

examination revealed that the pathogen most often implicated in the appearance of mycetoma is *Aspergillus fumigatus*.

**Keywords:** chronic fungal rhinosinusitis, fungal- ball, mycetoma, sinus.

## 212. CHRONIC HYPERTROPHIC NON-ALLERGIC RHINITIS

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**Introduction:** Chronic hypertrophic non-allergic rhinitis is an important public health problem that affects about 5% of world population. The evolution of chronic hypertrophic rhinitis is slow and gradual, sometimes occurring complications that lead to respiratory, emotional and social failure, and to prevent this, it is necessary to identify risk factors and to apply proper treatment, as early. Purpose: to detect high-risk factors in the development of chronic hypertrophic non-allergic rhinitis, contemporary useful and appropriate treatment.

**Materials and methods:** In the ward „Otorhinolaryngology”, „Em. Cotaga” Clinic, between 2011-2015 were hospitalized 84 children with chronic hypertrophic non-allergic rhinitis, with ages between 0-18 years. Based on patient records from the archive „Em. Cotaga” Clinic was effectuated a retrospective study determining risk factors and methods of treatment for hypertrophic rhinitis. The children were treated surgically: to 48 children (57%) was performed electric cauterization, to 22 children (26%) was carried out conchotomy, to 13 children (16%) was performed vasectomy, and 1 child (1%) was applied to laser therapy.

**Results:** The patients with chronic hypertrophic non-allergic rhinitis are affected by environmental factors as: place of residence (urban: 56 children- 67%), the result is conditioned by the fact that air pollution in cities is due to a higher level of exhaust gases and of chemicals from factories, due to dust's nefarious action, due to reduced green spaces; the cigarette smoke (smoking parents to 59 children- 70%), it's a clear relationship between rhinitis prevalence and presence of cigarette smoke; the temperature and humidity (winter and spring were hospitalized 52 children- 62%), specific for chronic hypertrophic non-allergic rhinitis is seasonal exacerbation during the change of temperature and humidity. An essential role in the rhinitis' pathogenesis have concomitant diseases that favor or complicate its development (45 children- (54%) with chronic hypertrophic non-allergic rhinitis, also suffer from deviation of the nasal septum). The surgery is the first choice in chronic hypertrophic non-allergic rhinitis because drug treatment, often, is administered improperly inducing secondary drug rhinitis, complicating the first one. The intervention of choice in chronic hypertrophic non-allergic rhinitis in children is electrical cauterization, because this method preserves the integrity of mucosa and allows maintaining normal function of the respiratory epithelium.

**Conclusion:** We can conclude that chronic hypertrophic non-allergic rhinitis is a frequent pathology in adolescents. An important role in promoting, producing and developing chronic hypertrophic non-allergic rhinitis have environmental factors. The way of solving the respiratory problem in hypertrophic rhinitis is surgery.

**Keywords:** chronic hypertrophic non-allergic rhinitis, risk factors, treatment.

## 213. THE CEREBROSPINAL FLUID FLOW QUANTIFICATION IN PATIENTS WITH HEADACHE

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**Introduction:** Headache disorders are among the most common disorders of the nervous system. Migraine on its own is the cause of 1,3% of all years of life lost to disability. The aim of this study was to determine whether there are disorders in cerebrospinal fluid dynamics in patients with migraine according to its severity. The objectives were to evaluate the cerebrospinal fluid flow parameters in patients with migraine and affective disorders and also between different subgroups of migraine.

**Materials and methods:** Sixty patients hospitalized in the Institute of Neurology and Neurosurgery were included in this study: 44 patients with migraine and 16 patients with affective disorders (as case control). Subjects were divided in the following groups: by diagnosis (migraine or affective disorders), by the type of migraine (episodic or chronic, with or without drug abuse), by age (19-25 years, 26-44 years and  $\geq 45$  years), by sex, by the disease duration (1-5 years, 6-15 years and  $\geq 16$  years). At this level, peak flow velocity (cm/s), average flow velocity (cm/s), volumes in cranial and caudal directions (ml), net volume (ml) and aqueductal area (mm<sup>2</sup>) were studied.

**Results:** There was a statistically significant difference in forward volume between the diagnosis group of migraine and affective disorders; in peak velocity and forward volume between the chronic and episodic migraine. Statistically significant differences were not detected in flow parameters between migraine with or without drug abuse. Also there was a statistically significant difference in peak velocity, forward volume, reverse volume and net volume between the age group of 19-25 years and the older age groups; in peak velocity and reverse volume between the sexes group; in peak velocity, forward volume and reverse volume between the disease duration group of 1-5 years and other disease duration groups.

**Conclusion:** When using cine - phase contrast MRI in the cerebral aqueduct the flow parameters were higher in subjects with migraine (only the forward volume showed a statistically significant difference), especially chronic migraine (only peak velocity and forward volume showed statistically significant difference between type of migraine groups), in subjects aged 19-25 years than those in older age groups (peak velocity, forward, reverse and net volumes showed statistically significant difference), in male subjects (peak velocity and reverse volume showed statistically significant difference) and in subjects with disease duration of 1-5 years than those in older groups (peak velocity, forward and reverse volumes with statistically significant difference).

**Key words:** cerebrospinal fluid flow, migraine, phase - contrast MRI.