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 cmH20	average IP cmH20
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

doi:10.1136/archdischild-2012-302724.1715

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

doi:10.1136/archdischild-2012-302724.1716

¹MBI Octavia, ¹BM Neamtu, ¹NM Leonida, ²M Rodica, ³C Rodica, ⁴Z Alina, ⁵M Ionela, ⁶M Melania, ¬N Cristian, ⁶B Radu, ⁴O Ariela. ¹Pediatric Hospital, Lucian Blaga University; ²Pneumology, Pediatric Hospital Sibiu; ³Pneumology, Pneumopthisiology Hospital Sibiu; ⁴Laboratory Medicine, County Hospital; ⁵Applied Informatics, Faculty of Science, Lucian Blaga University; ⁶Chemistry; ¬Research; ⁶Pediatric 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:

- patients treated with Seretide 25/50 between the number of patients with GH values < 1ng/ml and number of patients with GH > 1ng/ml (second measurement of GH).
- 2. patients treated with Symbicort 4.5/80, between the number of patients with GH values < 1ng/ml and number of patients with GH > 1ng/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

doi:10.1136/archdischild-2012-302724.1717

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.

1/18

ENDOBRONCHIAL NOCARDIOSIS IN A 11-YEAR-OLD CHILD

doi:10.1136/archdischild-2012-302724.1718