

**Results** 204 combinations were analysed. Mean (SD) duration of SI, maximum inspiratory pressure (maximum IP) and average inspiratory pressure (average IP) are shown in the table.

Abstract 1714 Table 1

Device	duration of SI seconds	maximum IP cmH2O	average IP cmH2O
SIB 1	6.2 (1.6)	30.0 (5.8)	17.2 (3.3)
SIB 2	13.9 (7.9)	24.7 (4.7)	17.5 (3.5)
SIB 3	4.6 (1.2)	23.6 (7.7)	12.5 (4.7)
SIB 4	33.3 (2.3)	26.4 (4.6)	20.9 (2.5)
T-piece	32.6 (0.9)	20.0 (0)	19.6 (0.5)

PEEP valve removal and absence of flow made no significant difference to the SI time ( $P=0.34$  and  $P=0.13$  respectively), maximum IP ( $P=0.17$  and  $P=0.12$  respectively) or average IP ( $P=0.32$  and  $P=0.60$  respectively).

**Conclusions** SIB perform differently depending on the brand and some are able to deliver sustained SI even in the absence of gas flow. If medically indicated, this may be useful in a resource-limited setting with no gas supply.

### 1715 TUBERCULOSIS IN CHILDREN - STILL DIAGNOSIS CHALLENGE

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M Dilberovska, N Uzunovska, D Dacevski. *Institute for Respiratory Diseases in Children-Kozle, Skopje, FYR Macedonia*

**Aim** Retrospective analyze of evaluation for tuberculosis (TB) diagnosis in children.

**Materials and Method** At the TB Department, for a period of 2007–2011 yr., data of treated patients were evaluated. Analyze was made on the base of diagnostic parameters: anamnesis data (positive TB control, beginning and symptoms of the disease); BCG vaccine and Mantoux test; and results of following investigations: hematology, microbiology, radiology, fiberbronchoscopy, toracocentesis, lumbal punction etc.

**Results** In the noted period, 267 children with TB were treated at the Department. Primary TB was presented in 229 (85, 8%) of them. Age group of 5–9 yr. was the most frequent in 147 (55.1%) children. Positive familiar TB contact was evident in 153 (57.3%) and positive Mantoux skin test in 179 (67.0%). Pleural effusion in 21 (7.9%) and cavernous changes (4.4%) were shown on the lung radiograms. In 57 (21.3%) children, lung TB was associated with non-specific disease (pneumonia in 23 (40.4%). From microbiological investigation: *M.tuberculosis* (culturally) was positive in 17 (6.6%); in relation with other bacteria, the most frequent was *Haemophilus influenza* in 19 (9.6%) children. Fiberbronchoscopy showed changes for TB endobronchitis in 29 (10.9%) children. Other diagnostic procedures were performed in connection with the form of TB.

**Conclusion** TB diagnostic in children is very difficult to be made. It requires long time period and numbered diagnostic investigations, especially in small children, because of the association with non-specific lung diseases that is very often.

### 1716 EFFECTS ON GROWTH OF INHALED CORTICOSTEROIDS IN ASTHMATIC CHILDREN

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<sup>1</sup>MBI Octavia, <sup>1</sup>BM Neamtu, <sup>1</sup>NM Leonida, <sup>2</sup>M Rodica, <sup>3</sup>C Rodica, <sup>4</sup>Z Alina, <sup>5</sup>M Ionela, <sup>6</sup>M Melania, <sup>7</sup>N Cristian, <sup>8</sup>B Radu, <sup>4</sup>O Ariela. <sup>1</sup>*Pediatric Hospital, Lucian Blaga University;* <sup>2</sup>*Pneumology, Pediatric Hospital Sibiu;* <sup>3</sup>*Pneumology, Pneumophthisiology Hospital Sibiu;* <sup>4</sup>*Laboratory Medicine, County Hospital;* <sup>5</sup>*Applied Informatics, Faculty of Science, Lucian Blaga University;* <sup>6</sup>*Chemistry;* <sup>7</sup>*Research;* <sup>8</sup>*Pediatric Clinic, Pediatric Hospital Sibiu, Sibiu, Romania*

**Background** Corticosteroids may inhibit growth hormone (GH) axis, reducing GH release, decreasing tissue expression of growth factors, inhibiting IGF-1 bioactivity, osteoblast activity, promoting bone resorption.

**Objectives** Evaluating adverse effects of inhaled corticosteroids used in asthmatic children on the following biological parameters: GH (two measurements), IGF-1 (insulin growth factor-1), FAS (alkaline phosphatase), correlated with the presence or absence of atopy (immunoglobulin E levels).

**Methods** The prospective study included 74 asthmatic children, treated with inhaled corticosteroids aged between 5 and 13 years of age, divided into subgroups. Each type of inhaled glucocorticoid fluticasone, budesonide, mometasone furoate (single or in combination with long-acting bronchodilators) has been analysed for each patient. T-test, Mann-Whitney, Chi-square, binomial tests were used to ascertain the relations between average dose, the duration of treatment and the biological parameters mentioned.

**Results** There were found statistically significant differences ( $p<0.05$ ) in:

1. patients treated with Seretide 25/50 between the number of patients with GH values  $< 1\text{ng/ml}$  and number of patients with GH  $> 1\text{ng/ml}$  (second measurement of GH).
2. patients treated with Symbicort 4.5/80, between the number of patients with GH values  $< 1\text{ng/ml}$  and number of patients with GH  $> 1\text{ng/ml}$  (first measurement of GH).
3. patients treated with Seretide 50/100 for the following parameters: GH (both determinations), IgE and FAS.

**Conclusions** Systemic effects of fluticasone propionate and budesonide formoterol in small and medium doses were noted in the association with long-acting bronchodilators and were more extensive accordingly to the duration of treatment.

### 1717 BRONCHOOBSTRUCTIVE SYNDROME IN TUBERCULOSIS IN CHILDHOOD

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D Dacevski. *Institute for Respiratory Diseases in Children-Kozle, Skopje, FYR Macedonia*

Bronchoobstructive syndrome in pediatric population, because of its symptomatology, is frequently cause/introduction for detection of etiological moment, and also verification of tuberculosis infection.

**Aim** To access how often bronchoobstructive crisis are related with respiratory form of tuberculosis (TB) and what forms are the most frequent.

**Material and Methods** In the period of 12 years (1999–2010) we inspected hospital histories of patients treated because of TB infection.

We noted: anamnesis data for acute respiratory disorder (cough, wheezing, dyspnea...), their long-lasting and expression, clinical finding, laboratory, microbiological and radiological findings, Mantoux test with PPD-5, data about contact with TB ill person, BCG-scar etc.

**Results** In 20, 15% cases with contact known persons these data were neglected and a cause for physician visit was bronchoobstructive episode. Patients from Roman population were the most frequent, and after them Albanians - at the same time social problem was manifested.

**Conclusion** It is necessary to realize educational and inspecting measures between populations. More attention has to be initiated on the relation physician-parents because of the bigger benefit achieved with early diagnosis and treatment/prevention.

### 1718 ENDOBRONCHIAL NOCARDIOSIS IN A 11-YEAR-OLD CHILD

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<sup>1</sup>E Çakır, <sup>2</sup>E Torun, <sup>3</sup>N Büyükpınar, <sup>4</sup>AH Gedik, <sup>5</sup>S Ziyade, <sup>6</sup>HNS Duru, <sup>7</sup>M Bilgin, <sup>8</sup>U Topuz. <sup>1</sup>Department of Pediatric Pulmonology; <sup>2</sup>Department of Pediatrics; <sup>3</sup>Department of Pathology; <sup>4</sup>Department of Chest Surgery, Bezmialem Vakif University; <sup>5</sup>Department of Pediatrics, Haseki Educational and Research Hospital; <sup>6</sup>Department of Radiology; <sup>7</sup>Department of Anesthesiology, Bezmialem Vakif University, Istanbul, Turkey

Pulmonary nocardiosis is a rare respiratory infection which commonly affects immunocompromised patients but also immunocompetent hosts. The clinical manifestation is variable and endobronchial nocardiosis is indeed a very rare condition. We report a case of endobronchial nocardiosis presenting as nonresolving pneumonia and lung abscess in an immunocompetent child. No predisposing factor could be shown for Nocardia infection. To the our knowledge, this is the first case of endobronchial nocardiosis in the childhood period reported in the literature.

#### 1719 PREDICTION OF MORTALITY CIRCUMSTANCES IN THE PEDIATRIC INTENSIVE CARE UNIT

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<sup>1</sup>N Hazhir, <sup>2</sup>R Ghergherehchi. <sup>1</sup>Medical Faculty; <sup>2</sup>Tabriz University of Medical Sciences, Tabriz, Iran

In pediatric ICU (PICU), retrospective studies done during the past decade, indicate that 40–60% of all deaths follow limitation or withdrawal of life sustaining treatment. We aimed to describe mode of death and the circumstances surrounding dying a pediatric intensive care unit. A retrospective descriptive study all patients (<15 years) dying in the PICU of tertiary care hospital (n = 74). Information regarding sex, age, Length of Stay (LOS), primary and admission diagnosis and the way of death was determined. Deaths were classified in 5 groups: Do not resuscitate (DNR), Withdrawal or Limitation of Therapy (W/LT), failed cardiopulmonary resuscitation (Failed CPR), brain death (BD) and terminal organ failure (TOF). Among 1075 admission, 6.8% patients died. Afton admitted during evening (43%). 40.8% died in the first two days. Failed CPR was the most common mode of death (66.2%), BD was found in 14.9%, TOF in 12.2%, W/LT in 2.7% and DNR in 4.1%. We observed that failed CPR is the most common mod of death and active withdrawal is still not widely practiced in our PICU because pediatricians in developing countries have to consider socio cultural and religious factors when making such decisions.

#### 1720 "SNIPPING OF A TONGUE TIE" IN NEONATES WITH ANKYLOGLOSSIA AND BREASTFEEDING PROBLEMS: OUTCOMES AND COMPLICATIONS

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<sup>1</sup>E Post, <sup>2</sup>J Daamen, <sup>3</sup>W Balemans. <sup>1</sup>Pediatrics, Sint Antonius Ziekenhuis, Nieuwegein; <sup>2</sup>Medicine, University Medical Center Groningen, Groningen, The Netherlands

**Background and Aims** Breastfeeding is considered the golden standard in neonatal nutrition. One of the complications encountered in breastfeeding is tongue-tie (ankyloglossia), which may eventually lead to aborting breastfeeding. Frenotomy is considered a harmless and effective procedure for ankyloglossia. However, different researchers question the positive effects and emphasize the possible complications, especially when the procedure is performed without general anaesthesia. Aim of our study is to describe the outcomes of frenotomy in neonates.

**Methods** The data of a series of 166 breastfed neonates (110 male, 56 female) with ankyloglossia and breastfeeding problems under 3 months of age were collected. In these neonates frenotomy was performed between January 2008 en 2012 by an experienced paediatrician in the outpatient clinic without general anaesthesia. Parent(s) attended the procedure and (breast)feeding was given within minutes after frenotomy. One week after frenotomy, data

on complications and effects on breastfeeding were collected by a telephone interview with one of the parents.

**Results** 34 Neonates (20%) were lost to follow-up after frenotomy. Of the remaining 132 neonates, 117 (89%) reported improvement in breastfeeding (better latch, less nipple pain or fully breastfed). 12 (9%) Reported no improvement. Improvement was controversial in 3 neonates (2%) because of additional problems affecting breastfeeding. Minor complications were reported in 5 patients (4%). These consisted of need for a mild analgesic or minimal bleeding up to 1–2 minutes. No major side effects were reported.

**Conclusions** Frenotomy without general anaesthesia is a safe and very effective procedure in neonates with tongue-tie experiencing breastfeeding problems.

#### 1721 ANALGESIC EFFECT OF A VIBRATION DEVICE ON VENIPUNCTURE IN CHILDREN

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<sup>1</sup>S Aydinöz, <sup>1</sup>FA Genc, <sup>1</sup>G Aydemir, <sup>1</sup>F Celikel, <sup>2</sup>RG Sezer, <sup>1</sup>S Suleymanoglu. <sup>1</sup>Pediatrics, GATA Haydarpaşa Teaching Hospital; <sup>2</sup>Pediatrics, Zeynep Kamil Maternity and Children's Diseases Training and Research State Hospital, Istanbul, Turkey

**Background and Aims** Venipuncture is a frequent source of painful procedures for children and it has been well documented that children react to pain with a combination of physiologic and behavioral responses. It has been known that children are unable to describe pain and at particularly high risk for inadequate pain management. FLACC scale is a widely used pain assessment tool for measurement of pain infants and young children. FLACC assess 5 behavioral parameters including facial expression, leg position, activity, crying and consolability. Vibration Anesthesia Device™ (VAD) is a device specifically designed for management of pain. The objective of this study was to investigate the efficacy of VAD on pain scores assessed with FLACC during and after venipuncture procedure.

**Methods** Study participants were 60 healthy children undergoing venipuncture procedure for routine laboratory tests. Children were divided into two groups as follows: Group 1 (n=30) were placed vibration anesthesia device 5 to 10 cm proximally through the site of venipuncture and group 2 (n=30) underwent venipuncture only. A single observer rated pain responses using FLACC before, during and after the procedure.

**Results** Groups did not differ by age and sex. There were no differences between pain scores of groups assessed by FLACC scale before, during and after venipuncture procedure.

**Conclusions** We assessed the efficacy of a vibration anesthesia device and our results suggested that this device did not reduced pain scores in children during and after venipuncture procedure.

#### 1722 METABOLIC SYNDROM: BIRTH WEIGHT AND CHILDHOOD OBESITY

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Z Yazdanpanahi, M Hajifoghaha, A Nematollahi. Nursing, Shiraz University of Medical Sciences, Shiraz, Iran

**Background** Obesity is a worldwide health problem at all ages of life span. A large number of research have shown a positive association between Birth Weight (BW), childhood obesity and Metabolic Syndrome in later life, and thus the prevention is critical.

**Material and Methods** This article presents the results of a systematic review of the association between Birth weight, childhood obesity and Metabolic syndrom.

**Result** Several studies pointed out that BW and childhood obesity have contributed to an increase in the prevalence of MS in obese pediatric populations born large gestational age (LGA) and macrosomia. Persistent fetal obesity during infancy and childhood rise the