

**Introduction.** Hypertrophy of adenoid vegetation is a common pathology among children and adolescents, being considered one of the main causes of upper respiratory obstruction of children, which can develop with major complications (Pereira L.-34.46%).

**Aim of the study.** We set out to study the prevalence of this pathology according to gender, age, living environment, risk factors, clinical symptoms, diagnostic methods, complications.

**Materials and methods.** A randomized retrospective study was performed on a group of 60 patients. They have been selected within the IMSP Institute of the Mother and Child Clinic "Emilian Coțaga " for 3 years: 2017, 2018, 2019. The data collected included: age, gender, living environment, risk factors, symptoms, diagnostic methods and complications. Subsequently, the patients were divided into 4 age categories: 0-5 years, 6-10 years, 11-15 years, 16-18 years. Then, the group of patients from the rural area - 34, was divided by areas: North, Center, South and the left side of Dniester.

**Results.** The following results were obtained: male gender - 40 patients (66.66%); female gender - 20 subjects (33, 33%); rural area - 34 patients (56.66%); urban area - 26 subjects (43.33%). The rate of affected age category was: 0-5 years - 35 children (58.33%); 6-10 years - 18 patients (30%); 11-15 years - 7 teenagers (11.66%). Regarding the distribution on the territorial areas of the republic, the following was determined: North - 10% (29.41%), South - 9% (26.47%), Center - 12% (35.29%), the left side of Dniester - 3% (8.82%). From the risk factors, were highlighted: food atopic dermatitis, acute viral respiratory infections, angina, chronic hypertrophic rhinitis. Patients' symptoms: 100% - nasal respiration, 75% - cough, 60% - post-nasal drip, 30% - hearing impairment. The used diagnostic methods were: conventional radiography, acoustic rhinometry, rhinomanometry, optical endoscopy, fibrorinoscopy. Also, were established the complications: chronic suppurated mesotimpanita, bilateral seromucous otitis media, maxillary rhinosinusitis, verbal and intellectual developmental delay, sleep apnea.

**Conclusions.** We determined the prevalence of the pathology among: the male gender, the children from the rural area, age category- 0-5 years old, which corresponds to the period when the adenoid vegetation reaches its maximum size. Also, regarding the distribution by territorial areas, the most affected area was the Center. By the way, we have observed the interdependence between the risk factors and the appearance of the disease, such as: allergies - seasonal or throughout the year, respiratory infections supported. It is important to mention that the complications of the given pathology refer to the impairment of the nasal functions, the middle ear, sleep apnea, but also the verbal and intellectual disability.

**Key words:** Adenoid vegetation, children, epidemiology.

## **216. ASPECTS OF ETIOPATHOGENY AND CELL THERAPY IN THE TREATMENT OF RECURRENT AND CHRONIC RHINOSINUSITIS IN CHILDREN**

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**Introduction.** Chronic rhinosinusitis is an important problem of otolaryngology, its treatment being so far below the expected level. The incidence of rhinosinusitis in the last decades has

increased almost 3 times, while there is a clear tendency to increase the frequency of recurrent and chronic forms of sinusitis. The study of the etiology, pathogenesis and development of effective sinusitis treatment principles is also due to the appearance, in some cases, of severe pansinusitis with orbital or intracranial complications with the development of septic states. At the same time, chronic inflammatory pathology of the nasal cavity and paranasal sinuses often leads to body allergies, the development of bronchopulmonary pathologies and the dysfunction of several organ systems. Thus, a new research is needed regarding the study of the pathogenesis of chronic sinusitis and the pathogenetic basis of the new complex treatment principles of inflammatory rhinosinusal pathologies using cell therapy with the application of autologous mononuclear cells, cell strain, drug-carrying nanoparticles and antioxidants.

**Aim of the study.** Studying specialized literature in order to carry out a research of the etiopathogenesis oriented to the optimization of the treatment of recurrent and chronic rhinosinusitis in children, through cell therapy.

**Materials and methods.** This article analyzes the data from the literature on the etiopathogeny and the importance of cell therapy in the treatment of rhinosinus inflammatory pathology. The bibliographic databases Cochrane, PubMed, Medline were accessed.

**Results.** A study of sixty-seven patients with chronic low-level CD8 + T lymphocyte rhinosinusitis were investigated and analyzed according to demographic data, disease progression and bacteriological culture, which were compared with a group of 480 patients with CRS with nasal polyposis. The medium CD8 + level in the CRS / CD8 population was  $0.15 \times 10^9 / L$  (range,  $0.20-1.5 \times 10^9 / L$ ). There was no difference between the two groups regarding the history of allergy, asthma, eczema, acetylsalicylic acid (ASA) intolerance or smoking. The bacteriology was similar between the two groups (*S. aureus*: CRS / Low CD8 +: 35%; CRS 32%,  $p = 0.643$ ). The disease progression was slightly easier in CRS / Low CD8 +, with fewer patients requiring surgery, and the first surgery was performed at an older age. However, antibiotic use was higher in CRS / Low CD8 +. Analysis of subgroups limited to CRS with nasal polyposis (CRSwNP) / low CD8 or CRS without nasal polyposis (CRSsNP) / low CD8 phenotypes did not substantially change these results. Another multicenter study of systemic administration of bone marrow-derived mesenchymal cell preparation (MSC) (Prochymal; Osiris Therapeutics Inc) in patients with moderately severe chronic obstructive bronchopneumopathy (COPD) in the United States has demonstrated to be safety without acute infusion toxicity and no attributable mortality or serious adverse reactions over a follow-up period of two years. Several laboratory studies show that Stem cells derived from adipose tissue (AUC) have the ability to regenerate mucosal lesions of the vocal cords. Professor Danilov L. (2016) proposed a new method of local immunocorrection (with autologous mononuclear cells) in the conservative complex treatment of compensated chronic tonsillitis in children which has been shown to be very effective, through the positive clinical effect, the normalization of the preimmune resistance status of the body, obvious decrease of the increased rates of allergic reactions, decrease of the levels of specific cellular sensitization to streptococcal, pneumococcal antigens, increase of the total lymphocyte content, increase of the levels and functional activity of the T and B lymphocytes, efficiency of the cytokine profile, decrease of the cytokine levels (IL-8, IL-1 $\beta$ ) and increased serum concentrations of anti-inflammatory cytokine (IL-4).

**Conclusions.** The studies presented in this review argue the need for further research into the etiopathogenesis of rhinosinusitis and cell therapy methods for the treatment of chronic inflammatory diseases of the nose and paranasal sinuses.

**Key words:** recurrent and chronic rhinosinusitis, cell therapy, immunological marker.

## CARDIOLOGY SECTION

### 217. DILATED CARDIOMYOPATHY: SUSPICION OF FAMILIAL FORM

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**Background.** Dilated cardiomyopathy (DCM) represents an important medical problem both in the adult and pediatric population, with high rates of morbidity, mortality and hospital admissions. Genetic forms of DCM account 30–48% in adult patients; their main pattern of inheritance is autosomal dominant (56%). Early diagnosis of a genetic disorder in a family identify carriers or first-degree relatives of affected family members potentially at risk of disease and receive lifestyle modification advice, avoidance of alcohol excess, regular moderate exercise are necessary to prevent disease progression.

**Case report.** Family doctor referred a 62-year-old nurse with breathlessness on exertion – she is limited to 250 m, palpitations, night sweats. From history is it known that more than 10 years ago during the routine ultrasound heart examination was found slight decrease of EF-(47%). Two years later after respiratory viral infection appeared palpitations, dyspnea, on ECG - frequent ventricular premature beats. She received irregularly treatment with Amiodarone, Lisinopril with incomplete positive effect, interrupted by patient after 2 months. The condition worsened periodically with palpitation. Family history was noticed 2 case of sudden death of family members (brother at 18 y.o, sister at 13 y.o). On examination: irregular heart rate 85 b/min, BP-110/70 mm Hg. The signs of congestive heart failure were not detected. Laboratory: increased pro BNP NT (1100 ng/ml). ECG - sinus rhythm with 78 b/min, left shift deviation, frequent ventricular extrasystoles. ECoCG - sever enlargement of left ventricular diameter, moderate- left atrium, LV ejection fraction is sever reduced (13%), mitral regurgitation IV, tricuspid – II degree. Holter-ECG monitoring - frequent ventricular extrasystolies, four episodes of unsustain ventricular tachycardia.

**Conclusions.** This 68-years -old female developed clinical features of cardiomyopathy at middle age. Were not identified the secondary causes of disease but were established 2 unexplained sudden death (< 35 years) at first degree relatives that suggest the genetic origin of disease. Is recommended genetic screening of patient and here relatives to provide more information of possible variants involved in the pathogenesis of DCM in this case. Genetic counseling is necessarily to identify the early symptoms in family members and to supervise people with high risk, especially female during pregnancy. Patient should continue treatment with b-blockers, ACE inhibitors and diuretics.

**Key words:** Dilated cardiomyopathy, genetic form, management.