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FEATURES OF CLINICAL PICTURE OF ODONTOGENIC PERITONSILLAR ABSCESS

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Peritonsillar abscess is a disease characterized by purulent fusion of peritonsillar tissue. Peritonsillar abscess (PTA) is an urgent pathology that is usually encountered by ENT departments on duty, dental surgeons, and maxillofacial surgeons.

The aim of study – to determine the frequency of occurrence of PTA in the maxillofacial department of the Poltava Regional Clinical Hospital. To develop the tactics of a dental surgeon, the features of differential diagnosis and treatment, while observing an interdisciplinary approach to curation of such patients.

We carried out a statistical analysis of the incidence of PTA according to the case histories and data from the annual reports of the Department of Otorhinolaryngology and Maxillofacial for 2021 at Poltava Regional Clinical Hospital in Poltava.

In most clinical cases, the lack of surgical treatment leads to the spread of purulent inflammation to the surrounding soft tissues. This is the reason for the development of abscesses and phlegmon of the maxillofacial localization. Spread of infection into the deep tissues of the neck and then into the posterior mediastinum is possible. There is a mediastinitis and a septic condition, which is critical for the health of such patients.

Complications of PTA are quite common, i.e. more than 10% of cases and mortality is also not less than 10% according to the literature.

An increase in symptoms for PTA is characteristic: the stage of edema, infiltration and abscess formation.

The prognosis for PTA is favorable in most cases. The risk of developing purulent generalized complications increases against the background of primary and acquired immunodeficiency states.

Key words: *peritonsillar abscess, palatine tonsil, urgent pathology, ENT department, maxillofacial department.*

Connection of the publication with planned research works.

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Introduction.

Peritonsillar abscess is a disease characterized by purulent fusion of peritonsillar tissue. This fiber is located between the pseudocapsule of the palatine tonsil and the pharyngeal fascia, which covers the muscular constrictors of the pharynx. Peritonsillar abscess (PTA) is an urgent pathology that is usually encountered by ENT departments on duty, dental surgeons, and maxillofacial surgeons [1-3]. Not all hospitals in Ukraine have specialists who work around the clock, especially at night. Diagnostic errors are possible in differential diagnosis in the absence of sufficient clinical experience and theoretical knowledge. The result is errors in treatment tactics [3-5].

PTA is most often found in the ENT clinic. Diagnosis of the disease presents certain difficulties. First of all, it is necessary to clarify the cause of the development of the disease. Is this process odontogenic or tonsillogenic in nature? Patients with PTA can be referred both to the ENT and to the maxillofacial department from the polyclinic [6].

The aim of study.

To determine the frequency of occurrence of PTA in the maxillofacial department of the Poltava Regional Clinical Hospital. To develop the tactics of a dental surgeon, the features of differential diagnosis and treatment, while observing an interdisciplinary approach to curation of such patients.

Object and research methods.

We carried out a statistical analysis of the incidence of PTA according to the case histories and data from the annual reports of the Department of Otorhinolaryngology and Maxillofacial for 2021 at Poltava Regional Clinical Hospital in Poltava.

Research results and their discussion.

The most common cause of PTA is tonsillogenic spread of microorganisms. It is impossible to exclude the hematogenous pathway of paratonsillar tissue damage in acute infections. The traumatic nature of the onset of the disease is obstruction of the excretory duct of the accessory salivary glands (Weber's glands). We will consider odontogenic paratonsillar abscesses [7].

More often, 4-6 days pass from the onset of the disease to the formation of an abscess, this period may be reduced. The process in the paratonsillar space is rarely reversed under the influence of adequate conservative treatment.

In most clinical cases, the lack of surgical treatment leads to the spread of purulent inflammation to the surrounding soft tissues. This is the reason for the development of abscesses and phlegmon of the maxillofacial localization. Spread of infection into the deep tissues of the neck and then into the posterior mediastinum is possible. There is a mediastinitis and a septic condition, which is critical for the health of such patients.

Complications of PTA are quite common, i.e. more than 10% of cases and mortality is also not less than 10% according to the literature [8].

An increase in symptoms for PTA is characteristic: the stage of edema, infiltration and abscess formation.

The general condition of the patient becomes severe because there is purulent inflammation in the pharynx and systemic intoxication phenomena are observed.

Odontogenic PTA is characterized by: excruciating sore throat, unilateral in nature, which is aggravated by swallowing, inability to swallow, pain radiating to the ear on the corresponding side, dysphagia, inability to eat, since the mouth does not open – trismus, pain in the neck when turning the head, slight swelling of soft tissues in the posterior submandibular region, regional lymphadenitis, depending on the localization, an increase, induration, pain on palpation of the submandibular, posterior mandibular, anterior and posterior cervical lymph nodes is possible [9].

ENT examination: difficulty opening the mouth, infiltration of the paratonsillar region with swelling of the palatine tonsil and arches, the soft palate shifts in the opposite direction.

Dental examination: bad breath, sockets of removed molars of the lower jaw with signs of inflammation – alveolitis, purulent pericoronitis in the area of the wisdom teeth; post-injection hematomas – as a result of dental interventions.

The diagnosis of "peritonsillar abscess" based on data: anamnestic data, physical examination, as well as according to the results of examinations by other specialists; instrumental examination of the pharynx – pharyngoscopy; laboratory research data [10].

All patients with suspected paratonsillar abscess undergo pharyngoscopy in our clinic. Pharyngoscopy is performed by an otorhinolaryngologist. Research is sufficient to identify or exclude PTA.

Differential diagnosis should be carried out with the following pathology:

aneurysm of the internal carotid artery – the presence of pulsation, which is associated with the close position of the carotid artery or its aneurysm;

specific inflammation – tuberculosis of the lymph nodes, with diphtheria, scarlet fever, abscess of the lingual tonsil, phlegmon of the floor of the mouth, neoplasms of the oropharynx;

unilateral swelling of the oropharynx with hyperemia and swelling of the mucous membrane, similar to paratonsillitis – with diphtheria and scarlet fever;

neoplastic diseases – cancer, sarcoma, tonsil lymphoepithelioma.

You need to know to choose a surgical tactic: localization of the inflammatory process, its volume – immediate disclosure of the process with a diameter of more than 2 cm; the presence of wounds of this localization, which were made at the prehospital stage; the number of cellular spaces in the surrounding local tissues that are involved in the infiltrate and the relationship to the internal carotid artery.

It is necessary to differentiate the inflammation of the paratonsillar tissue from the deeper parts of the neck in severe cases. We use CT, MRI, ultrasound of the neck, puncture of soft tissues of paratonsillar localization.

CT shows the spread of the pathological process beyond the peritonsillar space, it is possible to conduct CT with contrast. MRI – soft tissues, fluids, large vessels of the neck, purulent foci are better represented.

Diagnostic puncture is dangerous because large vessels can be injured. The depth of intervention up to exceed 2 cm.

Ultrasound is an accessible research method and the structure of the palatine tonsil and paratonsillar tissue of a healthy person is described.

There were 2451 patients in the ENT department for inpatient treatment. 151 patients had an inflammatory nature of the disease. This is 6.2% of the total number of hospitalized.

There were 91 patients with pharyngeal abscesses. This is 3.7% of the total number of patients in the ENT department. PTA is 4.1% as a percentage of all inflammatory processes in the pharynx. In the maxillofacial department 1230 patients were treated in 2021. They have: odontogenic phlegmon of the floor of the mouth – 80, of the floor of the mouth and neck 35, phlegmon of the neck – 28; with isolated PTA – 2 patients.

These 2 patients with PTA were admitted to our department from the polyclinic by ENT doctors. The situation can be explained by the primary dental pathology and its complications (post-injection hematomas and their suppuration). There was an interdisciplinary examination and treatment of patients by specialists of our departments.

The frequency of occurrence of PTA according to the literature is 30 cases per 100,000 per year, i.e. 2.6% of all inflammatory processes in the pharynx, and 3 patients per 100,000 need surgical treatments.

Patients with this pathology often come for a consultation in the maxillofacial department and after examination and diagnosis – for hospitalization in the ENT.

Patients with PTA and independently apply to the ENT department and the doctor learns about the odontogenic nature of the disease (the tooth was removed).

Dentists refer patients to the department most often with diagnoses: submandibular phlegmon, pterygomandibular phlegmon and phlegmon of the floor of the mouth. The main question for them – is it a polyclinic case or not? No one is worried about the coincidence of diagnoses. To the maxillofacial department immediately if the mouth does not open and the patient does not swallow.

Family doctors refer compensated patients to private clinics and very rarely to dental clinics. Patients and even colleagues do not think about timely sanitation of the oral cavity in wartime.

Principles of treatment. Patients with paratonsillar abscess are shown to open and drain the purulent focus. The operation is performed under local application anesthesia. If possible, the "causal" tooth is removed.

We need to know that there is no pulsation at the site of the dissection. We advance the instrument into the paratonsillar tissue only in a blunt way. We make a wide cut. We regularly dilute the edges of the wound in order to provide adequate drainage.

We prescribe systemic antibiotics. With severe general intoxication, we carry out infusion and detoxification therapy. Local therapy contributes to a rapid decrease in the severity of the pain syndrome, prevents secondary infection of the damaged mucosa. Physiotherapy after the surgical intervention and the positive dynamics of the inflammatory process.

It is advisable for all patients to perform a microbiological study of pathological exudate obtained after surgical opening of an abscess with the isolation of a pure culture of the pathogen and an antibiotic sensitivity test. If necessary, we carry out further correction of antibiotic therapy. Dynamic control is regularly carried out based on the analysis of clinical symptoms, laboratory and additional instrumental methods [11].

Conclusions.

The prognosis for PTA is favorable in most cases. The risk of developing purulent generalized complications increases against the background of primary and acquired immunodeficiency states.

Traumatic removal of the lower molars, violation of anatomical landmarks during local anesthesia, namely, mandibular and torusal aesthesia, may be the most common cause of hematomas and their subsequent suppuration. We observe the development of formidable purulent complications: phlegmon of the soft tissues of the neck, purulent mediastinitis, tonsillogenic sepsis, infectious-toxic shock, if there is no timely treatment of the patient or it is inadequate.

Prospects for further research.

The problem of treatment of paratonsillar abscesses is still very important problem. So, it is necessary to continue the clinical research about PTA.

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ОСОБЛИВОСТІ КЛІНІЧНОГО ПЕРЕБІГУ ОДОНТОГЕННИХ ПАРАТОНЗИЛЯРНИХ АБСЦЕСІВ

Скікевич М. Г., Локес К. П., Волошина Л. І., Соколов А. М.

Резюме. Паратонзилярний абсцес – це захворювання, що характеризується гнійним розплавленням навколомигдаликової клітковини. Це волокно розташоване між псевдокапсулою піднебінного мигдалика і фасцією глотки, яка покриває м'язові констриктори глотки. Паратонзилярний абсцес – невідкладна патологія, з якою зазвичай стикаються чергові ЛОР відділень, хірурги-стоматологи та щелепно-лицеві хірурги.

Мета дослідження – визначити частоту зустрічаємості ПТА в щелепно-лицевому відділенні КУ «Полтавська обласна клінічна лікарня ім. М.В. Скліфосовського ПОР». Розробити тактику хірурга-стоматолога, особливості диференціальної діагностики та лікування з дотриманням міждисциплінарного підходу до лікування таких пацієнтів.

Нами проведено статистичний аналіз захворюваності на ПТА за історіями хвороби та даними річних звітів відділення оториноларингології та щелепно-лицевої патології за 2021 рік Полтавської обласної клінічної лікарні м. Полтава.

Найбільш частою причиною виникнення ПТА є тонзилогенне поширення мікроорганізмів. Не можна виключити гематогенний шлях ураження паратонзилярної тканини при гострих інфекціях. Травматичний характер початку захворювання – закупорка вивідної протоки додаткових слинних залоз (веберових залоз). Ми розглянемо одонтогенні паратонзилярні абсцеси.

Одонтогенний ПТА характеризується: нестерпним болем у горлі одностороннього характеру, який посилюється при ковтанні, неможливістю ковтання, болем, що іррадіює у вухо з відповідного боку, дисфагією, неможливістю приймати їжу, оскільки рот не відкривається – тризм, біль в ділянці шиї при поворотах голови, незначна припухлість м'яких тканин задньої підщелепної області, регіонарний лімфаденіт, залежно від локалізації можливе збільшення, ущільнення, болючість при пальпації підщелепних, задньощелепних, передньо- і задньошийних лімфатичних вузлів.

Прогноз при ПТА в більшості випадків сприятливий. Ризик розвитку гнійних генералізованих ускладнень підвищується на фоні первинних і набутих імунодефіцитних станів. Травматичне видалення нижніх молярів, порушення анатомічних орієнтирів під час місцевої анестезії, а саме нижньощелепної та торусальної естезії, може бути найчастішою причиною виникнення гематом та їх подальшого нагноєння. Спостерігається розвиток грізних гнійних ускладнень: флегмони м'яких тканин шиї, гнійного медіастиніту, тонзиллогенного сепсису, інфекційно-токсичного шоку, якщо хворому не надано своєчасного або неадекватного лікування.

Ключові слова: паратонзилярний абсцес, піднебінний мигдалик, ургентна патологія, ЛОР-відділення, щелепно-лицеве відділення.

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The prognosis for PTA is favorable in most cases. The risk of developing purulent generalized complications increases against the background of primary and acquired immunodeficiency states. Traumatic removal of the lower molars, violation of anatomical landmarks during local anesthesia, namely, mandibular and torusal aesthesia, may be the most common cause of hematomas and their subsequent suppuration. We observe the development of formidable purulent complications: phlegmon of the soft tissues of the neck, purulent mediastinitis, tonsillogenic sepsis, infectious-toxic shock, if there is no timely treatment of the patient or it is inadequate.

Key words: peritonsillar abscess, palatine tonsil, urgent pathology, ENT department, maxillofacial department.

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