

finding may be useful to clinicians to help avoid unnecessary use of salbutamol and to explain lactate findings when use of salbutamol is appropriately indicated.

## REFERENCE

1. Sharif Z, Al-Alawi M. Beware of beta! A case of salbutamol induced lactic acidosis in severe asthma. *Case reports* 2018;2018:bcr-2017-224090

### P539 EVALUATION OF PSYCHOGENIC RESPIRATORY BEHAVIOUR IN CHILDREN

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10.1136/archdischild-2019-epa.873

**Introduction** Psychogenic respiratory behaviours (PRB) such as psychogenic cough (tic cough), barking, sighing, feeling of shortness of breath, and throat clearing tic are common in adolescent children. These behaviours are difficult to diagnose and are usually diagnosed by psychiatric examination while excluding other diseases. Generally, symptoms disappear asleep. Prior to the diagnosis, these patients used many medications and they had many school absences. Therefore, early diagnosis is important. The aim of this study was to compare the socio-demographic and clinical characteristics of the patients with psychogenic respiratory behaviour to the control group and to evaluate their diagnosis according to DSM-5.

**Method** The study includes 52 children with PRB and control group, which includes 42 children, without any chronic disease. Patients who were followed-up in our pediatric pulmonology outpatient clinic between January 2017 and November 2018 were included in the study. Age, parental age, the presence of psychiatric disease in the family, family income and parental separation were questioned.

**Results** The mean age of the patients with PRB was  $11.25 \pm 2.61$  and it was  $11.17 \pm 2.58$  in the control group. The rate of female patients was 48% (25/27) in the PRB group and 61.9% (26/16) in the control group. There were cough in 35 patients, shortness of breath in 11 patients, throat clearing in 11 patients and deep sighing in 6 patients (shortness of breath and deep sighing were together in most patients). Symptoms were more than 6 months in most patients. In 72% of the patients, there was a disappearance of symptoms in sleep. In addition, the disappearance of symptoms was observed at the rate of 25% in the school, 29.2% in social activity, 66.7% in the exercise. Considering the previous examinations; PA-AC radiography 84.6%, allergy skin tests 76.9%, blood test 82.7%, spirometry 73.1% and CT 23.1% were performed in patients. At least one psychiatric disease was detected at 55.8% of PRB group and this rate was 28.6% in the control group. In the PRB group, attention deficit hyperactivity disorder, tic disorder and specific phobia were other common psychiatric.

**Discussion and conclusion** Psychogenic respiratory problems are usually diagnosed by exclusion of other diseases. This diagnosis should be considered in the adolescent age group which has no pathology in physical examination but especially

high stress factor. In suspected patients, early psychiatric evaluation is important for early diagnosis of these patients.

### P540 OUTCOMES OF GIVING THE HERBAL BASED MEDICINE TONSILGON H TO PRE-SCHOOL CHILDREN WITH ADENO-TONSIL PATHOLOGY

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10.1136/archdischild-2019-epa.874

**Aim** To study the efficiency and safety of the herbal preparation Tonsilgon H in clinical experience in pre-school children with adeno-tonsil pathology.

**Materials and methods** Within the period between 2013–2017 1876 children (2–5 years old), with nasopharyngeal and palatal tonsils pathology in case history, suffering recurrent respiratory infections were observed. The average age of the observed was  $3,54 \pm 2,81$  years old. The pre-schoolers of the core group (n=940) were given the herbal preparation Tonsilgon H in the form of drops dosed according to the age, following the instructions during 30 days. The control group were made up from 936 children. The efficiency and safety of the medicine were analyzed before and after the course.

**Outcomes** A year before the course of treatment started 72.3% of children in the core group and 74.8% in the control group were suffering from nasopharyngeal tonsil hypertrophy 2 stage accompanied by adenoiditis ( $p = 0.2296$ ). In a year's time after rehabilitation treatment only 31.6% of patients in the core group didn't show clinical performance improvement ( $p = 0.000$ ). By the end of the research 64.6% of patients given the herbal preparation, proved reactivated nasal breathing ( $p = 0.001$ ); 58.3% of patients shew adenoiditis symptoms almost compensated ( $p = 0.000$ ); 86.5% proved the nasopharyngeal tonsil reduced from 2 to 1 stage ( $p = 0.000$ ); 78.9% shew rhinoscopic picture normalized ( $p = 0.000$ ); endoscopic check proved palatal tonsils size reduction in 65.8% пациентов ( $p = 0.000$ ); 29.2% didn't even mention throat discomfort and irritation ( $p = 0.000$ ); only 2.8% of children complained about swallow difficulties ( $p = 0.000$ ). The severity of nasopharyngeal and palatal tonsils hypertrophy in children not given the herbal preparation didn't change and even increased up to 83.6%. What's more, the research proved the decrease in frequency of recurrent respiratory infections from 5–9 times a year to 2–3 times a year in 77.9% of children in the core group, as well as shortening the period of acute respiratory infections symptoms by 3 days, compared to previous cases ( $p = 0.000$ ).

**Conclusion** The research outcomes proved the efficiency and tolerability of the herbal preparation of combined effect Tonsilgon H. Prospective observation of children given the herbal preparation as a rehabilitation remedy proved its effective influence on respiratory tract immunity formation. The obtained data allow us to recommend including the preparation Tonsilgon H into programs for immunity rehabilitation and prevention of adeno-tonsil pathology recrudescence in children from 1 year old.