic changes for the coming year.

**PURPOSE:** The purpose of this analys besides statistical analysis of target years(2000,2005,2010 ,2015,2018) and prediction of the population pyramid for 2020, is also to find the hypotheticalal gap for different interventions to improve the situation.

**MATERIAL AND METHOD:** The analys is a prospective study, involving women of reproductive age, in the period January - April 2019, conducted in the cities of Tetovo and Gostivar. The nature of the study was medical-demographic, it encompasses multidisciplinary problems, the study was designed in 4 main pillars: 1. Statistical analysis 2.Health services analysis 3. Socio-psychological analysis 4. Population pyramid

**RESULTS:** Selection of target years for the study was by logic: millennium plus 5 years; to give a larger time gap in the study, with a tendency to have greater variability in results. Target years analyzed are: 2000, 2005, 2010, 2015, 2018 and prediction for 2020. General data obtained from the statistical center of the Republic of North Macedonia:

- Year 2000: total population: 2022000 inhabitants; birth rate: 26168, mortality: 17253
- Year 2005: total population: 2035,000 inhabitants; birth rate: 22482, mortality 18406
- Year 2010: total population: 2053000 inhabitants; birth rate: 24296, mortality 19148
- Year 2015: total population: 2069000 inhabitants; birth rate: 23075, mortality 20461

### DISCUSSION

- The results obtained from natural growth analyzes show a 0.36% difference between maximum population growth and minimum population growth over a period of 18 years.
- Grad The gradual increase in popularity contradicts overall population growth with birth rates.

### RECOMMENDATIONS

- From the above analysis the drastic birth rate of births in comparison to a period of 20 years is not only a health problem but a multidisciplinary one.
- 21st Century Woman, unlike the classic female prototype, now the “golden middle” is the goal of every woman balancing between career, society and family

**Key words:** Growth natural population,birth rate.



# I<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Diabetic Ketoacidosis at onset of type 1 Diabetes in pediatric population in Kosova

Vjosa Mulliqi Kotori

University Clinical Center Prishtina-Kosova, Pediatric Clinic-Department of Endocrinology

### Abstract

Diabetic ketoacidosis at diagnosis of T1DM is a life-threatening situation that represents the main cause of morbidity and mortality in pediatric patients with T1DM.

### Patients and Methods:

Data from 477 patients with T1DM under 18 years of age was retrospectively studied (2006-2018) for the presence and severity of DKA at the onset of T1DM. All patients were admitted in Pediatric Clinic-Department of Endocrinology in Prishtina as a tertiary referral center for Diabetes in Kosova.

**Results:** There were a total of 477 incident cases of type 1 diabetes during the observation time period from 2006 to 2018. Mild DKA was present in 45.0% of cases, moderate in 32.5% and severe in 22.5%. The mean symptom duration until the manifestation of type 1 diabetes was 15 days in children less than 5 years and 18 days in school children.

**Conclusions:** Type 1 Diabetes is often diagnosed late, therefore the ketoacidosis rates at the time of diagnosis are high. Children under 5 years of age are at increased risk for severe DKA. Awareness campaign is urgently needed to improve early detection of diabetes type 1 and to reduce the rate of ketoacidosis at diabetes onset.

**Keywords:** Diabetic Ketoacidosis (DKA), Type 1 Diabetes mellitus (T1DM)



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## HYPERTENSION: AS A SILENT KILLER

**Diamant Shtiza**

University Hospital Centre “Mother Tereza”, Department of Pediatrics, Nephrology and Dialysis Unit, Tirana, Albania

In adults the hypertension is pathology with high prevalence, associated with high morbidity and mortality.

More than 50% of individuals had hypertension during their life.

Hypertensive essential process will be identified in adults, but first signs come from pediatric period, with different picks and abnormal response to physic and psychic stress.

In all populations, the hypertension rise progressively during childhood with pick in first weeks of puberty. Each individual in childhood is identified in one percentile that will be followed during the growing up. After puberty the hypertension rises only in the industrialized countries.

Hypertension is necessary to be measured at least once per year in children and adolescents that took part of risk categories such: family hypertension; low birth weight; subjects affected by specific pathology such: diabetes mellitus, nephropathies, aortic coarctation, M. Cushing, etc.

Hypertension is determinate by a genetic and environment component. In the third period of childhood rises the incidence to the essential hypertension and less to the secondary hypertension.

The main cause of hypertension in childhood is renal diseases, responsible to the 50-85% of cases.

The child who has the blood pressure more than 95<sup>o</sup> percentile during the three non consecutive measurements and safety, with the appropriate instruments is considered as hypertensive patient.

### References

1. Ardissino G, Bianchetti, MG, Braga M et al. Raccomandazioni sull'ipertensione arteriosa in età pediatrica: il Progetto CHId. Ital Heart J 2004;5:398-412.
2. European Society of Hypertension – European Society of Cardiology Guidelines Committee. 2003 European Society of Hypertension-European Society of Cardiology guidelines for the management of arterial hypertension. J Hypertens 2003;21:1011-1053 (Errata in: J Hypertens 2003;21:2203-4 e J Hypertens 2004;22:435).
3. Whitworth JA; World Health Organization, International Society of Hypertension Writing Group. 2003 World Health Organization (WHO)/International Society of Hypertension (ISH) statement on management of hypertension. J Hypertens 2003;21:1983-1992.





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Diagnostic and therapeutic approach to children with pulmonary hypertension in Kosovo

**Ramush Bejiqi**

Department of Pediatric Cardiology, Pediatrics Clinic, University Clinical Center of Kosovo, Prishtina, Kosovo

**Background** Pulmonary hypertension (PH) is defined by a mean pulmonary artery pressure (PAP) >25 mmHg at rest or >30 mmHg with exercise. It's defined as a group of diseases characterized by a progressive increase of pulmonary vascular resistance (PVR) leading to right ventricular failure and premature death. The epidemiology of IPAH is about 125-150 deaths per year in the United States, and worldwide the incidence is similar to the U.S. - at 4 cases per million. Despite that we don't have real data of the PH incidence in Kosovo we accounted that the incidence is similar or higher to the other European countries.

**Aim of presentation:** Analyzing the medical records of children diagnosed with PH, etiology diagnostic procedures, treatment and outcomes in a country with limited resources.

**Presentation** We analysed medical records of 28 children diagnosed with PH during the period 2005 -2015. Twelve of them (42.8%) were with primary PH and all other were with secondary PH, due to non-treated congenital heart disease. Basing on the age of diagnosis patients with primary pulmonary hypertension can be divided in two groups: half of them were younger than one year (Group I) while others 6 children have been aged 7 to 13 years – median 10±3 (Group II). Despite application of the modern therapeutic procedures 8 children died due to heart – lung failure.

In the group are children with secondary PH, mostly with Trisomy 2 and complete atrioventricular septal defect (7children - 43%), because Kosovo has not cardiac surgery service and the majority of European states refuse to accept children CHD and syndromes. Three children are with ventricular septal defect, two with aorto-pulmonary window and four children with univentricular heart. Despite of early diagnosis, lack of cardiac surgery service in Kosovo and impossibility for evacuation abroad for treatment has enabled secondary PH.

**Conclusion** Until the number of children with primary PH hypertension is similar with other west countries number of children with secondary PH is much higher due to the lack of cardio surgery services in Kosovo.

**Key words** primary pulmonary hypertension, congenital heart disease, cardiac surgery,



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Follow up to Congenital Heart Defects by Pediatricians

**Alper Güzeltaş**

Training and Research Hospital, Department of Pediatric Cardiology, Istanbul  
University of Health Sciences, Istanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery

The incidence of congenital heart diseases is approximately 8/1000. If a baby has congenital heart disease, the risk of heart disease occurrence in the next offspring is more than two folds. Some of the common etiological factors that may cause congenital heart diseases are; genetic factors, drugs usage or abuse/addiction during pregnancy, intrauterine infections, diabetes during pregnancy etc.

Congenital heart diseases are classified as left-to-right shunt “acyanotic” diseases, right-to-left shunt “cyanotic” diseases and obstructive lesions. It is important to know the timing of intervention/surgery for the pediatrician who is in charge of follow-up the patient. Therefore, pediatricians should know treatment and timing for surgical/transcatheter treatment timing for each disease group and refer it to the upper center when necessary.

Understanding the pathophysiology of left-to-right shunt diseases informs us about the time of clinical symptoms. Normally, if there is no shunt, systemic and pulmonary blood flow is equal. In other words, the Qp/Qs ratio equals to 1. This ratio increases in favor of Qp in left to right shunts. Increased pulmonary blood flow leads to heart failure, recurrent pulmonary infections in children. Besides, because of a delayed or no treatment of left-to-right shunt diseases, persistent pulmonary hypertension may occur. Since pulmonary vascular resistance (PVR) is high during neonatal period, left-to-right shunt diseases do not cause clinical findings.

But, at the end of the first month, after the PVR decreases, the left-right shunt becomes prominent and the patients become symptomatic. Especially, defects such as; large ventricular septal defect (VSD), large patent ductus arteriosus (PDA), complete atrioventricular septal defect (cAVSD) should be operated before 6 months of 1 year old. Hence, atrial septal defect (ASD) has no clinical signs and no need for urgent intervention. Generally, after the diagnosis is made, ASDs can be closed around 4 years of age. Besides, hemodynamically insignificant defects such as; small VSD and PDA can be follow up without any intervention.

In the cyanotic patient group as opposed to the acyanotic group, interventions are generally performed during the newborn period. When the hyperoxia test is performed in a cyanotic newborn with heart disease, supplemental oxygen will have no effect, and the partial pressure of oxygen will usually remain below 100 mmHg. In order to maintain the patency of the ductus arteriosus in these patients, prostoglandin E1 infusion should be started immediately. In most of the cyanotic patients, initiation of prostoglandin E1 ensures that the patient will be stable until to the transportation to the cardiac center. Most of the cyanotic patients do not need to be operated shortly after birth. Clinical status, saturation levels, blood gas analysis, urine output and lactate levels of the patients should be monitored. The timing of intervention can be determined by checking these parameters.

For the obstructive diseases; the degree of stenosis determines the timing of intervention. Severe pulmonary stenosis, which is associated with low saturation levels, requires urgent intervention. And for the systemic outflow tract stenosis (aortic stenosis, aortic coarctation, interruption, etc.), if the degree of stenosis is critical, intervention can be performed even during newborn period. On the other hand, for mild to moderate stenosis, usually follow-up is enough. But for these patients, if the degree of the stenosis increases in the follow-up, they can be treated by surgery or catheter angiography.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Arrhythmias in Children: Case by Case

**Yakup Ergul**

Istanbul Sağlık Bilimleri University, Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Center,  
Department of Pediatric Cardiology/Electrophysiology

### Summary

(Case 1 and 2: Case presented with palpitation (SVT and VT), Case 3 with bradycardia and complete AV block, Case 4 with syncope with long QT syndrome)

The most common symptoms in pediatric cardiology are; palpitations are chest pain, syncope, cyanosis and heart failure, most of which are associated with arrhythmia. Palpitations and syncope are also common causes of emergency admissions in pediatric clinics. Initial evaluation of the patient who presented with palpitation / syncope should start with a good history, physical examination and baseline ECG recordings.

#### **In palpitations, four points are important in the patient's history;**

- Is the rhythm abnormality causing palpitation a life-threatening condition?
- What does the rhythm abnormality look like? Tachycardia, bradycardia? or premature beat?
- Are the symptoms related to exercise?
- Is there any underlying or acquired heart disease?

#### **If palpitations are accompanied by syncope, cardiac causes should be considered. Tips for cardiac etiology in syncope:**

- Exercise, excessive noise, fear, anxiety and excessive emotional stress
- Pre-syncope palpitations and chest pain
- No prodromal symptoms before and syncope ended with injury
- Sudden syncope and collapse when swimming
- Cardiopulmonary resuscitation during syncope
- Neurological sequelae of syncope
- Physical examination and ECG abnormalities such as rhythm abnormality, pathological murmur, abnormal heart sounds immediately or immediately after syncope

**In this children physical examination** should be performed to see if there is a structural heart disease. **Electrocardiographic** diagnosis is vital in the diagnosis of the patient and especially in the planning of medical treatment. The presence of tachycardia, narrow or wide QRS, presence of long QTc and the presence of a WPW pattern should be investigated. It should be remembered that palpitations are sometimes a sign of slowly complete AV complete block or sinus node dysfunction.

If there is syncope or presyncope associated with an episode of palpitation, severe chest pain and associated with exercise, if there is congenital pre-postoperative heart disease, if there is an unsuccessful sudden death or long QT syndrome or unexplained sudden death in the family A rhythm disorder should be suspected.

**These patients should be evaluated together with pediatric cardiology, presence of long QT, presence of WPW, ECO should be performed in terms of structural heart disease and long-term ECG recordings and exercise tests should be performed in order to reveal rhythm disorder when necessary.** Invasive electrophysiological studies may be necessary for patients whose results cannot be reached with all these tests.

**Treatment:** Treatment should be done entirely for the underlying cause;

- If rhythm is recorded at the time of palpitations and 24-hour Holter monitoring only involves **sinus tachycardia**, in other respects a normal person should be told to the family and patient that this is a variant of the normal and the



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

family should be sedated.

- If there is a **severe tachyarrhythmia, bradyarrhythmia or AV conduction disorder** at the time of palpitation, it should be evaluated together with pediatric cardiology. ECG should be performed in every patient with syncope and possible cardiac cues should be reviewed and managed at every stage with Pediatric Cardiology.
- **If the patient's hemodynamics are stable in emergency SVT management**, first do vagal maneuvers and if does not respond initial therapy should be **IV adenosine** [0.2 mg / kg IV rapid push should be given via a central venous route close to the heart].
- **1J / kg cardioversion** should be performed in the treatment of all narrow and wide QRS tachycardia with **impaired hemodynamics**.
- In pulseless VT or VF, an emergency 2J / kg should be started and defibrillation to a maximum of 300 j.
- It should be kept in mind that if the ECG shows AV TAM block in a patient with syncope and low flow, emergency pacemaker (forceful or permanent) can be inserted.
- **Long QT syndrome** is characterized by prolongation of the corrected QT (QTc) interval and is associated with precipitation of torsade de pointes (TdP), a polymorphic ventricular tachycardia that may cause syncope and sudden death. The prevalence of LQTS is estimated to be approximately 1 in 2000 live births.
- **Long QT Syndrome- Treatment Approach**
  - **General rules:**Life -style modifications [Avoid certain drugs ([www.qtdrugs.org](http://www.qtdrugs.org)) , No competitive sports, Avoid electrolyte disturbances (hypokalemia, hypomagnesemia) , Carry an emergency card, Consider changes to worklife if appropriate
  - **Pharmacotherapy:** Beta-blockers, In patients with prolonged QTc (class I, evidence level B), In patients with normal QTc (class IIa, evidence level B) and Mexiletine plus beta-blockers for LQTS 3
  - **ICD** for high risk patients (With beta-blockers) : Patients who have survived sudden cardiac death (class I, evidence level A) and Symptoms persisting despite therapy
  - **Sympathectomy**

Finally; all physicians dealing with children should have ECG on every patient who comes with palpitations and syncope. And we should recognize the red flags on the ECG.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## CHILDREN WITH KIDNEY STONE

**Ozan Özkaya**

Istinye University Bahçeşehir Liv Hospital, İstanbul, TURKEY

The true incidence of kidney stones in children remains unknown due to the diversity of etiopathogenic factors such as geographic location, age, gender, race and scarcity of studies with appropriate epidemiological design. However, in recent years, studies have shown that among pediatric patients, kidney stone disease has increased between 5 and 10%. Several theories including the changes in socioeconomic conditions and dietetic habits, climate change, increased utilization and sensitivity of radiologic imaging have been proposed. Although the incidence of kidney stones in children has been steadily increasing, it still remains under- or misdiagnosed in a significant proportion of patients diagnosed incidentally. Therefore, children should be evaluated with caution for urolithiasis, especially where stone disease is endemic. Symptoms of urinary tract stones are often non-specific, particularly in infants and young children. In infants, stones are incidentally discovered where in older children hematuria and abdominal pain are the major symptoms. Obtaining a detailed medical history including fluid intake, nutrition or specific diets, medications (vitamins D/A, steroids, diuretics, etc.), immobilization, and any mineral supplementation is essential for early and correct diagnosis and for appropriate advice. Clinical practice guidelines and evidence support using ultrasound as the initial imaging study for children with suspected nephrolithiasis, reserving CT only for children with a non-diagnostic ultrasound in whom the clinical suspicion for stones remains high. Intravenous pyelography is rarely used in children, but may be needed to delineate the caliceal anatomy before surgery.

**Risk Factors:** Urine analysis should be done in every child with acute stone episode and urine should be obtained for culture as part of the evaluation for nephrolithiasis. It is essential that kidney stone material be retrieved and analyzed whenever possible. All studies from different continents and countries report that calcium oxalate accounts for 60% to 90% of stones in children, followed by calcium phosphate (10–20%), struvite (1–14%), uric acid (5–10%), cystine (1–5%), and mixed or miscellaneous (4%). In contrast to the adult kidney stone patients, where environmental factors are the main cause, genetic and/or metabolic disorders are the main reason for childhood urolithiasis. After the acute episode, management is directed towards prevention of recurrent stone disease. This includes an evaluation to identify any underlying cause or risk factors for stone formation.

Non-metabolic risk factors:	Metabolic risk factors
Genetic predisposition	Hypercalciuria
Structural renal abnormality	Hyperoxaluria
Infection	Hyperuricosuria
Drugs	Cystinuria
Dietary consideration	Xanthinuria
Environmental factors	Hypocitraturia
Systemic disorders	Hypomagnesuria



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

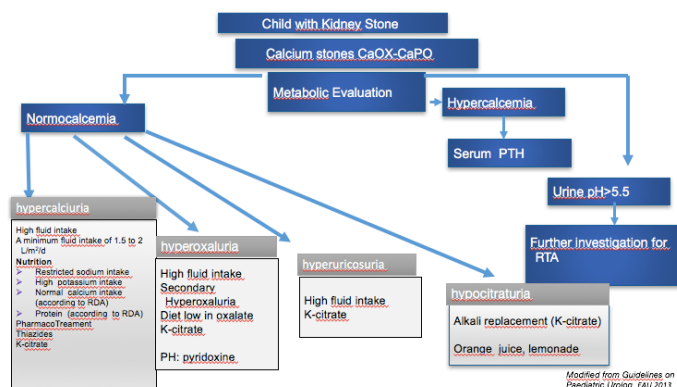
## Metabolic Evaluation:

Since an underlying metabolic risk factor is identified in 75 to 85 percent of children with nephrolithiasis, every effort should be made to discover the underlying metabolic abnormality to prevent recurrence. Initial metabolic assessment should consist of serum calcium, phosphorus, uric acid, magnesium, alkaline phosphatase, pH, bicarbonate, electrolytes, and creatinine levels. 24 h urine collections provide the best information and also provide an objective assessment of the child's daily intake of fluid. In infants or young children, or in situations where a 24 h urine collection is difficult, random urine measurements, using the ratio of the concentration of each analyte to that of urine creatinine, provide valuable information.

Serum	24 h urine collection	Random urine samples
Creatinine	Ca <sup>2+</sup> level	Ca <sup>2+</sup> :creatinine
Ca <sup>2+</sup>	Uric acid level	Uric acid:creatinine
Phosphorus	Citrate level	Citrate:creatinine
Uric acid	Oxalate level	Oxalate:creatinine
Mg <sup>2+</sup>	Mg <sup>2+</sup> level	Mg <sup>2+</sup> :creatinine
pH, Bicarbonate	Cystine level	Na <sup>+</sup> and K <sup>+</sup> levels
Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup>	Phosphorus level	
Parathyroid hormone, vitamin D (if there is hypercalcemia)	Creatinine level	
Plasma oxalate (for patients with PH)	Urinary volume	
HPRT1 (if there are uric acid stones)	In certain circumstances, measurements of glycerate, hypoxanthine, ornithine, lysine, and arginine may need to be done)	

## Treatment

The evidence for the efficacy of medical expulsive therapy (MET) including calcium channel blockers, alpha blockers (Doxazosin, Tamsulosin) in the acute management of a child with kidney is relatively sparse. Four studies have tested whether MET increases the passage of ureteral stones among children. The level of evidence supporting the use of MET for ureteral stones in children still remains moderate. The optimal length of time for observation prior to intervention remains uncertain. If the stone is smaller than 5 mm, the chance of spontaneous passage is high, if it is between 5 and 7 mm the chance is about 50 percent, if it is bigger than 7 mm generally urological treatment is needed. Indications for urologic intervention versus observation with medical management for pediatric nephrolithiasis include severe pain refractory to analgesic therapy, partially or totally obstructing calculi in children with a solitary kidney or a significant urinary obstruction. Also, in asymptomatic children who fail to pass a stone after two weeks, stone removal can be considered.



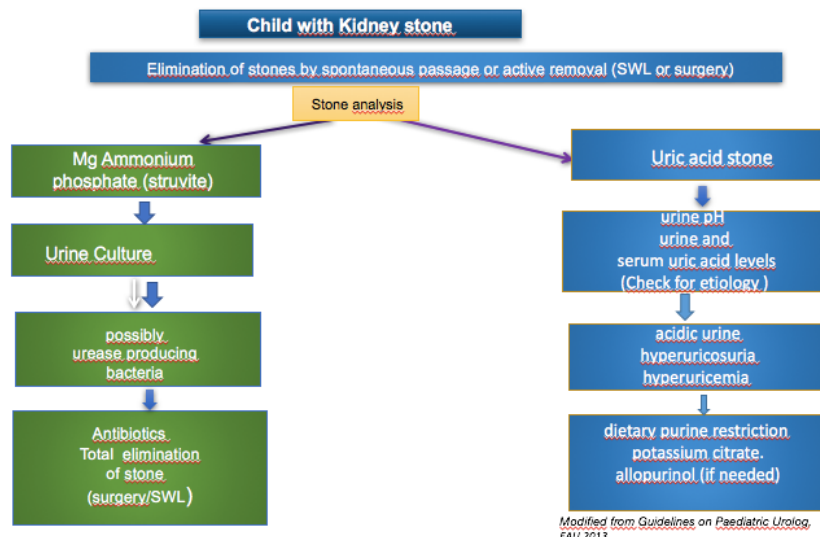




# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo



## References:

- 1-Hoppe B, López M. History, epidemiology and regional diversities of urolithiasis . *Pediatr Nephrol* (2010) 25:49–59
- 2-Pierre Cochat. Primary hyperoxaluria Type 1: indications for screening and guidance for diagnosis and treatment. *Nephrol Dial Transplant* (2012) 27: 1729–1736
- 3-Tekgul S.Guidelines on Pediatric Urology . European Association of Urology 2013
- 4-Alon Uri S. Medical treatment of pediatric urolithiasis . *Pediatr Nephrol* (2009) 24:2129–2135
- 5- Kirkali, Z., Rasooly, R., Star, R. A. , Rodgers, G. P. Urinary stone disease: progress, status, and needs. *Urology* **86**, 651–653 (2015).
- 6- **Özkaya** O, Söylemezoğlu O, Mısırlıoğlu M, Gönen S, Buyan N, Hasanoglu E. Polymorphisms in the vitamin D receptor gene and the risk of calcium nephrolithiasis in children. *Eur Urol.* 2003 44(1):150-4.
- 7-Nalcacioglu H, Ozden E, Genc G, Ozsevik S, Sancak R, Ozkaya O. A rare cause of acute kidney failure in a young child; bilateral nephrolithiasis. 44th Annual Scientific Meeting of the European Society for Paediatric Nephrology. 1626 pp., Dubrovnik, Hırvatistan, Eylül 2011
- 8- Özden E, Mercimek MN, Yakupoğlu YK, Özkaya O, Sarıkaya S. Modified Clavien classification in percutaneous nephrolithotomy: assessment of complications in children. *J Urol.* 2011; 185(1):264-8

In children urolithiasis has a high risk of recurrence due to anatomical and metabolic abnormalities and urinary tract infection.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## Infantile Hemangioma

**Bahar Genc**

Associate Professor of Pediatric Oncology

University of Health Sciences, Sisli Hamidiye Etfal Training and Research Hospital

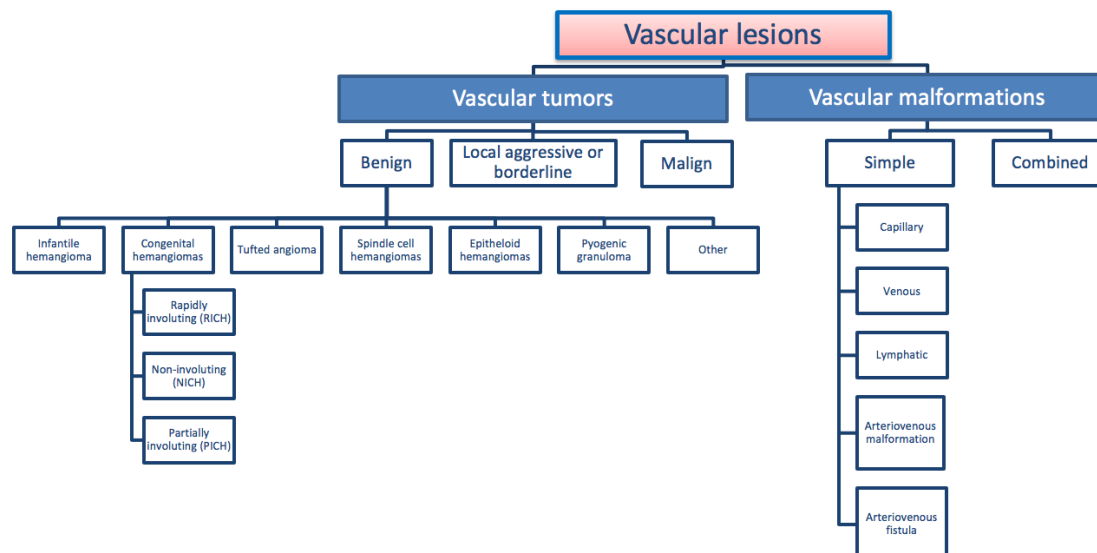
Hemangiomas are the most common benign tumor of the infancy. Unlike other tumors, infantile hemangiomas (IH) have a unique clinical course marked by early proliferation, which is followed by spontaneous involution. Most of the IH are clinically insignificant. Unfortunately, occasional IH may lead to complications such as pain, ulceration, functional impairment and permanent disfigurement. As a result, primary physician should determine the lesions requiring early consultation with a specialist.

First step in the evaluation of a vascular lesion is the differentiation between vascular malformation and vascular tumor. Vascular tumors generally can be treated by medical therapy whereas vascular malformations might necessitate surgical approach. Latest revised classification of vascular lesions is presented in Table 1.

Although IH is the most common neoplasm, this group includes several other vascular tumors such as congenital hemangioma (CH). CH is a distinct form of vascular tumors in terms of biology and behavior. As the name implies, they are present and fully formed at birth and they do not exhibit unique proliferative phase observed in IH. They can show rapid or partial involution as well as no involution at all. Unlike IH, the CH cells do not express glucose transporter protein isoform 1 (GLUT1).

IH is observed in 4-5% of the infants. Its frequency is slightly higher in females. The incidence of IH is increased among preterm infants, affecting 22% to 30% of infants weighing less than 1 kg. Presumed risk factors for IH include maternal chorionic villus sampling, older maternal age, multiple gestation pregnancy, placenta previa, preeclampsia and placental

Table 1 Updated classification of vascular lesions (<https://www.issva.org/UserFiles/file/ISSVA-Classification-2018.pdf>)





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

anomalies. The pathogenesis of IH remains unclear. Placental hypoxia has been proposed as the causative pathology. Another theory suggests that the endothelial progenitor cells migrate to locations that provide favorable conditions for growth into placenta like tissues. Positivity of GLUT1 antigen in IH and placenta seems to support this theory. Proliferative IH are composed of endothelial cells, pericytes, mast cells and interstitial dendritic cells, whereas involuting IH are fibrofatty in composition.

Infantile hemangiomas can be classified according to depth of involvement such as superficial and deep hemangiomas. IH can also be anatomically classified as either localized (focal), segmental, indeterminate and multifocal. Recognition of segmental IH is crucial, as it might be a hallmark sign of PHACE syndrome. Previously, the presence of a large or segmental (>5 cm) cutaneous IH were proposed as a useful marker for hepatic IHs. However, results from a large prospective study demonstrated that the number of cutaneous IHs is more predictive than their size for hepatic hemangiomas. When 5 or more cutaneous IHs are present, ultrasonography may be helpful in assessing potential hepatic involvement.

The diagnosis of IH is generally based on history and clinical appearance. Occasionally, imaging may be required when the diagnosis is not certain, when evaluation of extent is needed, or when response to therapy needs to be objectively monitored. Ultrasonography is the preferred initial imaging modality for such cases. However, the extent of the lesion and the surrounding anatomy are better demonstrated on MRI, especially to assess complicated or extensive visceral lesions and to assess associated anomalies such as PHACES syndrome.

As for the proliferative phase, the recent literature suggests that most rapid IH growth occurs between 1 and 3 months of age. Thus, early recognition of growth pattern for timely intervention is crucial for appropriate management of IH. Most of the IH resolve spontaneously. However, this does not mean that the healing process is complete and without sequelae.

The subgroups of IH requiring treatment can be summarized as follows:

1. Patients at risk of life-threatening complications.
  - Airway hemangioma, liver hemangioma with congestive heart failure and hypothyroidism, severe bleeding from ulcerated IH
2. Patients at risk of functional impairment
  - Eyelid hemangioma leading to visual loss, oral or lip hemangioma preventing feeding
3. Lesions with ulceration and bleeding
4. Patients with associated structural anomalies
  - PHACES syndrome
  - LUMBAR syndrome
5. Risk of permanent disfigurement or cosmetic disability
- 6.

For the IH without predefined risk factors, “wait and see” approach is preferred. However, these patients should be closely followed as a subset of hemangioma might transform to lesions requiring medical intervention as the child grows, e.g., a one-millimeter eyelid hemangioma may become 2 centimeter in size during first month of life and may cause visual dysfunction. Once the decision to treat has been made, second question is which therapeutic intervention is the most appropriate. Factors affecting this choice include the following: Age of the patient, growth phase of the lesion, location and size of the lesion, degree of skin involvement, severity of complication and urgency of intervention, potential for adverse psychosocial consequences, parental preference, and physician experience.

Oral propranolol is the first-line agent for IHs requiring systemic treatment at a dose of 2-3 mg/kg per day unless there are comorbidities (e.g., PHACE syndrome) or adverse effects (e.g., sleep disturbance) that necessitate a lower dose. Treatment for at least 6-months-duration is recommended. Rebound growth during tapering or after stopping the medication may occur. Timolol can be used for superficial lesions. Despite their efficacy, systemic corticosteroids are no longer considered by most clinicians to be first-line therapy for IH due to the associated risk of adverse effects. Corticosteroids administered intralesionally and topically also appear to be effective in certain subsets of patients with



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

more localized IH, but their dosing and safety profile are not well studied. Other medical therapies include vincristine, interferon, imiquimod and antiangiogenic agents. Laser therapy and surgery can be used for a selected group of patients. Surgery for IH during infancy may be indicated in case of failure of, or contraindication to, pharmacotherapy; focal involvement in an area anatomically favorable for resection; and a high likelihood that resection will ultimately be necessary and the scar will be the same regardless of timing. Elective surgical intervention for IH is reasonable after age 4 years because, by this age, self-esteem and long-term memory begin to form and the tumor has completed most of its involution.

Although many IHs can be managed without therapy, some cases will clearly benefit from medical or surgical intervention. It is important for pediatricians to be updated in IH management, because the types and threshold of interventions are subject to evolve. Early referral to an experienced specialist or a multidisciplinary vascular anomalies center may provide utmost benefit in case of diagnostic and therapeutic uncertainty.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## THE ROLE OF PRIMARY CARE PEDIATRICIAN/PHYSICIAN ON THE SUPPORT OF CHILDREN WITH MALIGNANCIES

**Donjeta Bali (ALIA)**

Onco/Hematologic Service- UHC" Mother Teresa"-Tirana

Pediatric Department

Faculty of Medicine

Universty of Medicine, Tirana

### ABSTRACT

Cancer in children, despite being a rare disease entity, is one of the major causes of death and serious illness in children.

There are about 300.000 new cases of childhood cancer diagnosed each year, and 80,000 deaths around the world.

While many children in high-income countries are successfully treated, in some settings around 80-85%, the survival rate for children with cancer in low- and middle-income countries can be as low as 20% .

Even though, much progresses, have been made in treating cancer children, little is known about their etiology, a gap that would help us greatly in preventing these diseases.

Children with early stage cancer often present with non-specific symptoms or symptoms that do not indicate serious disease, but mimic common conditions, such as infections, developmental processes or psychological problems. Therefore, a suspicion of cancer sometimes emerges during the visit of the child's primary care physician/pediatrician (PCP/P).

A PCP/P, with good knowledges, would help in early diagnosis and consequently in treatment of cancer, increasing the chances of a higher survival.

The PCP/P is called upon to play a central role in managing the child with oncohematological problems at every stage of the disease, from diagnosis to follow-up.

Regular visits allow the physician, to assess the full effects of therapy or therapy -relating complications, to detect and report disease recurrence, as well as to identify and manage long-term and late effects of treatment.

The PCP/P must be a point of reference for parents and hospital (terciary service) colleagues in dealing with the small and large problems that patients face at home, on a daily life.

Establishing a continuous and constant collaboration will thus be able to guarantee complete assistance and combat the anxiety that the family sometimes experiences far away from the hospital.

Despite being a leading cause of death, survival of childhood cancer is much higher than that of adult cancer and is improving over time, but childhood cancer survivors are at risk of developing long-term morbidity, which is likely to be presented to a primary care physician.

The partnership between primary and tertiary providers is critical to ensure that survivors remain engaged in follow-up care.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## MEDICAL CANNABIS IN PEDIATRICS Uses and possibilities

Filip Duma

<sup>1</sup>University Pediatric Clinic, Clinical Center “Mother Tereza”, Skopje

**Background:** The public interest in cannabis for medical use is acknowledged, and anecdotal reports of effectiveness in individual patients are compelling. Comments in the media refer to a growing body of evidence regarding the effectiveness of cannabis for medicinal use.

**Objectives:** To make overview of the current scientific papers for medicinal cannabis use in pediatric population.

**Methods:** Literature review was conducted utilizing, PubMed, Medline, and Google Scholar

**Results:** In paediatrics, the greatest evidence for medicinal cannabis use, specifically Cannabidiol (CBD), is for **seizure disorders**. RCTs have demonstrated the safety and efficacy of oral cannabidiol for treatment of seizures associated with Lennox-Gastaut or Dravet syndrome.

It is estimated that 25% of children with treatment-resistant epilepsy have comorbid **autism spectrum disorder (ASD)**. A review of the scientific literature suggests that CBD has promising results in the treatment of ASD. Currently, one ongoing clinical study is assessing the tolerability and efficacy of a CBD and THC combination product in treating behavioural problems in children with ASD.

CBD and THC alone and in combination, were studied for efficacy, safety, and tolerability in children with **Complex Motor Disorder**. Significant improvement in spasticity and dystonia, sleep difficulties, pain severity, and QOL was observed in the pilot study.

Good pain management in children, especially those at end of life, is a crucial component of palliative medicine. Oral solution of both CBD and THC was investigated for safety and efficacy as adjunctive therapy to opiates in paediatric patients with **Cancer-related pain** in with double-blind, placebo-controlled study.

Cannabinoids were investigated for possible effects in **Perinatal Brain Injury**. Orphan designation was granted by the European Commission for CBD for the treatment of perinatal asphyxia.

Placebo-controlled Phase 2 study of a combination of CBD and THC as add-on therapy to dose-intense temozolomide in patients with recurrent **Glioblastoma Multiforme** was completed with positive results. Orphan designation was granted by the European Commission for sublingual spray with THC and CBD for the treatment of glioma.

Most recently, researchers have reported promising *in vitro* and *in vivo* studies for use of cannabinoids in **Neuroblastoma (NBL)**.

**Conclusion:** Cannabis based product have promising potential for add-on treatment of certain conditions in paediatrics. Well-designed Randomized Clinical Trials with sufficient number of patients are imperative to demonstrate benefit of therapeutic use.

**Key words:** cannabinoids, autism spectrum disorder,





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## STURGE - WEBER SYNDROM AND EPILEPSY

Naim Zeka

SH.S.K.U.K Paediatric Clinic, Prishtina, Kosova

**Introduction:** Sturge-Weber syndrome (SWS) is caused by a mutation in the GNAQ gene. The medical term for SWS is encephalotrigeminalangiomatosis. According to the National Organization for Rare Disorders, SWS occurs in one of every estimated 20,000 to 50,000 live births. Sturge-Weber syndrome has three major features: a red or pink birthmark called a port-wine birthmark, a brain abnormality called a leptomeningeal angioma, and increased pressure in the eye (glaucoma). This is caused by abnormal blood vessels on the surface of the brain. This abnormality usually results in epileptic seizures and other problems. In some children, abnormal vessels don't cause any symptoms. In others, they can cause the following symptoms.

Sturge-Weber syndrome can involve a range of complications, including seizures, developmental delays, muscle weakness on one side of the body, paralysis, cognitive impairment and eye problems.

Two out of every 3 children with SWS will have seizures. They may start at birth or in the first year of life. They are usually focal (also called partial) motor seizures involving jerks of one side of the body only. The seizures may become generalised and evolve into other types of seizures, such as atonic seizures 'drop attacks', myoclonic seizures or infantile spasms. Twenty-five percent of those children have full seizure control, 50 percent have partial seizure control, and 25 percent have no seizure control from medication.

The abnormal blood vessels may also involve the eye directly and result in an abnormality of the drainage of fluid within the eye.

According to the American Association for Pediatric Ophthalmology and Strabismus, an estimated 50 percent of children with SWS develop glaucoma during infancy or later in childhood. Glaucoma is an eye disease often caused by increased pressure in the eye. This can cause vision impairment, sensitivity to light, and eye pain.

Learning disabilities are present in up to 2 out of 3 children with SWS. In some children, severe learning disabilities develop. The more frequent and the more severe the seizures, the greater is the severity of the learning disabilities.

The diagnosis of SWS is usually relatively easy. This is because of the characteristic 'port-wine' birth mark on one side of the face and neck is seen at or soon after birth. However, sometimes the diagnosis is more difficult. This is when the birth mark is very pale or occurs only over the scalp and is covered by the child's hair. A computerised tomography (CT) brain scan will usually show the typical abnormalities of the blood vessels on the surface of the brain better than a magnetic resonance imaging (MRI) brain scan.

Treatment is mainly directed towards trying to control the frequent seizures. In these cases, early consideration should be given to epilepsy brain surgery. The surgery involves disconnecting part of the brain in the region of the abnormal blood vessels. This is called a 'hemispherotomy'.

Treatment of glaucoma, if it develops, is possible and laser treatment may be very effective for the birth marks.

**Aim of the study:** The aim of the study is to look at the incidence of the disease in our country, its correlation with epilepsy, glaucoma, and its impact on developmental delay.

**Material and method:** The study is retrospective and includes the period of years 2000-2019. Following analysis of medical records, 11 cases with Sturge Weber syndrome have been identified, 6 male and 5 female.

We have used SPSS 20.0, SigmaStat and SigmaPlot 11.0 and Excel 2010 for statistical analysis.

We have used the following statistical parameters, the structure index, cumulative structure, simple arithmetic mean, standard deviation, standard error, confidence interval with significance level of 95% (CI 95%).

For the purpose of testing the differences for nonparametric data, we have used chi square test (chi-test), for the exact level of significance (p).

**Results:** Out of medical records and follow up, it has been identified a ratio of 55%– 45 % for male and female. Incidence



# I<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

of the disease is estimated to be 1;51 000 to live births. During analysis of correlation of the disease with other diseases, it has been identified that 8 cases (73%) have been associated with epilepsy, 6 cases with glaucoma (55 %), and 7 cases (64 %) had developmental delays. 3 cases (17%) only presented with the birthmark in the face.

**Conclusion:**Sturge Weber syndrome is a very rare disease. The incidence of the disease in our study 1:51 000 is approximately as in other countries. There is no significant difference between male and female, a ratio of 6:5 for male and female. Glaucoma has occurred in 55% of the cases, which also correlates with the data from many authors. About 73% of the patients presented with different types of seizures, in particular the focal type. A significant number of patients have developmental delays.

**Keywords:**Sturge- Weber syndrome, port wine birthmark, leptomeningeal angioma



# **1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School**

**17-20 October 2019**

Venus Hotel & Congress Center, Pristina, Kosovo

## **FULL TEXT ORAL PRESENTATION**



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-01

### THE EFFECT OF VITAMIN D LEVELS ON PREMATURE RETINOPATHY

Didem Biçer<sup>1</sup>, Adil Umut Zübarioğlu<sup>2</sup>, Ebru Türkoğlu Ünal<sup>2</sup>, Ali Bülbül<sup>2</sup>,

<sup>1</sup>Osmaniye State Hospital, Clinic Of Pediatrics, Osmaniye

<sup>2</sup>Sarıyer Hamidiye Etfal Education And Research Hospital, Clinic Of Neonatology, İstanbul

**Giriş :** Vitamin D receptors are present in many regions of the central nervous system and 1-ykrk7-hydroxylase activity is known in brain tissue (1). It is thought that vitamin D deficiency may play a role in the development of retinopathy of prematurity (ROP). In this study, we investigated the effect of vitamin D levels on ROP detected in premature babies.

**Yöntem :** The study was designed as single-center, prospective and randomized. The study was performed in 39 infants who were born between August 2014 – August 2015 and who were hospitalized in the neonatal intensive care unit with < 32 gestational weeks and/or <1500 grams. The characteristics of the patients, including gestational week at delivery, mechanical ventilation during hospitalization, and oxygen supplementation, were similar. Vitamin D levels were measured from cord blood taken at birth and blood sample taken at postnatal 1st month. Patients were divided into two groups as cord blood vitamin D level <10 ng/ml and >10ng/ml. In addition, we investigated whether there was a correlation between control vitamin D levels and ROP development at postnatal 1st month.

**Bulgu :** 39 patients were included in the study. Twenty eight (71.7%) of these patients had cord vitamin D levels <10ng/ml. Although 9 patients with premature retinopathy were in the group with vitamin D level <10ng/ml, there was no statistically significant difference between the groups (p:0.147). The mean cord vitamin D level in patients with ROP was 4.4±2.1ng/ml, but the mean cord vitamin D in patients without ROP was 8.3±6.4ng/ml. This situation was not accepted as statistically significant (p:0.057). However, the mean vitamin D level of the babies who developed ROP at the postnatal 1st month was 12.0 ± 6.8ng/ml and the mean vitamin D level of the babies who did not develop ROP at the postnatal 1st month was 20.8±11.9 ng/ml. Results of vitamin D levels at postnatal 1st month were considered statistically significant between the groups (p:0.043). The relationship between vitamin D levels and ROP development is shown in Table 1.

**Sonuç :** The pathophysiology of ROP includes an inflammatory process. Considering the effects of vitamin D on immunomodulatory, antiinflammatory and neuronal development, it is thought that it may affect ROP development in premature infants. In our study, all babies who developed ROP had cord vitamin D at the level of insufficiency (<10ng/ml). In addition, the postnatal first month serum vitamin D levels were significantly lower in ROP infants compared to infants without ROP, suggesting that vitamin D replacement should be given in higher doses in premature infants.

**Anahtar Kelimeler:** vitamin D, retinopathy of prematurity

**Table 1:** Effect of vitamin D on ROP in premature infants

		Cordblood Vitamin D	Postnatal 1st month Vitamin D
ROP	No	8,3±6,4 ng/ml	20,8±11,9 ng/ml
	Yes	4,4±2,1 ng/ml	12,0±6,8 ng/ml
	p	0,057	0,043



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-03

### The Effects Of Total Parenteral Nutrition On Plasma Aluminum Level In Premature

Semra Bahar<sup>1</sup>, Ali Bülbül<sup>2</sup>, Umut Zübarioğlu<sup>3</sup>, Sinan Uslu<sup>2</sup>, Ebru Türkoğlu Ünal<sup>2</sup>, Evrim Kıray Baş<sup>2</sup>,

<sup>1</sup>Şirnak State Hospital

<sup>2</sup>Şişli Hamidiye Etfal Training And Research Hospital

<sup>3</sup>Yeniyuzyl University Hospital

**Giriş :** There are studies showing that parenteral nutrition fluids and medications used for preterm infants contain aluminum. It is known that aluminum accumulates in the body, disrupts mental development, affects bone mineral structure and causes cholestasis in liver. In our study, we aimed to investigate possible aluminum transmission with parenteral nutrition and medications used in preterm infants.

**Yöntem :** Babies born before 32 gestational weeks and/or under 1500 gr were included in the study. Patients' daily parenteral nutritional content and given other medications recorded. Cord blood samples collected at birth from all infants. Infants who received parenteral nutrition at least 7 days were included in the study, and blood levels of aluminum collected at 14th day and compared with cord blood levels of aluminum.

**Bulgu :** A total of 45 patients were included in the study. 62.2% (n = 28) of patients were male. Mean gestational age was 29.0 ± 2.3 (26-32 Gestational weeks), mean birth weight was 1219.2 ± 432.5 grams and 88.9% of deliveries was by cesarean section. 88.6% of infants were given full dose antenatal steroids. The duration of hospitalization was 72.8 ± 50.3, and the total parenteral nutrition time was 23.42 ± 22.65 days. Aluminum values measured from cord blood of patients were 3.35 ± 1.73 µg / L (lower-upper limit: 1.18-9.7 µg / L), while aluminum levels measured on day 14 were 4.79 ± 3.54 µg / L (lower-upper limit: 1.6-18.6 µg / L). Increase of 1.44 ± 3.86 (0.28-2.60) µg / L in the level of aluminum was statistically significant (p = 0.021). There was no significant association between the increase of aluminum and the number of days that dopamine and dobutamine administered, but the increase in aluminum levels was associated significantly with number of days that furosemide administered (p=0,012). The increase in serum aluminum levels of the patients with parenteral nutrition duration longer than 10 days was found to be markedly higher, but no statistically significant difference was found. There was no significant difference between parenteral nutrition volume and serum aluminum levels. When parenteral solution contents were examined, a significant positive correlation was found between calcium and magnesium levels in TPN administered in the first 7 days and serum aluminum levels on the 14th day (p = 0.044 and p = 0.008, respectively).

**Sonuç :** The increase in serum aluminum levels in preterm infants fed by parenteral nutrition was found to be statistically significant. Longer parenteral nutrition was associated with the greater increase in serum aluminum levels.

**Anahtar Kelimeler:** aluminum, parenteral nutrition, preterm infants.



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-04

### THE EFFECT OF DELIVERY MODE ON MORTALITY IN PREMATURE INFANTS

Sinan Uslu<sup>1</sup>, Lutfiye Sahin Keskin<sup>1</sup>, Ebru Turkoglu Unal<sup>1</sup>, Evrim Kiray Bas<sup>1</sup>, Aysegul Uslu<sup>2</sup>, Ali Bulbul<sup>1</sup>,

<sup>1</sup>Sisli Hamidiye Etfal Education And Research Hospital

<sup>2</sup>Kagithane State Hospital

**Giriş :** Worldwide and especially in developing countries, the frequency of birth by cesarean section has increased in the last 25 years. This increase reaches approximately over 80% in premature births. Traditionally, cesarean delivery has been thought to reduce mortality, particularly in small premature infants. However, some studies on this subject do not support traditional approaches. The aim of this study was to investigate the effect of delivery method on mortality to infants born < 32 weeks of gestation.

**Yöntem :** Premature infants delivered < 32nd gestational week in the Maternity Clinic of Şişli Hamidiye Etfal Education and Research Hospital were divided into 2 groups according to the mode of delivery. Infants born by normal vaginal routes (V/R) and infants born by cesarean section (C/S) were compared in terms of mortality in early neonatal period. Comparisons were made with SPSS statistics program.  $p < 0.05$  was considered statistically significant. There are no financial conflicts of interest to disclose and no any support received.

**Bulgu :** A retrospective study, total of 300 infants were included who born in our hospital before <32 weeks of gestation and followed between 2012 and 2017. A total of 219 (73%) were C/S. There were no any demographic differences (gestational age, birth weight, gender, maternal age, presentation) between the groups. In general approach, no difference was found between the two groups when mortality was compared (23.4% for V/R and 21.0% for C/S,  $p=0.177$ ). Although there was no statistical difference between the groups for infants born with breech presentation, mortality was lower in C/S infants (28.4% for V/R and 22.9%,  $p>0.05$ ).

**Sonuç :** There was no direct effect of cesarean delivery on mortality in small premature infants (as opposed to the traditional approach). However, for breech presentation, delivery by C/S must be considered separately. In this respect, large series and multicenter studies are needed.

**Anahtar Kelimeler:** Delivery mode, mortality, premature





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-05

### Relationship Between Socio-Demographic Characteristics and DENVER Developmental Screening Test II

Vedat Baş<sup>1</sup>, Hatice Çetin Hakyemez<sup>1</sup>, Tuğba Eles Baysal<sup>1</sup>, Ecem Naz Cınbız<sup>1</sup>, Yeşim Oğuz<sup>1</sup>, Tuğçe Günsar<sup>1</sup>,

<sup>1</sup>Istanbul Arel University

**Giriş :** By conducting this study, our aim is to early diagnose the developmental problems of premature infants that may have been oversighted during the routine medical examination by using the Denver Developmental Screening Test (DDST). The purpose of this research was to investigate the relationship between socio-demographic characteristics and developmental follow-up.

**Yöntem :** Within developmental follow-up, the children from whole study group were assessed at pre-school age by pediatrician using the Denver Developmental Screening Test (Denver II). Socio-Demographic Characteristics were collected from study data form.

**Bulgu :** One hundred- four who were admitted to the clinic were examined. The mean  $24.8 \pm 14.8$  months age was found. When the Denver test results were examined according to socio-demographic characteristics; Significant relationships were found between father's age and primary caregiver and language development. The rate of language development disorder was found to be significantly higher in children who father age under 35 years of age compared to children who father age over 35 years of age ( $p: 0.043$ ). The rate of language development disorder was found to be significantly higher in children who were cared for by non-mothers compared to children who were cared for by mother ( $p: 0.027$ ).

**Sonuç :** We believe that being the mother of the primary caregiver will reduce the deterioration in the language development field of the children and the level of language development in the children will be normal.

**Anahtar Kelimeler:** Denver developmental screening, socio-demographic features



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-06

### The Prevalence Of Bacterial Strains Isolated From Urine Cultures And Their Antibiotic Susceptibility Patterns Among Children with Urinary Tract Infection

Behcet Simsek<sup>1</sup>,

<sup>1</sup>Haydarpasa Numune Research Hospital Pediatrics And Pediatric Nephrology Unit İstanbul

**Giriş :** Urinary tract infections (UTI) are one of the most common bacterial infections diagnosed in outpatients as well as hospitalised children. The use of an inappropriate antibiotic, will delay effective treatment and increase the risk of antimicrobial resistance which is an escalating global health treat. Early diagnosis and prompt “best guess” empiric antimicrobial treatment are required to minimise renal scarring and progressive kidney damage. A retrospective study was performed to identify bacterial strains isolated from urine cultures and their antimicrobial susceptibilities in children with UTI to evaluate the options for empirical treatment of UTI and combat antimicrobial resistance.

**Yöntem :** Data analysis was carried out retrospectively on all infants and children from 15 days up to the age of 18 years who admitted to Haydarpasa Numune Research Hospital Children Clinic (inpatients and outpatients) with culture proven UTI from January 2015 to March 2018. Patients were identified and data were extracted using the Hospital Information and Support System. Urine cultures with a pure growth ykrk31105 of a single organism were included in the study. Antibiotic susceptibility tests were performed by VITEK2 (bioMerieux, France) system, according to EUCAST (European Committee on Antimicrobial Susceptibility Testing) criteria.

**Bulgu :** A total of 485 UTIs were confirmed on urine cultures in 276 girls (80%) and 69 boys (20%) in a total of 345 patients. Mean patient age was 6.52±4.92 years; median age was 5.7 years. (Reinfection and recurrent UTIs were diagnosed in 16% and 9% of patients respectively. Of the 485 UTIs, E.coli was the most commonly isolated uropathogen, accounted for 299 (61.6%) of the bacterial strains; followed by Klebsiella pneumoniae, in 55 (11.3%), Enterococcus faecalis, in 52 (10.7%), Proteus mirabilis in 23 (4.7%), Enterococcus faecium, in 11(2.3%), Pseudomonas aeruginosa, in 8 (1.6%), Klebsiella oxytoca, in 8 (1.6%), Staphylococcus aureus in 8 (1.6%) and others in 21 (%4.3) isolates. 100% of E. Coli isolates were determined susceptible to Ertapenem, 87.2% to Gentamicin, 85% to Amoxicillin/Clavulanate, 63.8% to Sulfamethoxazole-Trimethoprim, 63.4% to Ceftriaxone and of 57.4% to Cefuroxime Axetil. The susceptibility patterns of bacterial strains to antibiotics are presented in Table 1.

**Sonuç :** Antimicrobial resistance is an internationally recognised threat to health. Taking into account the prevalence of bacterial isolates in urine cultures and antibiotic susceptibility patterns when selecting empiric treatment for UTI in children, may prevent inappropriate antibiotic use and alleviate antimicrobial resistance.

**Anahtar Kelimeler:** UTI, children, antibiotic susceptibility, antimicrobial resistance, urine culture, bacterial strains

Table 1. Antibiotic Susceptibility Patterns of Uropathogen Isolates

Antibiotics	Uropathogens							
	E.coli n(%)	K.pneumoniae n(%)	E. faecalis n(%)	P. mirabilis n(%)	E. faecium n(%)	P. aeruginosa n(%)	K. oxytoca n(%)	S. aureus n(%)
SXT	187 (66.8)	43 (79.6)	8 (16.3)	12 (57.1)	1 (9.1)	1 (16.7)	6 (75)	7 (87.5)
AM	108 (36.2)	1 (1.8)	50 (98)	13 (56.5)	5 (45.5)	-	0 (0)	6 (75)
AMC	149 (55.1)	24 (44.3)	-	19 (100)	-	-	7 (87.5)	6 (75)
CXA	170 (57.4)	29 (52.7)	-	23 (100)	-	-	6 (75)	6 (75)
CAZ	185 (62.9)	31 (56.4)	-	23 (100)	-	7 (87.5)	7 (87.5)	-
CRO	185 (63.4)	30 (55.8)	-	23 (100)	-	-	7 (87.5)	-
TZO	213 (71.7)	31 (56.4)	2 (66.7)	23 (100)	-	5 (62.5)	7 (87.5)	-
ETP	297 (100)	51 (92.7)	-	23 (100)	-	-	8 (100)	-
MEM	297 (100)	51 (92.7)	-	23 (100)	-	8 (100)	8 (100)	-
CN	259 (87.2)	38 (69.1)	2 (66.7)	18 (78.3)	-	7 (87.5)	7 (87.5)	7 (87.5)
AK	229 (77.6)	46 (83.6)	-	20 (87.7)	-	7 (87.5)	8 (100)	-
TE	-	-	5 (21.7)	-	-	-	-	7 (87.5)
CIP	219 (73.7)	41 (74.5)	46 (88.5)	17 (73.9)	5 (45.5)	7 (87.5)	7 (87.5)	8 (100)
VA	-	-	50 (100)	-	11 (100)	-	-	8 (100)
TEC	-	-	50 (100)	-	11 (100)	-	-	8 (100)
DAP	-	-	50 (100)	-	11 (100)	-	-	8 (100)
DA	-	-	-	2 (50)	-	-	-	6 (85.7)

SXT: Sulfamethoxazole-Trimethoprim, AM: Ampicillin, AMC: Amoxicillin + Clavulanic acid, CXA: Cefuroxime axetil, CAZ: Cefazidime, CRO: Ceftriaxone, ETP: Ertapenem, MEM: Meropenem, CN: Gentamicin, AK: Amikacin, TE: Tetracycline, CIP: Ciprofloxacin, VA: Vancomycin, TEC: Telicoplanin, DAP: Daptomycin, DA: Clindamycin



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-07

### Neonatal respiratory morbidity outcomes of infants of diabetic mothers

Evrin Kıray Baş<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ali Bülül<sup>1</sup>, Ebru Türkoğlu Ünal<sup>1</sup>, Gizem Kara Elitok<sup>1</sup>, Ahmet Tellioglu<sup>1</sup>,

<sup>1</sup>Şişli Etfal Training and Educational Hospital

**Giriş :** Diabetes, which is present before and during pregnancy, causes an increase in perinatal morbidity and mortality in infants may lead to adverse changes in the later stages of life health. Diabetic mother infant (DAB) is an increasing subject of increasing frequency and importance in recent years. Its frequency is 5%. Respiratory distress is more common than normal infants born at a similar gestational age. The main cause is fetal hyperinsulinism. This study aimed to determine respiratory morbidities in infants of diabetic mothers.

**Yöntem :** In this study, all babies of diabetic mothers who were born in our hospital between January 2018 and January 2019 were evaluated for early respiratory morbidity.

**Bulgu :** Ninety-four diabetic mothers who were born in our hospital were included in our study. Of the patients, 14 (14.8%) were hospitalized in our neonatal intensive care unit for treatment because of respiratory distress syndrome and transient tachypnea of the newborn. The mean gestational age of patients who developed respiratory distress syndrome was 32 $\pm$ 2 week (27-36), and the mean gestational age of newborn transient tachypnea was 36 $\pm$ 2 week (33-41). Six of the patients received surfactant treatment 8 times. All patients received ventilation therapy.

**Sonuç :** Infants of diabetic mothers should be carefully monitored for various complications that may develop before and after birth. Health personnel and families should be informed about follow-up and treatment. As a result, respiratory distress in babies of diabetic mothers is a risky condition that can be expected frequently.

**Anahtar Kelimeler:** Neonatal morbidities, diabetic mothers



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-08

### Evaluation of Renal Functions in Asphyxiated Newborns

Evrin Kiray Baş<sup>1</sup>, Ali Bülbül<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ebru Türkoğlu Ünal<sup>1</sup>, Gizem Kara Elitok<sup>1</sup>, Esra Ağırçöl<sup>1</sup>,

<sup>1</sup>Sisli Etfal Educational And Training Hospital

**Giriş :** Perinatal asphyxia is one of the most common cause of neonatal mortality and morbidity in developing countries. Hypoxia and ischemia can damage almost every tissue and organ of body, and kidney involvement is seen in about 50%-72% of cases. The aim of this study was to evaluate systematically the renal functions in perinatal asphyxiated newborns.

**Yöntem :** This prospective cohort study was conducted on total 20 newborns of >34wks gestational age. Simultaneously 20 gestation and weight matched babies with no asphyxia were enrolled as controls. All neonates were evaluated clinically and their renal functions were assessed . Criteria for labeling an asphyxiated neonate as having renal failure were serum creatinine >1.5mg/dl at any time or oliguria (<1 ml / kg / h) lasting 24 hours or more and serum creatinine concentration > 1.1 mg / dl or increased postnatal serum creatinine levels during follow-up.

**Bulgu :** Six (33.3%) asphyxiated babies had acute renal failure (ARF) as compared to control (p = 0.001) in our study. Blood urea and serum creatinine were significantly higher in asphyxiated babies, compared to control group (p value <0.001) Incidence of renal failure increases as Apgar score decreases and as HIE stage progresses. Biochemical derangements correlated well with HIE staging and Apgar score and this difference was found significant (p value <0.05).

**Sonuç :** It should be kept in mind that acute kidney damage may occur due to perinatal asphyxia, and blood pressure, urea-creatinine, electrolyte follow-up and urine amounts should be performed daily.

**Anahtar Kelimeler:** Neonatal morbidities, renal functions



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-09

### Characteristics of Newborns with Indirect Hyperbilirubinemia in our Neonatal Intensive Care Unit

Evrin Kiray Baş<sup>1</sup>, Ebru Türkoğlu Ünal<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ali Bülbül<sup>1</sup>, Hasan Avşar<sup>1</sup>, Melek Selalmaz<sup>1</sup>,

<sup>1</sup>Sisli Etfal Training And Educational Hospital

**Giriş :** Hyperbilirubinemia is a common problem in the first week of life in most healthy newborns. However, when severe and untreated hyperbilirubinemia reaches a high level, it is neurotoxic and is the most common cause of hospitalization in the first 2 weeks of life. The aim of this study is to investigate the reasons and risk factors of development of indirect hyperbilirubinemia in babies whose gestation age  $\geq 37$  weeks.

**Yöntem :** This study was a retrospective medical chart review. Neonates who were born  $\geq 37$  gestation weeks and treated with the diagnose of indirect hyperbilirubinemia in neonatal intensive care unit of Sisli Etfal Education and Research Hospital in a year period were subjected to this study. Etiologic risk factors, clinical and laboratory findings were investigated for 186 neonates retrospectively.

**Bulgu :** One hundred-eighty six infants who met the study criteria were evaluated. The gender, mean gestational age and mean birth weight of the infants were 50.5% (n:94) male,  $38.6 \pm 1.0$  weeks and  $2854 \pm 136$  g, respectively. The ratio of the first children of their families was found 51.7% and amount of 60.2% were breastfeeding. Admission time was  $5.2 \pm 3.7$  days and total bilirubin level was  $19.2 \pm 4.8$  mg/dl. As the etiological risk factors were assessed, in 80 of patients (43.1%) ABO incompatibility was detected, and in 64 of patients (34.4%) excessive weight loss whereas no etiologic cause was defined in 69 of patients (37.1%). The mean admission time was  $4.2 \pm 2.5$  days and total bilirubin level was  $18.1 \pm 3.8$  mg / dl. Hyperbilirubinemia was found to be more frequent for male gender and patients with weight loss, and these properties were significant risk factor for higher bilirubin levels ( $p < 0.001$ ). Infants who were delivered by vacuum extraction had higher bilirubin levels at the hospital admission

**Sonuç :** In this study, we found that the incidence of hyperbilirubinemia was increased more frequently in male gender, the first infant and breastfeeding. The rate of excessive weight loss and male gender were significant risk factors for achieving higher values of bilirubin were identified.

**Anahtar Kelimeler:** Neonatal morbidities, Indirect Hyperbilirubinemia



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-10

### CATHETER ABLATION OF FOCAL ATRIAL TACHYCARDIA WITH LIMITED FLUOROSCOPY IN CHILDREN(2 YEARS OF EXPERIENCE)

Gülhan Tunca Şahin<sup>1</sup>, Yakup Ergül<sup>1</sup>,

<sup>1</sup>Sbu Istanbul Mehmet Akif Ersoy Thoracic And Cardiovascular Surgery Center

**Giriş :**Herein, we want to share our experience about the utilization of 3D systems and catheter ablation by electro anatomic mapping systems in children with focal atrial tachycardia (FAT).

**Yöntem :** The electro physiologic properties, catheter ablation data, success rates and the duration of follow-ups of a total of 38 patients (F/M:9/29) with FAT whom catheter ablation was performed between August 2017 and August 2019 were evaluated retrospectively. The postoperative arrhythmias were excluded. All studies were performed with 3D complex mapping system 'Ensité Precision' and minimal fluoroscopy in need. Electronic internet database system FileMaker® was used for data retrieval.

**Bulgu :** The mean age of the patients was 11.3 (1 month-18 years) years, mean body weight was 43 (3-98) kg. There was structural heart disease in 9 of the patients. ( Ebstein's anomaly in 3 patients, atrial septal defect in 1, mitral regurgitation in 2, bicuspid aorta in 1 and noncompaction cardiomyopathy in 2). There was tachycardia induced cardiomyopathy (TIC) in 9 patients. There was additional different tachycardia substrate in 9 patients.( atrioventricular nodal re-entrant tachycardia in 5, intraatrial re-entrant tachycardia in 2, Wolff-Parkinson White in 1 and junctional ectopic tachycardia in an other patient). Radio frequency ablation (RFA) was used in 31 of the patients (84%), cryo ablation (CRA) in 6(16.2%), both RFA and CRA in the same session in 2 (5.4%). Irrigated RFA was performed additionally in 5 patients (13.5%) who had RFA. Ablation could not be performed in a patient as tachycardia was unsustainable. Acute success was 97% (36/37). There was another FAT focus in 5 (14%) out of 37 ablated patients. Out of 14 patients who had left atrial procedures the focus was mitral annulus in 8, interatrial septum in 2, right pulmonary vein in 3, left upper pulmonary vein in 1 of the patients . Out of 28 patients who had right atrial procedures, focus were coronary sinus in 10 of the patients, tricuspid annulus in 5, crista terminalis in 4 and right atrial appendage in 4, SVC right atrial junction in 3, right atrial isthmus in 1 and right parahissian region in 1 of the patients. Procedural mean duration was 181 (82-473) min. Fluoroscopy was used only in 11 patients (30%) and mean fluoroscopy time was 3,93 min(2-6min). No major complications were seen. The mean duration of follow up was 9 months. Relapse of tachycardia was determined in a patient 6 months after the procedure at right atrial appendage. Complete success was achieved by a transjugular second procedure.

**Sonuç :** Catheter ablation is safe and effective in FAT treatment. Electro anatomic mapping system can eliminate or minimize the radiation exposure.

**Anahtar Kelimeler:** Focal atrial tachycardia , catheter ablation, limited fluoroscopy, children





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-11

### ULTRASONOGRAPHIC POSTOPERATIVE EVALUATION OF DIAPHRAGM FUNCTION OF PATIENTS WITH CONGENITAL HEART DEFECTS

Erkut Öztürk<sup>1</sup>, İbrahim Cansaran Tanıdır<sup>1</sup>, Alper Güzeltaş<sup>1</sup>,

<sup>1</sup>SBU, Mehmet Akif Ersoy Thoracic And Cardiovascular Surgery Education And Research Hospital

**Giriş :** Morbidity and mortality can increase due to post-operative effects on the diaphragm functions of patients with congenital heart defects. The use of ultrasonography (USG) in addition to echocardiography is increasing in pediatric cardiac intensive care units (ICUs). The aim in the present study was to evaluate the effects of USG usage on the management of diaphragm dysfunction.

**Yöntem :** Patients who underwent congenital heart surgery (CHS) procedures between 01 September 2018 and 31 March 2019 were included in the study. USG was performed for the patients who had difficulty weaning from mechanical ventilation or who were thought to have diaphragm dysfunction due to pathological findings on postoperative chest X-rays. The findings were interpreted as normal, paresis, or paralysis, and the results were evaluated.

**Bulgu :** Three hundred and sixty patients underwent CHS during the study period, and 44 patients underwent diaphragm USGs evaluation. The median age of the patients was 4 months (range: 1 day to 8 years), and the median patient weight was 5 kg (range: 2.5–52 kg). Diaphragm dysfunction was demonstrated in 23/360 patients (6.3%), paralysis in 11 patients (bilateral in 2, right-sided in 3, left-sided in 6), and paresis in 12 patients (bilateral in 1, right-sided in 4, and left-sided in 7). A median sternotomy was performed in 21 (91%) patients, and 7 out of the 21 were re-do cases (30%). Five patients had single ventricle physiology (21%). Six (1.6%) of the patients needed intervention due to diaphragm dysfunction. The interventional procedures were: diaphragm plication in 3 patients (bilateral paralysis: n=2, left-sided diaphragm paralysis: n=1) and tracheotomy in 3 patients (bilateral paresis: n=1, right-sided diaphragm paralysis: n=1, left-sided diaphragm paralysis: n=1). Three of these patients had single ventricle and 3 had biventricular physiology. The median time after surgery, for these procedures was 36 days (range: 32–44 days). One of the patients died at the ICU. The mean stay at the ICU and the hospital were 36±12 and 48±21 days, respectively.

**Sonuç :** Diaphragm dysfunction should be kept in mind in patients underwent CHS and those needed prolonged intubation during the post-operative period. Ultrasound is a noninvasive diagnostic tool that can be used to determine the nature of the diaphragm dysfunction and the best course of management of this clinical condition.

**Anahtar Kelimeler:** ultrasonography, Diaphragm dysfunction, congenital heart



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-12

### Transseptal Puncture for Catheter Ablation of Left sided Arrhythmias in Children; single-center experience

Yakup Ergül<sup>1</sup>, Hasan Candaş Kafalı<sup>1</sup>,

<sup>1</sup>Sbu Istanbul Mehmet Akif Ersoy Thoracic And Cardiovascular Surgery Center, Pediatric Cardiology, Istanbul

**Giriş :**Transseptal puncture (TP) is the most used method to access the left atrium in left-sided arrhythmia catheter ablations in pediatric patients, compared to retrograde aortic approach, used commonly in adult patients. TP can be difficult and complicated, especially in small children. We aimed to evaluate the safety and feasibility of TPs performed in children in our center.

**Yöntem :** A retrospective screening of our pediatric arrhythmia center database revealed 129 TP procedures in 126 patients (85 males; 67.4 %), conducted between August 2016 and August 2019. Fluoroscopy was used in all patients during the procedure besides a three-dimensional mapping system (EnSite™; St.Jude Medical Inc.,St.Paul,MN,USA)

**Bulgu :** Median age of the patients was 11.54 years (4.67 to 17.97 years) and median weight was 43 kg (16 to 116 kg). The TP was successfully performed in all cases (success rate 100%). The most common diagnoses were Wolff Parkinson White syndrome in 80 cases (62%), atrioventricular reentrant tachycardia (AVRT) due to concealed accessory pathways (APs) in 41 cases (31.8%) and focal atrial tachycardia in 7 cases (0.54%). The most common locations for APs (both manifest and concealed) were left posteroseptal in 33 cases, left lateral in 28 cases, left posterior in 17 cases and left anterolateral in 16 cases. The median fluoroscopy time and dose were 3,55 minutes (1 to 12.07 minutes) and 204.61 mGy.cm<sup>2</sup> (18.7 to 3502.6 mGy.cm<sup>2</sup>) respectively. Only one patient with an age of 16 years and weight of 80 kg, diagnosis with AVRT due to a left sided concealed accessory pathway (AP), developed self-limited pericardial effusion during the procedure. There were no signs of cardiac tamponade, and the procedure was completed successfully.

**Sonuç :** In one large scale report by the North American Society of Pacing and Electrophysiology, the success rate was reported as 96% with major complications of 3.3% in 1867 children [1]. In a recent study including 303 pediatric patients with a median age of 13 years and median weight of 55 kg, no major complications were observed, and a posterior wall perforation was only seen in one 15-yearold child [2]. A more recent study including 45 pediatric patients revealed also no difference in means of complications, when comparing children <20 kg and >20 kg. A retroaortic approach can also be used as an alternative to TP for accessing the left side in older patients, but pediatric patients are more prone to complications in this method [3]. In our study, no major complication was observed. Another possible TP complication is an embolism, which was not seen in our study [4]. In this single-center study, we demonstrated that TP can be performed safely and with a high success rate in children.

**Anahtar Kelimeler:** catheter ablation, children, transseptal puncture



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-13

### EVALUATION OF TEMPERATURE MEASUREMENT METHODS IN CHILDREN BETWEEN 6 MONTHS-6 YEARS

Aysegul Uslu<sup>1</sup>, Sinan Uslu<sup>2</sup>, Faruk Akcay<sup>1</sup>, Nimet Pinar Yilmazbas<sup>1</sup>, Gulsen Sezer<sup>1</sup>,

<sup>1</sup>Kagithane State Hospital, Department Of Pediatrics, Istanbul, Turkey

<sup>2</sup>Sisli Hamidiye Etfal Education And Research Hospital, Istanbul, Turkey

**Giriş :**Monitoring of the thermoregulation of children is an essential vital sign that reflects sign of serious illness. Up to 30% of all admissions to emergency department and outpatient clinics are fever. Therefore, accurate and rapid temperature measurements play a key role for pediatric care. The aim of this study is to compare different temperature measurement methods in children between 6 months and 6 years.

**Yöntem :** Temperature measurements were performed in children aged 6 months to 6 years who applied to Kagithane State Hospital Children's clinics with fever. Each measurement was performed in 3 different areas and with different instruments (axillary digital, infrared tympanic and infrared non-contact forehead skin) simultaneously. All readings were done by celcius (°C) scale. Measurement time and results were compared statistically. Clinical significance was defined as a mean difference of 0.2 °C. There are no financial conflicts of interest to disclose and no any support received.

**Bulgu :** A total of 198 patients were included. The mean age of these patients was 3.2±1.1 and 102 (51.5%) were female. A time of 2.3±0.8 min with digital thermometer (DT), 3.1±0.5 s with tympanic thermometer (TT) and 1.1±0.1 s with forehead thermometer (FT). There were no any differences between DT and TT measurements (+0.03, p>0.05). On the other hand statistical and clinical differences were found between DT and FT measurements (+0.44, p<0.001) and TT and FT measurements (+0.43, p<0.001).

**Sonuç :** Although the most rapid measurement is performed with FT, clinical differences are found according to DT and TT measurements. When time management and accuracy are considered jointly, TT measurement can be considered as the most practical and realistic method in pediatric temperature care.

**Anahtar Kelimeler:** Temperature, Measurement, Children



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-14

### The Experience Of Self-Infusion Education In Pediatric Hemophilia Patients And Their Parents

Emine Türkan<sup>1</sup>,

<sup>1</sup>University Of Health Sciences, Okmeydanı Research And Training Hospital, Pediatric Hematology Department, Istanbul, Turkey

**Giriş :** Hemophilia is an inherited bleeding disorder characterized by a deficiency in clotting factors .Severe hemophilia is associated with development of arthropathy due to joint bleedings. In patients with severe hemophilia, prophylactic treatment with infusions of clotting factors to prevent chronic arthropathy is recommended. In order to evaluate the practice of Prophylactic factor therapy and learning experience of self-infusion in pediatric patients with hemophilia, we performed a retrospective study from a single-center.

**Yöntem :** A total of 42 severe hemophilia patients on prophylactic factor replacement therapy and their parents were analyzed. All data involving pediatric hemophilia patients on prophylactic treatment between 2015 and 2018 in a research hospital at Istanbul, were extracted from patient files.

**Bulgu :** All patients had severe hemophilia A and started prophylaxis at a median age of 4.8 years. A majority (%95) of the children (40/42) started prophylaxis after a joint bleeds, and only two patients (%5) started primary prophylaxis. None of the patients developed an inhibitor on prophylaxis. Two of the patients who had inhibitors before prophylaxis, used activated Prothrombin Complex Concentrate for prophylactic treatment. 20 of 42 (%48) patients accepted to have training for self-infusion. 15 of 20 parents of patients (%75), and 2 patient (aged 15 and 17 years) himself, successfully learned intravenous infusion. Overall, parents or patients needed a median of six visits to learn home treatment. In 90 % of cases (18/20), the mother was the first who started learning to infuse the child. Five of 42 patient's parents (%12) refused self-infusion training and preferred to continue receiving prophylactic factor infusion at the healthcare center or hospital. In 17 case (% 40), himself or parents of patients was able to do self-infusion and didn't need any training also.

**Sonuç :** The difficulties associated with maintaining a prophylactic factor infusion therapy may decrease treatment compliance in pediatric patients. Learning self-infusion of clotting factors in severe hemophiliac patients and their parents requires time and effort. Home treatment allows immediate access to clotting factor, hence optimal early treatment and should be initiated by the caregivers after adequate training.

**Anahtar Kelimeler:** Self-Infusion, Pediatric, Hemophilia



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-15

### RELATIONSHIP BETWEEN MODE OF DELIVERY AND EARLY MORBIDITY OF PREMATURE INFANTS

Lutfiye Sahin Keskin<sup>1</sup>, Sinan Uslu<sup>1</sup>, Hasan Avşar<sup>1</sup>, Evrim Kiray Bas<sup>1</sup>, Ebru Turkoglu Unal<sup>1</sup>, Aysegul Uslu<sup>2</sup>, Ali Bulbul<sup>1</sup>,

<sup>1</sup>Sisli Hamidiye Etfal Education And Research Hospital

<sup>2</sup>Kagithane State Hospital

**Giriş :** The debate on the ideal delivery mode of premature babies has been going on for many years. Traditional approaches suggest that small premature infants tend to be delivered by cesarean section. The relationship between early neonatal morbidities and delivery type of premature infants is of particular interest. The aim of this study was to investigate the effect of delivery mode on premature infants (born < 32 weeks of gestation) with significant morbidities such as respiratory distress syndrome (RDS), bronchopulmonary dysplasia (BPD), patent ductus arteriosus (PDA), necrotizing enterocolitis (NEC), intraventricular hemorrhage (IVH), premature retinopathy (ROP), and sepsis. The secondary aim is to comment on the ideal mode of delivery for premature infants.

**Yöntem :** Premature babies born < 32 weeks of gestation in Sisli Hamidiye Etfal Education and Research Hospital between 2012-2017 were evaluated. Infants with congenital anomalies and transported from external centers were excluded from the study. The infants who were divided into two groups according to the type of delivery (normal vaginal routes (V/R) and cesarean section (C/S) were compared in terms of early neonatal morbidities. Comparisons were made with SPSS statistics program.  $p < 0.05$  was considered statistically significant. There are no financial conflicts of interest to disclose and no any support received.

**Bulgu :** A total of 300 infants were included in this study. A total of 219 (73%) were C/S. There were no any demographic differences (gestational age, birth weight, gender, maternal age, presentation) between the groups. There were no statistical differences between the groups for early neonatal morbidities such as RDS, BPD, PDA, NEC, IVH, ROP and sepsis (Table 1).

**Sonuç :** In our study, it is seen that cesarean delivery, which is accepted as a protective factor, does not appear as a protective factor in terms of early neonatal morbidity for small premature infants. We concluded that delivery by caesarean section should not be an indication for all premature babies, especially when maternal complications of the mother are mentioned.

**Anahtar Kelimeler:** Premature infants, delivery mode, morbidity



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-16

### Comparison of ABO and Rh group incompatibility for neonatal indirect hyperbilirubinemia

Evrin Kiray Baş<sup>1</sup>, Ali Bülbül<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ebru Türkoğlu Ünal<sup>1</sup>, Bülent Güzel<sup>1</sup>, İlkey Özmeral Odabaşı<sup>1</sup>,

<sup>1</sup>Sisli Hamidiye Etfal Educational And Training Hospital

**Giriş :**Background and Aim: Neonatal hyperbilirubinemia is a common problem. In this study we aimed to evaluate clinical and laboratory findings between ABO and Rh incompatibility and to compare the results of groups in terms of severe hyperbilirubinemia.

**Yöntem :** Term neonates with indirect hyperbilirubinemia due to ABO and Rh blood group incompatibilities who were hospitalized in Neonatal Intensive Care Unit between January 2018 and January 2019 were included and evaluated retrospectively. Among the two groups, Serum total bilirubin levels, hematocrit levels, direct coombs test results, existence of severe hyperbilirubinemia levels (>20 mg/dl), phototherapy duration, IVIG usage and rates of exchange transfusion were compared.

**Bulgu :** During the period, 815 newborns were admitted to Neonatal Intensive Care Unit for two years. Of the patients, 186 (22,8%) were diagnosed as indirect hyperbilirubinemia. ABO and Rh incompatibility were found in 80 (43,1%) and 37 (19,8%), respectively. There was similar to demographic characteristics. Severe hyperbilirubinemia was seen more often in ABO incompatibility group ( $p=0,03$ ). Serum total bilirubin levels at 2nd ( $p=0,02$ ) and 3rd days ( $p=0,001$ ) were found to be higher in ABO incompatibility group. IVIG was used more often in Rh incompatibility group ( $p=0,009$ ). Two patients with Rh group incompatibility had undergone exchange transfusion. None of the patients were diagnosed of hearing loss.

**Sonuç :** ABO incompatibility is an important cause of indirect hyperbilirubinemia. Close follow-up of patient with ABO incompatibility in antenatal and postnatal period could decrease morbidity due to ABO incompatibility.

**Anahtar Kelimeler:** Newborn, ABO and Rh group incompatibility, indirect hyperbilirubinemia





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-17

### Frequency of hypoglycemia in Small for Gestational Age (SGA) infants

Evrin Kiray Baş<sup>1</sup>, Ali Bülbül<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ebru Türkoğlu Ünal<sup>1</sup>, Bülent Güzel<sup>1</sup>, Ahmet Tellioğlu<sup>1</sup>, Şehrinaz Sözeri<sup>1</sup>,

<sup>1</sup>Sisli Etfal Training And Educational Hospital

**Giriş :**Currently, newborns with small for gestational age (SGA) are still important in perinatal morbidity and mortality. Hypoglycemia plays an important role in these morbidities. The aim of this study was to determine the incidence of hypoglycemia in patients with SGA (small for gestational age) in the last 4 years.

**Yöntem :** During the period 1 January 2016 to 31 January 2019, the plasma glucose concentrations of all small for gestational age (SGA) infants at risk were determined. They were screened over a period of 24 hours or until plasma glucose concentration was  $>45\text{ mg/dL}$  on three occasions. Hypoglycemia was defined as a plasma glucose concentration  $<40\text{ mg/dL}$ , regardless of the age of the infant.

**Bulgu :** Hypoglycemia was detected in 38 patients (17.6%). Two patients presented with convulsions. Eight (3.7%) out of these 38 newborns had to be transferred to the neonatal unit for i.v. glucose treatment.

**Sonuç :** For hypoglycemia, which is an important morbidity in low birth weight infants, blood sugar values should be monitored and symptoms should be carefully monitored.

**Anahtar Kelimeler:** hypoglycemia, Small for Gestational Age (SGA) infants



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-18

### COMPARISON OF NUTRITIONAL CHARACTERISTICS OF INFANTS WITH OR WITHOUT ROP

İlkay Özmeral Odabaşı<sup>1</sup>, Hasan Sinan Uslu<sup>1</sup>, Semra Tiryaki Demir<sup>2</sup>, Evrim Baş<sup>1</sup>, Ebru Ünal<sup>1</sup>, Bülent Güzel<sup>1</sup>, Ahmet Tellioğlu<sup>1</sup>, Ali Bülbül<sup>1</sup>,

<sup>1</sup>University Of Health Sciences, Sisli Hamidiye Etfal Education And Research Hospital, Department Of Neonatology, İstanbul

<sup>2</sup>University Of Health Sciences, Sisli Hamidiye Etfal Education And Research Hospital, Department Of Ophthalmology, İstanbul

**Giriş :** Retinopathy of prematurity (ROP) is one of the most common causes of blindness in childhood. In addition to screening ROP for babies born less than the 32nd gestational week, ROP is also important for preterm infants born at larger gestational weeks. There are many studies about retinopathy in the literature, but our knowledge about relationship between nutrition and retinopathy is limited. In this study, we aim to detect the nutritional characteristics of infants with and without ROP born at 32-35 weeks of gestation.

**Yöntem :** The premature infants who were born at 32-35 weeks of gestation and followed up in Istanbul Sisli Hamidiye Etfal Education and Research Hospital, Newborn Intensive Care Unit between 2015-2017 were evaluated retrospectively. Infants with and without ROP were compared of demographic characteristics and total parenteral nutrition (TPN) status, duration of TPN, day of transition to full enteral feeding, and type of enteral feeding. Enteral nutrition was evaluated four groups as; breastfeeding, breastfeeding and formula feeding, only formula feeding, breastfeeding and breastfeeding fortifier. Infants diagnosed with ROP were classified as ROP (+) group and those without retinopathy were classified as ROP (-) group. Statistical analyzes were performed with SPSS20.0 analysis program. We have no financial disclosures.

**Bulgu :** Fifty-nine infants were included in the study. Thirty five (50.7 %) of the cases were female. Thirteen (22%) of the infants diagnosed as ROP. No statistically significant difference was found between infants ROP (+) group and ROP (-) group in terms of gender, gestational week, birth weight, birth height and head circumference, maternal age, length of hospital stay and birth weight according to gestational week ( $p > 0.05$ ). While the rate of initiation of TPN was 61.5% in ROP (+) group, this rate was 53.6% in ROP (-) group and mean duration of TPN was  $14.8 \pm 12.9$  days and  $9.5 \pm 6.1$  days, respectively ( $p > 0.05$ ). Transition time to full enteral feeding was postnatal  $14.9 \pm 13.7$  days in the ROP (+) group and  $8.8 \pm 6.9$  days in ROP (-) group ( $p = 0.29$ ). Only breastfeeding rate was 30.8% in ROP (+) group and 42.9% in ROP (-) group ( $p > 0.05$ ).

**Sonuç :** In the ROP (+) group, the rate of infants receiving TPN was higher, the duration of TPN continuation was longer, the date of transition to full enteral feeding was late and the rate of feeding with only breast milk was lower. Although there are no statistical significance between two groups, on the other hand it suggests that switching to full enteral nutrition as soon as possible and supporting only breastfeeding may be important in preventing ROP.

**Anahtar Kelimeler:** nutrition, prematurity, ROP



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-19

### The impact of passive smoking on the development of lower respiratory tract infection in infancy

Vedat Baş<sup>1</sup>, Ahmet Arvas<sup>2</sup>, Emel Gür<sup>2</sup>,

<sup>1</sup>Istanbul Arel University

<sup>2</sup>Istanbul-cerrahpaşa University

**Giriş :** The goal of this study was to evaluate the impact of passive smoking on the development of lower respiratory tract infection (LRTI) in children aged 0-24 months.

**Yöntem :** 95 infants with LRTI and 95 healthy control infants were included in the case-control study conducted by random sample method. Urinary cotinine/creatinine ratios (u-CCR) were determined in all children. Smoking habits of their parents were evaluated.

**Bulgu :** The frequency of LRTI was increased in children with exposure to passive smoking. The incidence of LRTI was also increased as the number of cigarettes smoked increased. The infants whose mothers were active smokers had more LRTI compared to those whose mothers were non-smokers (OR= 2.5, p= 0.026). The prevalence of passive smoking was quite high in both group sof children according to u-CCR (95.8%, 92.7% respectively). The prevalence of passive smoking detected with quantitative measurements among children was higher than parental self reports.

**Sonuç :** Passive smoking prevalence was very high in infants with LRTI and in healthy infants. However, passive smoking exposure and smoking density among infants with LRTI were higher than healthy infants.

**Anahtar Kelimeler:** urine cotinine, infancy



# I<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-20

### Polycythemia in Small for -Gestational-Age (SGA) infants

Evrin Kiray Baş<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ali Bülbul<sup>1</sup>, Ebru Türkoğlu Ünal<sup>1</sup>, İlkey Odabaşı Özmeral<sup>1</sup>, Esra Ağırşöl<sup>1</sup>, Hasan Avşar<sup>1</sup>, Vesile Kantaş<sup>1</sup>,

<sup>1</sup>Sisli Etfal Educational And Training Hospital

**Giriş :** Small for -Gestational-Age (SGA) is an important determinant of neonatal mortality, morbidity and poor neurologic outcome. Polycythemia has an important place among these morbidities. The study was aimed to evaluate the rate of Polycythemia in small for gestational age (SGA) babies.

**Yöntem :** Two hundred and seventy-one SGA babies born over a period of four year were retrospectively analysed during their hospital stay.

**Bulgu :** Polycythemia was detected in 73 patients (26.9%). The mean gestational age of the cases was  $37.5 \pm 2.0$  (35-39) and the mean birth weight was  $2814 \pm 123$  g (2150-2610 g). Nineteen (26%) of the polycythemia cases were treated with partial blood exchange. Mean hospitalization time was 2.3 days (1-4 days)

**Sonuç :** Hematocrit values should be examined for polycythemia which is an important morbidity in Small for -Gestational-Age (SGA) infants and care should be taken in terms of symptoms.

**Anahtar Kelimeler:** Polycythemia, Small for -Gestational-Age



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-21

### EFFECT OF DEMOGRAPHIC CHARACTERISTICS AND MATERNAL FACTORS ON PLATELET TRANSFUSION IN NEWBORN

Bulent Guzel<sup>1</sup>, Sinan Uslu<sup>1</sup>, Selda Arslan<sup>3</sup>, Evrim Kiray Bas<sup>1</sup>, İlkay Ozmeral Odabasi<sup>1</sup>, Hasan Avsar<sup>1</sup>, Ebru Turkoglu Unal<sup>1</sup>, Aysegül Uslu<sup>2</sup>, Ali Bülbül<sup>1</sup>,

<sup>1</sup>Sisli Hamidiye Etfal Education And Research Hospital

<sup>2</sup>Kagithane State Hospital

<sup>3</sup>Mustafa Kemal Üniversitesi, Tıp Fakültesi, Yenidoğan, Hatay

**Giriş :**Thrombocytopenia is seen in around 20-35% of newborns, and especially 70% of low birth weight newborns in the neonatal intensive care units. Platelet transfusion is the second commonly used blood product for the sick newborns. In this study, we evaluated the association between maternal factors and demographic characteristics in newborns who had thrombocytopenia and platelet transfusion.

**Yöntem :** The study was performed in two different newborn intensive care units which applied the standard transfusion protocol. Newborns who were hospitalized for thrombocytopenia between January 2015 and January 2017 were enrolled in this study. The demographic data and maternal factors were recorded retrospectively in the standard data file. Medcalc (Turkey) statistical program was used for statistical analysis. The study protocol was approved by the local ethics committee.

**Bulgu :** Thrombocytopenia was determined in 216 of the newborns, and platelet transfusion was performed to the 41 (19%) of them. Birth weight and gestational age were on an average of  $2016.3 \pm 103$  g (520-5500 g) and  $33.4 \pm 5$  weeks (23-42 w), respectively. A total of 116 (53.7%) of the newborns were male. Once the patients were compared in terms of platelet transfusion frequency; patients with late neonatal thrombocytopenia, low gestational week (<28) and low birth weight (<1000 g) had a higher platelet transfusion frequency ( $p < 0.05$ ). No difference was found between the groups regarding gender and maternal factors (preeclampsia, chorioamnionitis, autoimmune disease, maternal thrombocytopenia).

**Sonuç :** Morbidity and mortality rates were increased during late neonatal period in thrombocytopenic patients with low birth weight and low gestational week. Therefore, the necessity of trombosit transfusion application is gaining importance. Thrombocytopenia is a remarkable finding in preterm patients hospitalized in neonatal intensive care unit.

**Anahtar Kelimeler:** Newborn, demographic characteristics, platelet transfusion



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-22

### THE ASSOCIATION BETWEEN THROMBOCYTOPENIA SEVERITY AND PLATELET TRANSFUSION FREQUENCY WITH THE RESPIRATORY SUPPORT IN NEWBORNS

Bulent Guzel<sup>1</sup>, Sinan Uslu<sup>1</sup>, Selda Arslan<sup>3</sup>, Evrim Kiray Bas<sup>1</sup>, İlkey Ozmeral Odabasi<sup>1</sup>, Hasan Avsar<sup>1</sup>, Ebru Turkoglu Unal<sup>1</sup>, Ayşegül Uslu<sup>2</sup>, Ali Bülbül<sup>1</sup>,

<sup>1</sup>Sisli Hamidiye Etfal Education And Research Hospital

<sup>2</sup>Kagithane State Hospital

<sup>3</sup>Mustafa Kemal Üniversitesi, Tıp Fakültesi, Yenidoğan, Hatay

**Giriş :**Thrombocytopenia symptoms are generally mild or moderate and follow-up with out treatment in the newborns. Severe thrombocytopenia patients may develop life-threatening severe clinical conditions and often require respiratory support in neonates due to concomitant morbidities.The aim of this study is determined to the association between thrombocytopenia and platelet transfusion frequency with respiratory support in newborns.

**Yöntem :** This study was performed between January 2015 and January 2017.The sick newborns with thrombocytopenia, who were hospitalized in two different centers at the neonatal intensive care unit, were included. These patients were grouped as an invasive and non-invasive mechanical ventilation (MV) support groups. These groups were evaluated retrospectively regarding the thrombocytopenia severity and platelet transfusion frequency. The study protocol was approved by the local ethics committee.

**Bulgu :** Thrombocytopenia was observed in 216 newborns. Mean gestational age of patients was  $33.4 \pm 5$  weeks (23-42 w) and mean birth weight was  $2016.3 \pm 103$  g (520-5500 g). A total of 116 (53.7%) of the patients were male. Platelet transfusion was performed to 41 (19%) of the patients. Thrombocytopenia classification; severe thrombocytopenia was  $<20,000 / \text{mm}^3$  (n=36, 16.6 %), moderate thrombocytopenia was 20,000-50,000/mm<sup>3</sup> (n=48, 22.2 %) and mild thrombocytopenia was 50,000-100,000/mm<sup>3</sup> (n=132, 61.1 %). The number of platelet transfusion for patient; ykrk30 2 was 29 (13.4 %) and  $> 2$  was 12 (5.5%). Invasive and non-invasive MV were applied in 73 (33.7 %) and in 72 (33.3 %) of the patients, respectively. Platelet severity and transfusion frequency were significantly higher in patients with invasive MV than patients with non-invasive MV ( $p = 0.001$ ).

**Sonuç :** In this study, we demonstrated that thrombocytopenia severity and platelet transfusion frequency were correlated with invasive MV support. Therefore, it should be considered that the severity of thrombocytopenia and the increase in the frequency of thrombocyte transfusion in the sick newborns will increase the need for mechanical ventilation support.

**Anahtar Kelimeler:** Newborn, Thrombocytopenia, Transfusion, Mechanical ventilation.





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## OP-23

### Clinical evaluation of preseptal cellulitis in childhood; comparison of risk factors and prognostic factors in the development of orbital infection

Lida Bulbul<sup>1</sup>, Canan Hasbal Akkuş<sup>1</sup>, Neslihan Özkul Sağlam<sup>1</sup>, Gizem Kara Elitok<sup>2</sup>, Ceren Can<sup>1</sup>, Zahide Mine Yazıcı<sup>3</sup>, Nevin Hatipoğlu<sup>1</sup>, Sami Hatipoğlu<sup>1</sup>.

<sup>1</sup> University of Health Science, Bakırköy Sadi Konuk Education and Research Hospital, Department of Pediatrics, Istanbul, Turkey

<sup>2</sup> University of Health Science, Şişli Hamidiye Etfal Education and Research Hospital, Department of Pediatrics, Istanbul, Turkey

<sup>3</sup> University of Health Science, Bakırköy Sadi Konuk Education and Research Hospital, Department of Otorhinolaryngology, Istanbul, Turkey

**Introduction:** The aim of this study was to evaluate the demographic characteristics, clinical findings, etiology, diagnosis and treatment methods of preseptal cellulitis and orbital cellulitis in childhood.

**Methods:** The records of all patients who were hospitalized with the diagnosis of preseptal cellulitis and orbital cellulitis between January 2014 and December 2018 were reviewed retrospectively. Demographic and clinical characteristics, laboratory results, radiological findings and treatment methods were evaluated. The findings of preseptal cellulitis and orbital cellulitis groups were compared. The risk factors for the development of prognosis and orbital involvement were analyzed.

**Results:** 123 patients with complete data were included in the study. 74 (60.2%) of the cases were male, 49 (39.8%) were female and the mean age was  $72 \pm 43$  months (lower-upper limit: 4-182 months). Eyelid swelling and redness in all patients, 20.3% (n: 25) had fever complaints. Right eye involvement was 51.2% (n: 63), left eye involvement was 43.9% (n: 54) and bilateral involvement was 4.9% (n: 6). 90.2% of the patients (n: 111) had preseptal and 9.8% (n: 12) had orbital cellulitis. The most common cause of infection was rhinosinusitis (n: 69, 56.1%). Mean leukocyte count of the patients was  $14001 \pm 5253$  /mm<sup>3</sup> (lower-upper limit: 4740-30 100/mm<sup>3</sup>), CRP level  $4.47 \pm 5.43$  mg/dl (lower-upper limit: 0.2-27.3 mg/dl), mean hospitalization duration was  $7.1 \pm 3.3$  days (3-22 days). Computed tomography, magnetic resonance imaging and computed tomography were performed in 63.4% (n:78), 16.3% (n:20) of the patients, and only magnetic resonance imaging was performed in 4.1% (n:5) of the patients. 16.3% (n:20) no further imaging was performed. All patients who underwent imaging had radiological findings of preseptal cellulitis. The most common radiological findings were computed tomography with 46.3% (n:57) rhinosinusitis, 5.6% (n:7) rhinosinusitis with orbital involvement (subperiosteal abscess, orbital soft tissue inflammation). Additional findings in patients with magnetic resonance imaging were rhinosinusitis 6.5% (n:8), orbital complications (subperiosteal abscess, subperiosteal inflammation, periorbital muscle inflammation) 8.8% (n:11), dural contrast involvement 1.6% (n:2). Surgical drainage was performed in three cases (2.4%). The levels of c-reactive protein were significantly higher in patients with orbital involvement than those without (p: 0.033), but there was no difference between the presence of fever, leukocyte and platelet values.

**Conclusion:** In our study, rhinosinusitis was the most common etiologic factor in the development of preseptal cellulitis and orbital cellulitis. Orbital involvement was present in 9.8% of the patients. Preseptal and orbital cellulitis can usually be treated with appropriate antibiotic use, whereas three patients required surgical intervention. Two patients were diagnosed as meningitis. It was determined that high c-reactive protein value could be used to predict orbital involvement.

**Key words:** Preseptal cellulitis, orbital cellulitis, etiology, rhinosinusitis.



# **1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School**

**17-20 October 2019**

Venus Hotel & Congress Center, Pristina, Kosovo

## **Poster Presentation**



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## PP-01

### Catheter Complications Mimicking Necrotizing Enterocolitis

Ahmet Tellioglu<sup>1</sup>, Ali Bülbül<sup>1</sup>, Hasan Sinan Uslu<sup>1</sup>, Ebru Ünal<sup>1</sup>, Evrim Baş<sup>1</sup>, Hasan Avşar<sup>1</sup>, Esra Ağırgöl<sup>1</sup>, Bülent Güzel<sup>1</sup>,

<sup>1</sup>University Of Health Sciences, Hamidiye Etfal Training And Researchhospital, Neonatology

**Giriş :** Umbilical venous catheterization (UVC) is a worldwide accepted invasive procedure in neonatal intensive care units (NICU) that allows administration of total parenteral nutrition (TPN), medication, exchange-transfusion, and blood sampling for newborn infants. In addition to these advantages, complications such as extravasation, sepsis, portal vein thrombosis, hepatic or vascular injury, ascites, cardiac arrhythmia, pericardial perforation can be seen.

#### Yöntem :

**Bulgu :** A 30-week-gestational age, 1560g female preterm was delivered with APGAR score 1st and 5th min, 5 and 9 respectively. Early nasal continuous-positive-airway-pressure (n-CPAP) treatment started after delivery for respiratory distress. Upon admission to the NICU, umbilical venous catheter (3.5Fr) was inserted and the catheter location was radiographically confirmed by anteroposterior (AP) radiography just below the diaphragm at the T10 level. On the 4th day of life, umbilical catheter of the infant who developed abdominal distention and bilious drainage from enteral feeding tubes was withdrawn. Broad-spectrum antibiotherapy was initiated with the diagnosis of necrotizing enterocolitis (NEC). The standing post-abdominal radiography was unremarkable. Tachycardia and tachypnea developed and diuresis decreased. Metabolic acidosis (bicarbonate: 10 mEq / L) occurred and other significant biochemical laboratory parameters are Urea: 129 mg / dl, Creatinine: 1.36 mg / dl, CRP: 0.3 mg / dl. In abdominal ultrasonography, diffuse free fluid in the abdomen was seen. Patient was consulted with pediatric surgery and as a result of diagnostic paracentesis, biochemistry from abdominal fluid was found to be compatible with TPN. Abdominal distention regressed with appropriate fluid treatment and follow-up, and urea and creatinine levels decreased to normal levels. Oral intake was increased and full enteral nutrition was started within 10 days.

**Sonuç :** The most common complication of UVC in the literature is catheter malposition. The correct location for the UVC is the diaphragmatic alignment of the inferior vena cava before entering the right atrium. It should be kept in mind that this condition can be as a result of malposition-extravasation of umbilical venous catheters in rapidly developing abdominal distention and ascites in premature newborns. In addition, AP radiography alone may be insufficient to confirm catheter location and biochemical analysis of the sample taken from the ascites is important in the diagnosis

**Anahtar Kelimeler:** catheter, complication, necrotizing enterocolitis



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## PP-02

### A RARE CAUSE OF RECURRENT PNEUMOTHORAX IN THE PRETERM INFANT: ESOPHAGEAL RUPTURE

İlkay Özmeral Odabaşı<sup>1</sup>, Hasan Sinan Uslu<sup>1</sup>, Ebru Ünal<sup>1</sup>, Evrim Kiray Baş<sup>1</sup>, Hasan Avşar<sup>1</sup>, Esra Ağırgöl<sup>1</sup>, Ali Bülbül<sup>1</sup>,  
<sup>1</sup>University Of Health Sciences, Sisli Hamidiye Etfal Education And Research Hospital, Department Of Neonatology, İstanbul

**Giriş :**Introduction: Preterm infants depend on gastric tubes for enteral feeding, application of medications, and gastric decompression. Perforations of the upper gastrointestinal tract– i.e. gastric or esophageal perforation – by misplacement of gastric tubes are rare but life-threatening events. While the incidence in preterm infants is low with 0.4–0.5%, mortality remains high with 21–30%. In this study, we aimed to present a case of esophageal perforation accompanied by pneumothorax.

**Yöntem :** Case: A premature neonate, born at 23 weeks of gestation, was intubated at delivery room and intratracheal surfactant was administered. Respiratory distress of the case worsened postnatal 4th day, developed sudden desaturation, and pneumothorax was detected. Thoracic tube was inserted . It was decided to withdraw the thoracic tube at the postnatal 10th day. On the 13th postnatal day chest radiography was performed because of PICC placement. It was found on the X-ray that the tip of the orogastric tube was directed to the right lung. Contrast-enhanced direct X-ray taken for esophageal perforation revealed contrast enhancement to pulmonary area. The patient had no gastrointestinal bleeding and coagulation factors were normal. Due to the low birth weight of the baby, it was decided to follow with conservative management. Accordingly, gastric tube was removed, enteral feeding was stopped, TPN and antibiotic treatment was started. In the follow-up two times more pneumothorax was developed and thoracic tube was inserted. No pathology was detected in the contrast-enhanced passage graphy on the postnatal 33th day so enteral feeding was initiated.

**Bulgu :** Result: In the case of recurrent pneumothorax, esophageal perforation, which is one of the rare conditions in the newborn, should also be considered. Esophagus perforation has high mortality. Therefore, the safe use of nasogastric tubes is of high importance. The correct placement of a nasogastric tube is part of daily routine at neonatal intensive care units. The evaluation of the location of any invasive device in the radiographs plays an important role in early diagnosis.

## Sonuç :

**Anahtar Kelimeler:** Pneumothorax, newborn, Esophageal Rupture



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## PP-03

### A Rare Newborn Case: Intramural Abscess

Ahmet Tellioglu<sup>1</sup>, Hasan Sinan Uslu<sup>1</sup>, Ali Bülbul<sup>1</sup>, Evrim Baş<sup>1</sup>, Ebru Ünal<sup>1</sup>, Bülent Güzel<sup>1</sup>, İlkay Odabaşı<sup>1</sup>,

<sup>1</sup>University Of Health Sciences, Hamidiye Etfal Training And Research Hospital, Department Of Neonatology

**Giriş :** Intramural abscess and osteomyelitis are seen in 1-3/1000 hospitalizations in the neonatal period. Due to the lack of specific clinical findings, delayed diagnosis may lead permanent bone and joint deformities, and long-term hospitalization. Generally; spread by hematogenous pathway, but primary focus is often absent. We present a case with atypical intramural abscess and osteomyelitis associated with surgical drainage and appropriate antibiotherapy.

### Yöntem :

**Bulgu :** A 38-week pregnant woman with a birth weight of 3315g presented with normal spontaneous vaginal delivery to our pediatric emergency outpatient clinic at the age of 19 day, complaining of limitation of movement in the left leg and agitated. The patient had hyperemia, swelling, temperature increase and tenderness in the left thigh and knee region. In physical examination. Significant findings in the laboratory investigations were white blood cell count (WBC): 29840/mm<sup>3</sup>, platelet: 849000/mm<sup>3</sup>, and C-reactive protein (CRP): 11.5mg/dl. X-ray imaging revealed no fracture in the left leg. ultrasound imaging revealed subcutaneous tissue edema and inflammation were detected and the patient had diffuse lymph nodes in the inguinal region. Since osteomyelitis could not be ruled out, vancomycin + cefotaxime treatment was initiated. CRP:9.6mg/dl, WBC:31840/mm<sup>3</sup>, sedimentation: 50mm/hour were detected in control. Since the patient's symptoms did not regress, magnetic resonance imaging (MRI) taken as a result of orthopedic consultation, surgical drainage was performed considering intramuscular abscess-osteomyelitis and then antibiotherapy was changed to vancomycin-meropenem. Methicillin-resistant Stafilococcus Aureus was isolated from the culture drainage of the abscess. Patient received meropenem for 14 days, vancomycin for 21 days and then oral cefuroxime for 3 weeks. There was no restriction of movement and no short stature was observed during the follow-up visits.

**Sonuç :** The most common causative agent in neonatal abscess and osteomyelitis is stafilococcus aureus, followed by Esherichia spp. Klebsiella spp., Bacteroides spp. In our case, the role of early diagnosis, appropriate antibiotherapy and multidisciplinary approach in the prevention of sequelae of the osteomyelitis clinic after invasion of the intramural abscess into the adjacent bone was emphasized.

**Anahtar Kelimeler:** abscess, newborn, osteomyelitis, Methicillin-resistant Stafilococcus Aureus



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

PP-04

## DESQUAMATION AS FIRST SYMPTOM OF CONGENITAL SYPHILIS

Bulent Guzel<sup>1</sup>, Sinan Uslu<sup>1</sup>, Evrim Kiray Bas<sup>1</sup>, Ahmet Tellioglu<sup>1</sup>, Esra Mimaroglu<sup>1</sup>, Ebru Turkoglu Unal<sup>1</sup>, Ali Bulbul<sup>1</sup>,

<sup>1</sup>Sisli Hamidiye Etfal Education And Research Hospital

**Giriş :** Congenital syphilis is a serious public health problem which is still important nowadays and it is seen as a result of transplacental transfer of spirochetes. The most common early signs are hepatosplenomegaly, jaundice, elevated liver enzymes and skin lesions. In this study, a case of congenital syphilis diagnosed with isolated skin lesion is presented.

### Yöntem :

**Bulgu :** Case: The patient who was born by cesarean section at the 35th gestational week was admitted to the neonatal intensive care unit due to respiratory distress. The birth weight was 2550g (50p), length was 45cm (10-50p) and head circumference was 35cm (50-90p). In physical examination revealed desquamation of the right foot on the plantar side and third finger on the left hand. Other systemic examinations were normal. In the follow-up, chest radiography was compatible with TTN and respiratory distress regressed on postnatal 2nd day. Laboratory investigations showed no pathological data except platelet count 38000/mm<sup>3</sup>. The patient was screened for intrauterine infection and VDRL-RPR (Venereal Disease Research Laboratory-Rapid Plasma Reagin) and TPHA (T.pallidum hemagglutination) tests were positive. The patient was diagnosed as congenital syphilis and penicillin G treatment was started and the treatment was completed to 10 days. After thrombocytopenia improved, lumbar puncture was performed to evaluate central nervous system involvement. TPHA was negative in cerebrospinal fluid. The patient was discharged after antibiotic treatment was completed.

**Sonuç :** Skin findings are detected in approximately 1/3 of congenital syphilis cases. The majority of these skin findings may be confused with nonspecific neonatal rashes and the diagnosis may be delayed. In our case, early diagnosis of congenital syphilis was made by desquamation which is a nonspecific skin finding.

**Anahtar Kelimeler:** Newborn, syphilis, desquamation





# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

PP-05

## PANTOEAE SEPTICA: A RARE CAUSE OF NEONATAL SEPSIS

Esra Ağırööl<sup>1</sup>, Sinan Uslu<sup>1</sup>, Ahmet Telliööl<sup>1</sup>, Evrim Baş<sup>1</sup>, Ebru Ünäl<sup>1</sup>, Hasan Avşar<sup>1</sup>, Esra Mimarööl<sup>1</sup>, Ali Bülbül<sup>1</sup>,

<sup>1</sup>Sağlık Bilimleri Üniversitesi Şişli Hamidiye Etfal Eğitim Araştırma Hastanesi

**Giriş :** Neonatal sepsis is an important cause of morbidity and mortality among neonates which is seen more commonly in premature infants. Both gram negative and positive bacterias are responsible for neonatal infections. Pantoea septica is a member of the family Enterobacteriaceae. It is a gram negative aerobic basillus that can be isolated from plants and soil. The genus pantoea is a highly rare cause of sepsis in neonates.

### Yöntem :

**Bulgu :** A twin female newborn was delivered by cesarean section at 33 weeks of gestation with 2050 g birth weight. Her apgar scores were 7 and 9 at 1st and 5th minute respectively. Shortly after delivery, the infant was put on early n-cpap due to respiratory distress and was transferred to neonatal intensive care unit. On admission, laboratory findings and chest X ray were normal. On the 3rd day of life, the infant's body temperature was 37.6 °C and physical examination revealed poor activity, jaundice and abdominal distention. Enteral feeding was stopped and total parenteral nutrition was initiated. On laboratory investigation, her C-reactive protein (CRP) level was elevated as 8 mg/dl (normal range , 0-1 mg/dl) along with thrombocytopenia with platelet count of 4000/mm<sup>3</sup>. Blood and urine culture samples were sent at the same time. Lomber puncture couldn't be performed because of thrombocytopenia. Wide spectrum antibiotherapy was started with a combination of vankomycin and meropenem along with Intravenous immunoglobulin and packed platelet transfusion . After one day, the pathogen by positive blood culture was identified as "Pantoea Septica". Vancomycin was continued for 7 days whereas meropenem was administered for 21 days. During the treatment platelet counts gradually increased and CRP level declined until it reached to the normal range. Enteral feeding was restarted on day 7 of admission and gradually raised to full feeds

**Sonuç :** Pantoea spp. is an infrequent cause in the etiology of early onset neonatal sepsis. According to the literature pantoea septica sepsis among neonates has not been reported so far. Early diagnose and appropriate antibiotherapy is the main subject about survival of sepsis in neonates.

**Anahtar Kelimeler:** neonate, pantoea, sepsis



# 1<sup>st</sup> Eurasian Pediatrics Congress & VII<sup>th</sup> Kosovo Pediatric School

17-20 October 2019

Venus Hotel & Congress Center, Pristina, Kosovo

## ORGANIZATION SECRETARIAT



**FIGÜR**  
CONGRESS & ORGANIZATION

### FIGÜR CONGRESS & ORGANIZATION

19 Mayıs Mah. 19 Mayıs Cad. Nova Baran Center

No: 4, 34360 Şişli / İstanbul

Phone: 0 212 381 46 00 - Fax: 0 212 258 60 78

E-mail: [cocukdostlari@figur.net](mailto:cocukdostlari@figur.net)

[www.epc2019.org](http://www.epc2019.org)