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CANCER DISEASES OF THE MAXILLOFACIAL REGION

Abstract

The social and medical significance of the problem of malignant neoplasms of the maxillofacial region, as well as tumors of other localizations, is dictated by the high morbidity and mortality of patients as a result of late diagnosis and insufficient awareness of doctors about the types, clinic of diseases and treatment tactics. Comparison of the statistical data of various authors on malignant and non-malignant tumors allows us to make a general conclusion that more than 25% of neoplasms occur in the maxillofacial region (together with the skin). Detection of malignant tumors of the maxillofacial area should be an integral part of therapeutic and dental examinations, since early diagnosis of the disease is extremely important. Malignant tumors of about 1 cm or less in diameter are usually well curable. Unfortunately, malignant tumors of the MFR in most cases are not diagnosed until they have spread to the lymph nodes.

Keywords: *maxillofacial, malignant, skin, sinuses, lymph nodes*

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Üz-çənə nahiyyəsinin xərçəng xəstəlikləri

Xülasə

Üz-çənə nahiyyəsinin bədxassəli yenitörəmələri, eləcə də digər lokalizasiyalı şişlər sosial və tibbi əhəmiyyəti gec diaqnoz qoyulması və həkimlərin düzgün seçilməməsi nəticəsində xəstələrin yüksək xəstələnmə və ölüm halları ilə diktə olunur. Xəstəliklər və müalicə taktikası bədxassəli şişlər üzrə müxtəlif müəlliflərin statistik məlumatlarının müqayisəsi ümumi nəticə çıxarmağa imkan verir ki, neoplazmaların 25%-dən çoxu üz-çənə nahiyyəsində (dəri ilə birlikdə) baş verir. Üz-çənə nahiyyəsinin bədxassəli şişlərinin aşkarlanması terapevtik və stomatoloji müayinələrin tərkib hissəsi olmalıdır,

çünki xəstəliyin erkən diaqnozu son dərəcə vacibdir. Diametri təxminən 1 sm və ya daha az olan bədxassəli şişlər adətən yaxşı müalicə olunur. Təəssüf ki, üz-çənə nahiyəsinin bədxassəli şişləri əksər hallarda limfa düyünlərinə yayılana qədər diaqnoz qoyulmur.

Açar sözlər: *üz-çənə, bədxassəli, dəri, sinuslar, limfa düyünləri*

Introduction

Tumors of any histological type can occur in the tissues of the oral cavity, face, and bones of the facial skull. By origin, they can be from connective tissue, epithelium, muscle, nervous and other tissues. In some cases, mixed tumors consisting of several types of tissues are found.

The origin of odontogenic tumors is associated with the development of the dental system. Some of these formations are conditionally referred to as tumors, since they represent the threshold for the development of blood vessels or skin (certain types of angiomas, pigmented birthmarks, etc.). From this point of view, it is necessary to distinguish true tumors from tumor-like diseases (Danilina, Safronov, Zhidovinov, Gumilevsky, 2008).

In the area of the face and jaws, there are primary tumors and secondary ones – metastases from primary foci located in other parts of the body. Metastasis to the face and jaws is observed in the late stages of the development of a malignant tumor, with a generalization of the process. The leading complaint in malignant tumors is a progressive violation of the form or function of an organ with the transition of the pathological process to neighboring organs and tissues, usually accompanied by ulceration at the location of the neoplasm, changes in regional, less often distant, lymph nodes. As the disease progresses, especially with cancer of the organs and tissues of the oral cavity, local spontaneous pain appears and intensifies, which increases the suffering of the patient by being prone to irradiation. In addition, there is a gradual deterioration in the general condition of the patient in the form of loss of appetite, weight loss, weakness (Zhidovinov, 2015). In the anamnesis of such patients, one of the precancerous diseases that precedes the appearance of a neoplasm is usually found: dyskeratosis, a chronic inflammatory process, a long-term non-healing ulcer or fissure, a pigment spot, etc.

The emergence and development of benign tumors usually proceed even more imperceptibly, against the background of a satisfactory state of health. A tumor is most often detected when the shape of an organ changes significantly with its function unchanged or slightly impaired. Pain increases when the tumor reaches a large size, and also if it is located in close proximity to any nerve (Zhidovinov, Mikhalchenko, Sletov, Loktionova, 2011).

When examining a patient, the following are determined: the presence of a tumor, its size, shape, nature of the surface, consistency, mobility, attitude to surrounding organs and tissues. Particular attention should be paid to the state of regional lymph nodes. Examine the general condition of the patient, objectively evaluate the functions of the most important systems and individual organs.

Malignant tumors of the maxillofacial region can be either of epithelial origin (squamous cell carcinoma, adenocystic carcinoma, adenocarcinoma) or of a connective tissue nature – sarcomas (osteosarcomas, chondrosarcomas, fibrosarcomas, etc.).

Among the tumors of the jaws should be distinguished:

- primary,
- secondary,
- metastatic neoplasms.

Primary squamous cell carcinoma of the jaws is very rare and develops from the epithelial islets of Malase, epithelial remnants of the Hertwigian membrane.

Secondary cancers occur on the mucous membrane of the oral cavity or maxillary sinus. Due to the fact that the area of the epithelium that lines different anatomical sections of the upper jaw is much larger in comparison with the epithelial lining of the lower jaw, cancer of the upper jaw is most common. Malignancy of the mucous membrane that covers the alveolar processes and the palate occurs under the influence of various carcinogenic factors, which have already been

described when considering cancer of the oral mucosa. Metaplasia of the cylindrical ciliated epithelium of the maxillary sinus mucosa develops as a result of a prolonged chronic inflammatory process with periodic exacerbations (Iordanishvili, 2007).

Organs and tissues of the maxillofacial region are relatively often affected by cancer and sarcoma (from 2 to 7% of the total number of patients with malignant tumors). So, cancer of the tongue, oral mucosa occurs in 2% of cancer cases, cancer of the jaw – in 3%, cancer of the lip – in 7%. In most cases (90%), skin cancer is localized on the face, which is apparently due to the influence of constant irritants on the human face (ultraviolet rays, changes in air temperature, chemical factors) (Kaprin, Starinsky, Petrova, 2017).

When eating excessively hot or cold, spicy or rough food, inhaling tobacco smoke, prolonged mechanical irritation of the mucous membrane by the sharp edge of a destroyed tooth crown or a poor denture, the integrity of the mucous membrane is partially violated, which contributes to the occurrence of a cancerous lesion. A significant role in the occurrence of a malignant tumor is also played by such bad habits as chewing tobacco, using nasa, etc. (Nerobeev, 2005).

In addition, in the presence of these irritants, benign neoplasms of the oral cavity (papilloma, fibroma, epulis) can become malignant. Therefore, in the absence of general contraindications, benign tumors of the oral cavity should be removed in a timely manner (Osinsky, Vaupel, 2009).

Predisposing factors for the occurrence of a malignant tumor are chronic processes. Thus, it was noted that cancer of the mucous membrane of the maxillary sinus often occurs against the background of chronic sinusitis. Leukoplakia – a chronic disease of the oral mucosa – sometimes degenerates into cancer. Thus, the peculiarity of the maxillofacial region, and in particular the features of the oral cavity, should be taken into account if the oncological nature of the detected pathology is suspected (Chissov, Aleksandrova, Butenko, 2016).

Of great importance in the early recognition of a malignant tumor of the maxillofacial region in patients and, accordingly, the most successful treatment, is the oncological alertness of general practitioners (therapist, surgeon, etc.), to whom patients turn earlier than to the dentist.

Therefore, special attention should be paid to precancerous conditions of the mucous membrane of the oral cavity, lips and tongue in the form of the appearance of dyskeratosis, long-term non-healing cracks, ulcers, leukoplakia. If a precancerous condition is detected, the patient should immediately be referred to an oncologist. Early recognition of a malignant neoplasm and timely initiation of special treatment provide the most favorable outcome for patients (Mikhalchenko, Siryk, Zhidovinov, Orekhov, 2016).

It should be emphasized that the success of the treatment of an oncological patient (especially with malignant tumors) is directly dependent on the early recognition of the disease. In this regard, over the past 10-15 years, the section of dentistry has been further developed, which is engaged in the improvement of organizational forms, methods for preventing early detection and timely treatment of neoplasms of the maxillofacial region (Mikhalchenko, Siryk, Zhidovinov, Orekhov, 2016). The scientifically based principles of oncological alertness, which are being introduced into practice, are of exceptionally great importance, primarily in the conditions of a dental clinic. The main tasks of dentists are the prevention and early detection of malignant tumors of the maxillofacial region. It is equally important for a doctor working in a polyclinic to be able to treat precancerous diseases and the so-called background conditions. Doctors of polyclinic departments are obliged to examine the oral cavity, examine the skin, bones of the facial skull, salivary glands, regional lymph nodes in order to detect a tumor or a precancerous disease, regardless of the disease with which the patient applied.

All patients with precancerous diseases should be monitored dynamically. To clarify the diagnosis, a histological examination of tissues that are removed during operations for chronic inflammatory processes, benign tumors, limited or diffuse dyskeratosis and other diseases that are part of the precancerous group is necessary (Chissova, Daryalova, 2007).

If a malignant tumor is detected or it is suspected, the patient should be referred to the primary oncology room of the medical organization at the place of attachment or to a specialized institution

where the entire scope of outpatient diagnostic studies, including diagnostic biopsy, is performed. A biopsy in a cancer patient can only be performed in a medical institution where the surgical intervention is performed in a qualified manner, in compliance with certain requirements, and the excised tissue is examined accordingly (Soloviev, 2003). Promptly obtained information serves to determine tactics in relation to a patient with a detected malignant tumor. The treatment of these patients should be carried out taking into account the need in each case to combine surgical intervention with radiation or chemotherapy, and later on with orthopedic measures that ensure the immobilization of the "segments" of the jaws and favorable conditions for the replacement of defects resulting from the removal of the tumor. An important role in the treatment of such patients is acquired by the timely use of other reconstructive interventions, the organization of their nutrition and care in the postoperative period, and the provision of sanitation of the oral cavity. The most favorable conditions for providing oncological patients with a variety of specialized care can be created in the conditions of a dental department or a head and neck department deployed on the basis of an oncological hospital or other oncological medical institution.

Among malignant tumors of the face, organs of the oral cavity and jaw bones, the most common are cancers arising from the epithelium of the mucous membrane, which, covering organs of dissimilar configuration, is characterized by a topographic difference in morphological, histophysiological and histochemical nature in their location. The epithelium of the tongue, floor of the mouth, and pharynx is an integumentary tissue of ectoendodermal origin. Up to 75-80% of oral cancer cases occur in the tongue, floor of the mouth, buccal mucosa, mandibular alveolar process, retromolar region, and anterior palatine arch. In 20-25% of cases of oral cancer, malignant tumors of the mucous membrane of the hard palate, the alveolar process of the upper jaw and various parts of the soft palate are observed. This should also include (according to localization) those cases when a cancerous tumor of the upper jaw arises from the mucous membrane of the maxillary cavity that has undergone malignancy, and very rare observations of a secondary lesion of the maxillary bone with advanced skin cancer of the infraorbital region or nasal mucosa. In addition to these localizations, there is also skin cancer of the maxillofacial region. In this case, the skin of the scalp, the skin of the infraorbital region and the wings of the nose, and the lower third of the face can be primarily affected.

Age plays an exceptionally large role both in the occurrence of precancerous conditions and in their transition to cancer. In most cases, precancerous diseases of the oral mucosa occur between the ages of 40 and 70 years. In this age period, precancerous changes in the mucous membrane of the organs and tissues of the oral cavity due to a decrease in its immunologically determined resistance occur in approximately 73% of those seeking medical help from a specialist. Precancerous diseases also affect the skin of the scalp and face.

DIAGNOSIS OF MALIGNANT NEOPLASMS –In order to diagnose malignant tumors of the face, oral cavity and jaw bones, methods are used that can be divided into general, particular and special.

Examination of the oral cavity begins with the vestibule of the mouth with closed jaws and relaxed lips, raising the upper and lowering the lower or pulling the cheek with a dental mirror. First of all, they examine the red border of the lips and the corners of the mouth. Pay attention to the color, the presence of scales, crusts. Then, using a mirror, examine the mucous membrane of the cheeks. Attention should be paid to infiltrates, ulcerations, fistulas, areas of leuko- and dyskeratosis, keratocanthosis, color, moisture, etc. During the inspection determine the localization of the pathological process, its extent.

Inspection of the mucous membrane of the gums is also carried out using a mirror, both from the buccal and from the lingual side. Normally, it is pale pink, densely covers the neck of the tooth. Next, the tongue, mucous membrane of the bottom of the mouth, hard and soft palate are examined. When detecting areas of keratinization, which is determined by a grayish-white area, their density, size, cohesion with the underlying tissues, the level of elevation of the focus above the surrounding tissues are determined. If any changes are detected on the mucous membrane (ulcer, erosion,

hyperkeratosis, etc.), it is necessary to exclude or confirm the possibility of a traumatic factor, which is necessary for making the correct diagnosis.

During palpation examination of organs, face and oral cavity, the color and turgor of tissues of symmetrical organs and tissues on the diseased and unaffected side are compared. Attention is drawn to the identification of possible deformation of the organs and the associated asymmetry of the face. When examining the oral cavity, it is advisable to use special devices for sufficient illumination - a frontal reflector, a binocular magnifier, etc. This is necessary with a thorough examination of the oral mucosa, including the tongue, the floor of the mouth, the oral surface of the cheeks, the mouths of the excretory ducts of the large salivary glands, mucous membrane of the hard and soft palate, vestibule of the oral cavity, alveolar processes of the jaws.

Conclusion

Very valuable diagnostic features are the mobility of the teeth on one or another jaw, not associated with periodontal disease and other diseases of the dental tissues, which are characterized by the predominance of atrophy and inflammation, the presence of fistulas in the edentulous areas of the alveolar processes. When examining a patient with a suspected tumor of the lower jaw, the presence of a pathological fracture should be excluded, in addition to the deformation of its body or branch. If a neoplasm of the maxillary bone is suspected, attention is paid to the presence or absence of facial asymmetry due to its deformation, the presence or absence of deformation of the alveolar process and the hard palate or tissues in the region of the infraorbital margin, a change in the shape and size of the palpebral fissure on the side of the lesion. On the sick and healthy side, the severity of nasal breathing is checked.

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