

FACIAL PAIN IN PATIENTS WITH THE PATHOLOGY OF THE NOSE AND PARANASAL SINUSES

Stagnieva I.V., Stagniev D.V.

*Rostov State Medical University, Rostov-on-Don,
e-mail: irinastagnieva@yandex.ru*

Headache is the most common pain symptom which occurs in 25-40% of population. Now it is considered that the nature of painful sensation depends not only on the damage, but also on the social, emotional and economic status of the patient. The International Association for the Study of Pain proposed the following definition: pain is an unpleasant sensation and emotional experience associated with actual or potential tissue damage or described in terms of such damage. That indicates that the pain sensation may also occur in the absence of tissue damage and can be caused by the mental component of pain perception. For the otorhinolaryngologist the most significant pains are facial pains. They are characterized by great diversity, insufficient analysis of etiology and pathogenesis of many forms and related problems of differential diagnosing and treatment [1, 2]. Pain is always subjective. The perception of pain depends on the psychological state, individual experience, sex, age, social factor, and religion of the patient. The perceptive component of pain reflects the discomfort of damage.

One of the most difficult moments of diagnosis is an unbiased analysis of pain symptom. Most developed methods for studying pain in medical practice are based on the subjective estimation of investigated patients, i.e. on sensations of the patient that cannot be objective.

In the Ear, Nose & Throat Clinic of the Rostov-on-Don State Medical University we have evaluated the facial pain symptom in 80 patients with diseases of the nose and paranasal sinuses using the «Multifactorial verbal-color pain test» [3]. This is a complex express method of pain evaluation and measurement. The test estimates intensity of pain syndrome components on 7 factor scales at multiple levels of psychic reflection – nociception, pain sensation, experience of pain, behavior under pain, and adaptability and allows to obtain an integral pain estimate in points/percents (both quantitative and qualitative). The study was performed with the computer version of test – «Peresvet Antibol» program. The test contains 7 scales, for each of which the minimum test result is zero, and the maximum is 6 points. Scales: lie, pain frequency, pain duration, pain intensity, sensory sensation of pain, emotional attitude to pain, neurotization, modalities (adaptability). This allows us to estimate the perception of pain at the level of nociception, sensation, experience, behavior under pain and adaptability.

All 80 patients had a detailed clinical examination including inspection, palpation and percussion of available walls of paranasal sinuses, anterior and posterior rhinoscopy, computed tomography (CT) of paranasal sinuses. In-depth history taking showed that 36 patients (45%) had acute inflammatory process in the paranasal sinuses, 23 patients (29%) had the exacerbation of chronic rhinosinusitis with disease duration from 7 months to 12 years. 22 patients (26%) with various forms of chronic rhinitis associated the cephalgia symptom with nasal breathing difficulty. 24 patients (30%) had nasal mucus discharge, 42 patients (52%) – mucopurulent discharge, 14 patients (18%) had no nasal discharge. 76 patients (95%) noted the difficulty in nasal breathing. All patients had signs of inflammatory process of nasal mucous membrane and/or paranasal sinuses with different degree of manifestation on CT.

The apparent painful symptom is observed in patients with acute purulent processes in the paranasal sinuses due to high (4 or more) points on scales of pain intensity and frequency, and in patients with absence of purulent process due to high points on scales of emotional perception and neurotization. We found the low average value of painful symptom (weak painful symptom) even in patients with the evident serious purulent process in the paranasal sinuses. The effects of overfatigue, stress, physical and mental overstrain on the painful symptom are noted on the scale of modality. Meanwhile the physical environmental factors (weather changes, noise, vibration, body position) were not decisive. Thus, the painful sensation that occurs in a patient did not correlate in any way with the cause and severity of the pathological process. This results from the fact that in the etiology of headaches there are many pathogenetic mechanisms, many of which are still insufficiently studied.

In clinical practice the significance of the painful symptom is rather high and demands more thorough analysis of all aspects of this major symptom.

References

1. Volkov A.G., Frontal Sinuses. – Rostov-on-Don: Phoenix, 2000. – 513 p.
2. Korkmazov M.Y., Kornova N.V., Chinkov N.A. Nature of cephalgia at acute and chronic sinusitis and their impact on quality of life // Russian Otorhinolaryngology Journal. – 2009. – №2 (39). – P. 96-101.
3. Adashinskaya G.A., Meyzerov E.E. Multifactorial verbal-color pain test // Pain Journal. – 2005. – №1 (6). – P. 26-33.

The work is submitted to the international scientific conference «Modern science technology», Spain (Tenerife), November, 18-25, 2011, came to the editorial office on 23.11.2011.