the mandible (64.03%) was more frequently affected than the maxilla. 31.89% of lesions were in the maxilla, 3.57% in the maxilla and the maxillary sinus, and only 0.51% in the maxillary sinus. These results are comparable to data from. In our study, we evaluated the localization of all odontogenic cysts as well as individual cyst entities. According to our results, odontogenic cysts were mostly located in the mandibular molar region (37.9%) and the maxillary anterior tooth region (18.3%). These localizations were also the most affectedjaw areas according to other sources.

The study aimed to examine odontogenic cysts in adult and pediatric patients within an entire population and in two separate groups over an eleven-year period, using different criteria and comparing results with previous studies. Cases were evaluated based on cyst distribution, gender distribution, localization, treatment type, recurrence rate, and treatment of causative teeth. Radicular cysts and follicular cysts were more frequently diagnosed in this study. The residual cyst, eruption cyst, and lateral periodontal cyst occurred much less frequently. These findings essentially confirmed the results of previously published studies. A predominance of male patients was observed in the entire patient collective and individual cyst entities. The male gender dominated in adult and pediatric patients with radicular cysts and in adult patients with follicular cysts. Odontogenic cysts most commonly occurred in the 4th to 5th decades of life. As expected, eruption cysts were only diagnosed in children, and residual cysts were only diagnosed in adults. The most affected region was both the overall odontogenic cysts and radicular and follicular cysts in the mandibular molar region.

Conclusions. Thus, out of the total number of patient male were more affected by odontogenic cysts, compared to females.

Radicular cysts of the jaws were diagnosed more frequently.

Localizations of radicular cysts on the lower jaw was more frequent than on the upper jaw, which confirms the literature data.

Key words: odontogenic cysts, prevalence, localization, statistics, age-sex peculiarities.

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Received 27.08.2023
Accepted 02.02.2024

DOI 10.29254/2077-4214-2024-1-172-518-522
UDC 616.716-002.36:616.211-002

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PREVALENCE OF INFLAMMATORY DISEASES OF THE NOSE AMONG PATIENTS WITH ODONTOGENIC PURILENT-INFLAMMATORY DISEASES OF MAXILLO-FACIAL LOCATION

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Many patients with these diseases of the paranasal sinuses have pathological changes both on the side of the maxillofacial area and on the side of the nasal cavity. There is a steady annual increase in the number of patients with acute, inflamed or exacerbations of patients (and generally latent) odontogenic maxillary sinusitis and their share among all inflammatory and dystrophic diseases of the ENT organs and the maxillofacial area. The purpose of study was to determine the frequency of admission to the maxillofacial department of the Poltava Regional Clinical Hospital of patients with odontogenic inflammation of the maxillary sinus, to study the informativeness of the methods used to diagnose odontogenic sinusitis at the pre-hospital stage, and to evaluate the treatment methods used in the hospital. Research objects and methods. A retrospective analysis of 456 case histories of patients with odontogenic maxillary sinusitis, who were treated in the maxillofacial department of the Department of Public Health, was carried out - for the period 2017-2023. The peak of admissions of patients with odontogenic sinusitis to the Department of Maxillofacial Surgery of Poltava Regional Clinical Hospital occurred in 2019 - 272 (16.7%) cases of sinusitis, the lowest rate of hospitalization was recorded in 2008 - 195 (about 11.9%). The most common diagnosis was: "Exacerbation of chronic odontogenic sinusitis" - 817 (50.2%) cases, which is consistent with the literature data. Patients with the diagnosis: "Acute odontogenic sinusitis" accounted for the minimum rate - 2.4% of cases. Recurrence of sinusitis was observed on average in 2017-2023 in 5.2% of cases. In 19.3% of cases, there was a discrepancy between the diagnosis of the referring institution and the clinical diagnosis. In 2.6% of cases, the clinical diagnosis

did not correspond to the described clinical data. 59.2% of patients were referred from dental polyclinics and offices; 15.7% of patients were referred by related specialists (ENT, neurologist); 14.7% went to the hospital themselves; in 10% of cases, data on the sending institution were missing. Thus, the problem of prevention, diagnosis (including differential) and treatment of odontogenic sinusitis is an urgent task of dentistry. Among the causes of the development of the disease, a significant part is pathological processes, the development of which was facilitated by inadequate medical tactics for the treatment of chronic inflammatory processes in the area of molars of the maxilla. The use of traditional methods of radical surgical treatment is often accompanied by chronicity of the process.

Key words: *nasal cavity, mucous membrane, odontogenic phlegmon, inflammatory disease, maxillofacial area, rhinitis, sinusitis.*

Connection of the publication with planned research works.

The article is a fragment of the complex initiative theme of the department of Oral and Maxillofacial Surgery of the Poltava State Medical University «Algorithm for the complex treatment of inflammatory processes and prevention of the formation of pathological scars of the scalp and neck after planned and urgent surgical interventions» (state registration number 0124U000093).

Introduction.

According to domestic and foreign authors, the incidence of advanced sinusitis has increased more than 2 times over the past 10 years, and the specific weight of patients hospitalized at the ENT-inpatients increases annually by 1.5-2% and has no tendency to decrease. Such indicative information, apparently, is due not to such true signs of sinusitis of various etiologies, but to the peculiarities of examination of patients with this pathology in dental and otorhinolaryngological departments of hospitals [1-3].

It is also necessary to obtain that many patients with these diseases have pathological changes both on the side of the maxillofacial area and on the side of the nasal cavity. There is a steady annual increase in the number of patients with acute, inflamed or exacerbations of patients (and generally latent) odontogenic maxillary sinusitis and their share among all inflammatory and dystrophic diseases of the ENT organs and the maxillofacial area [1, 4, 5].

Due to the pronounced tendency to relapse and the lack of effective methods of conservative treatment, patients with chronic rhinosinusitis in many cases require surgical treatment. The operations used in these cases can be performed both with the use of classical radical methods and with the use of modern endoscopic technologies [6, 7].

The results of surgical treatment of patients with odontogenic maxillary sinusitis cannot be considered optimal [8, 9, 10].

The frequency of recurrence of sinusitis during extranasal surgery ranges from 50 to 64%. In this regard, in recent years, the expediency of radical surgical treatment of sinusitis has been called into question. Different methods of sparing surgical treatment significantly reduce the number of complications.

The aim of the study.

To determine the frequency of admission to the maxillofacial department of the Poltava Regional Clinical Hospital of patients with odontogenic inflammation of the maxillary sinus, to study the informativeness of the methods used to diagnose odontogenic sinusitis at the pre-hospital stage, and to evaluate the treatment methods used in the hospital.

Object and research methods.

A retrospective analysis of 456 case histories of patients with odontogenic maxillary sinusitis, who were treated in the maxillofacial department of the Department of Public Health, was carried out – for the period 2017-2023. The clinical diagnoses, age, sex, place of residence, type of activity, anamnestic data, treatment performed were noted. All medical histories were divided into groups based on the diagnosis. The histories of diseases with two combined diagnoses were taken into account in two groups, with three combined diagnoses, for example: exacerbation of chronic odontogenic sinusitis, a cyst that grew into the maxillary sinus, a foreign body of the maxillary sinus.

According to age indicators, all patients with maxillary sinusitis during the studied period were divided into three groups: group I – patients under the age of 25 years; group II – patients of the age of 25-50 years; group III included patients 50 years of age and older. Excel program was used for statistical processing of the research results.

Research results and their discussion.

During the study we have established such results. The diagnosis of exacerbation of chronic odontogenic sinusitis was established in 817 (50.2%) patients; chronic odontogenic sinusitis in 308 (19%) patients; acute odontogenic sinusitis – in 40 (2.5%) patients; perforation of the maxillary sinus – in 181 (11%) patients; 168 (10.3%) patients were hospitalized with foreign body of the maxillary sinus; cyst of the maxillary sinus – 112 (6.8%) of cases; recurrence of sinusitis was noted in 76 (5.2%) cases.

The peak of admissions of patients with odontogenic sinusitis to the Department of Maxillofacial Surgery of Poltava Regional Clinical Hospital occurred in 2019 – 272 (16.7%) cases of sinusitis, the lowest rate of hospitalization was recorded in 2008 – 195 (about 11.9%). The most common diagnosis was: “Exacerbation of chronic odontogenic sinusitis” – 817 (50.2%) cases, which is consistent with the literature data. Patients with the diagnosis: “Acute odontogenic sinusitis” accounted for the minimum rate – 2.4% of cases. Recurrence of sinusitis was observed on average in 2017-2023 in 5.2% of cases. In 19.3% of cases, there was a discrepancy between the diagnosis of the referring institution and the clinical diagnosis. In 2.6% of cases, the clinical diagnosis did not correspond to the described clinical data. 59.2% of patients were referred from dental polyclinics and offices; 15.7% of patients were referred by related specialists (ENT, neurologist); 14.7% went to the hospital themselves; in 10% of cases, data on the sending institution were missing.

For the period from 2020 to 2023, the number of patients increased by an average of 1.8% – 2.6%. Inflam-

mation of the left sinus was observed in 51%, the right sinus in 49% of cases, bilateral impression was found in 0.2% of patients (in 2003 this data was 53% and 45%, respectively). The right maxillary sinus in men was affected 4% more often than in women. It is interesting that the left sinus was affected by 4-5% more often in women than in men. In the left maxillary sinus, a foreign body was detected twice as often as in the right. Recurrence (48 (63%) of cases) and exacerbation of chronic sinusitis (451 (55.2%) of cases) were noted more on the right side.

The distribution of patients according to age was: group I – made up 12.9%; group II – made up 63.4% of the total number of examinees; group III – 22.7% of all patients.

About 65% of patients were between 25 and 50 years old. Patients with odontogenic sinusitis were aged from 21 to 40 years. The highest relapse rate was observed in the II group – 48 (62%) patients. Despite the fairly high level of dental care in modern cities and regional centers, 76.3% of patients with odontogenic sinusitis were residents of the city of Zaporizhia. Of them, 65% are employed, 32% are unemployed, and about 3% are pupils and students. The prevalence among this category of patients of working age indicates the relevance of this problem in its economic aspect. An increase in the length of stay in the hospital was noted in patients over 50 years of age, which corresponds to the data of the literature [11, 12]. The average period of disability was 13±5 days. The majority of patients with chronic sinusitis (52%) and cysts in the maxillary sinus (59%) were admitted to the hospital within 1 month to 1 year from the time of the first signs of the disease, 62.5% of patients with perforation of the maxillary sinus and 79% with acute was hospitalized with odontogenic sinusitis during the first day. Patients were admitted to the hospital in the following terms: 40% – up to 14 days from the onset of the disease; 12.6% – from 15 days to 1 month; 20% – from 1 month to 1 year; 8.8% of patients – a year after the onset of the disease.

In the hospital, all patients underwent anamnesis collection, clinical examination, X-ray examination, analysis of blood and urine indicators. The most frequently described first symptoms of the disease; the most frequent primary signs of sinusitis were complaints of pain in the "causing" tooth (24%), the appearance of a message with the maxillary sinus (42%), pain in the maxilla (22%). It can be seen that complaints of pain in the area of the maxilla (51.2%), the presence of an oroantral message (45%), purulent discharge from the nose (about 32%) were the most frequent. Pain in the maxilla and the presence of an oroantral fistula were more often complained of by patients with exacerbation of chronic odontogenic sinusitis and acute odontogenic sinusitis – in 59% and 45.2% of cases, respectively. Facial swelling (8.5%) and a feeling of discomfort (13.5%) were more often complained of by patients with cysts in the maxillary sinus. The fewest complaints were presented by patients with a foreign body in the maxillary sinus, and the most by patients with exacerbation of chronic odontogenic sinusitis.

In 6.2% of all patients, the local status was described without signs of the disease, this picture is most often found in patients with chronic odontogenic sinusitis (10.9%). The presence of an oroantral fistula was described in 946 (58.1%), the presence of a "causing tooth" – in 404 (24.8%), purulent discharge from the nose in local status was noted in 208 (12.7%) cases. Symptom of a positive oral-nasal test, most often noted in patients with a diagnosis of "Perforation of the maxillary sinus" – in 25% of cases; the "causative" tooth was found equally often in patients with acute odontogenic sinusitis (23.3%), exacerbation of chronic odontogenic sinusitis (22.2%) and with a cyst in the maxillary sinus (20%); less often – in patients with a diagnosis of "Perforation of the maxillary sinus" (0.8%).

The most pronounced local symptomatology in exacerbation of chronic odontogenic sinusitis. Computed tomography before admission to the hospital was performed only in three patients. There were no data on X-ray examination of maxillary sinuses in outpatient conditions at the pre-hospital stage, in the medical histories analyzed by us. In the hospital, X-ray examination of the paranasal sinuses and orthopantomogram were performed in 97.5% of cases. In 65% of patients, inflammation of the maxillary sinus was diagnosed only after dental manipulations (extraction or treatment of teeth) and complications arose as a result (perforation of the maxillary sinus, ingress of filling material and the roots of the removed teeth into the maxillary sinus). Patients with open forms of sinusitis accounted for 62.6% of the total number. The results of the X-ray examination show from the analysis that patients with exacerbation of chronic odontogenic sinusitis got darkening of the maxillary sinus occurred more often than with other forms of sinusitis. In sum, this radiological sign is described more often than others. The thickening of the membrane of the maxillary sinus is more often observed with chronic odontogenic sinusitis in 21 (53.8%) cases. Obscuration of the maxillary sinus – with perforations of the maxillary sinus and chronic odontogenic sinusitis – was described in 6 (27.2%) cases. In women, a foreign body in the maxillary sinus was found 40% more often than in men. In men, the root of a removed tooth in the maxillary sinus was found in 7 (63.3%) cases, filling material – in 25 (22.2%), and in women – in 4 (36.6%) and in 88 (77.8 %)) in cases respectively. "Causative" teeth were removed before hospitalization in 65% of patients, hospitalized in 27.2% of patients, "causative" teeth were preserved in 4.3% of patients, and the history of the "causative" tooth was not described in 3.5% of patients. "Causal" teeth were more often 16.26 – in 45.7%; 17.27 – in 25%; 18.28 – in 10%; 15.25 – 9%; 14, 24 – in 3.5%; 13.23 – in 1.3% of cases, the causative tooth is not described – in 4.5% of cases. More than one "causing" tooth was noted in 27% of patients. All patients received medical treatment: antibiotics, antihistamines, anti-inflammatory drugs. The prescription of antibiotics is inadequate: the use of two or more antibiotics in the absence of a pronounced inflammation clinic. In 70% of cases, surgical treatment was performed: plastic fistula (7.7%); radical sinusotomy (83%); cystohymorotomy (8.2%). Among those operated on, patients with acute sinusitis made up 1.8% of all examined patients and about 44% in this group. 31% of all patients and 57% with a diagnosis of exacerbation of chronic odontogenic sinusitis were operated on. Conservative treatment was carried out in 35 (2.4%) patients with chronic odontogenic sinusitis, 12 (0.8%) patients with a foreign body in the maxillary sinus.

Conclusions.

Thus, the problem of prevention, diagnosis (including differential) and treatment of odontogenic sinusitis is an urgent task of dentistry.

Among the causes of the development of the disease, a significant part is pathological processes, the development of which was facilitated by inadequate medical tactics for the treatment of chronic inflammatory processes in the area of molars of the maxilla. The use of traditional methods of radical surgical treatment is often accompanied by chronicity of the process.

Prospects for further research.

In further studies, we plan to study the prevalence of inflammatory diseases of the nose among patients with odontogenic phlegmons of oral floor and neck.

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ПОШИРЕНІСТЬ ЗАПАЛЬНИХ ЗАХВОРЮВАНЬ НОСА СЕРЕД ПАЦІЄНТІВ ІЗ ОДОНТОГЕННИМИ ГНІЙНО-ЗАПАЛЬНИМИ ЗАХВОРЮВАННЯМИ ЩЕЛЕПНО-ЛИЦЕВОЇ ЛОКАЛІЗАЦІЇ

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Резюме. За даними вітчизняних та зарубіжних авторів, захворюваність на хронічні синусити за останні 10 років зросла більш ніж у 2 рази, а питома вага госпіталізованих до ЛОР – стаціонари хворих збільшується щорічно на 1,5-2% і не має тенденції до зниження. Такі відомості, мабуть, обумовлені не так істинним співвідношенням синуситів різної етіології, а особливістю обстеження хворих на цю патологію в стоматологічних і оториноларингологічних стаціонарах.

Пік надходження пацієнтів з одонтогенними синуситами до відділення щелепно-лицьової хірургії КП «Полтавська обласна клінічна лікарня ім. М.В. Скліфосовського» ПОР припадав на 2019 рік – 272 (16,7%) випадку синуситу, найнижчий показник госпіталізації відмічений у 2008 році – 195 (близько 11,9%). Найчастіше було встановлено діагноз: Загострення хронічного одонтогенного гайморита – 817 (50,2%) випадків, що узгоджується з даним літератури. Пацієнти з діагнозом: Гострий одонтогенний гайморит склали мінімальний показник – 2,4% випадків. Рецидив гайморита спостерігався в середньому за 2017-2023 роки у 5,2% випадків. У 19,3% випадків відзначалося розбіжність між діагнозом установи, що направила, і клінічним діагнозом. У 2,6% випадків поставлений клінічний діагноз не відповідав описаним клінічним даним. Зі стоматологічних поліклінік та кабінетів було направлено 59,2% пацієнтів; суміжними фахівцями (ЛОР, невропатолог) направлено 15,7% пацієнтів; самі звернулися до стаціонару 14,7%; у 10% випадків дані про установу, що направила, були відсутні.

Проблема профілактики, діагностики (у тому числі диференціальної) та лікування одонтогенних синуситів є актуальним завданням стоматології.

Серед причин розвитку захворювання значну частину становлять патологічні процеси, розвитку яких сприяла неадекватна лікарська тактика для лікування хронічних запальних процесів у сфері молярів верхньої щелепи. Використання традиційних методів радикального хірургічного лікування часто супроводжується хронізацією процесу.

Ключові слова: порожнина носа, слизова оболонка, одонтогенна флегмона, запальне захворювання, щелепно-лицева ділянка, риніт, синусит.

PREVALENCE OF INFLAMMATORY DISEASES OF THE NOSE AMONG PATIENTS WITH ODONTOGENIC PURILENT-INFLAMMATORY DISEASES OF MAXILLO-FACIAL LOCATION

Steblovskyi D. V., Kopchak A. V., Lokes K. P., Bilokon S. O., Voloshyna L. I., Popovich I. Y.

Abstract. According to domestic and foreign authors, the incidence of chronic sinusitis has increased more than 2 times over the past 10 years, and the specific weight of patients hospitalized in ENT – inpatients increases annually by 1.5-2% and has no tendency to decrease. Such information, apparently, is due not to the true ratio of sinusitis of various etiologies, but to the peculiarity of the examination of patients with this pathology in dental and otorhinolaryngological hospitals.

The peak of admissions of patients with odontogenic sinusitis to the Department of Maxillofacial Surgery of Poltava Regional Clinical Hospital occurred in 2019 – 272 (16.7%) cases of sinusitis, the lowest rate of hospitalization was recorded in 2008 – 195 (about 11.9%). The most common diagnosis was: "Exacerbation of chronic odontogenic sinusitis" – 817 (50.2%) cases, which is consistent with the literature data. Patients with the diagnosis: "Acute odontogenic sinusitis" accounted for the minimum rate – 2.4% of cases. Recurrence of sinusitis was observed on average in 2017-2023 in 5.2% of cases. In 19.3% of cases, there was a discrepancy between the diagnosis of the referring institution and the clinical diagnosis. In 2.6% of cases, the clinical diagnosis did not correspond to the described clinical data. 59.2% of patients were referred from dental polyclinics and offices; 15.7% of patients were referred by related specialists (ENT, neurologist); 14.7% went to the hospital themselves; in 10% of cases, data on the sending institution were missing.

The problem of prevention, diagnosis (including differential) and treatment of odontogenic sinusitis is an urgent task of dentistry.

Among the causes of the development of the disease, a significant part is pathological processes, the development of which was facilitated by inadequate medical tactics for the treatment of chronic inflammatory processes in the area of molars of the upper jaw. The use of traditional methods of radical surgical treatment is often accompanied by chronicity of the process.

Key words: nasal cavity, mucous membrane, odontogenic phlegmon, inflammatory disease, maxillofacial area, rhinitis, sinusitis.

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Conflict of interest:
The authors declare no conflict of interest.

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Received 08.10.2023
Accepted 01.03.2024

DOI 10.29254/2077-4214-2024-1-172-522-527
UDC 616.314.13/.14-073.75

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ANALYSIS OF HARD TISSUE DENSITY INDICATORS OF PERMANENT TEETH WITH DIFFERENT LOCALIZATION

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Mineral density of bones and teeth is an optimal biomarker that allows assessing their qualitative characteristics. In dental practice, dental radiography is widely used to determine the density of jawbone tissue and hard tissues of teeth. The aim of our study was to elucidate the characteristics and compare the density indicators of hard tissues of the cervical area of formed permanent teeth of different localization.

To determine the density indicators of hard tissues of teeth, X-ray images of 320 intact formed permanent teeth were processed.

It was found that the density of all investigated tissues of teeth of the upper jaw is higher than that of the antagonist teeth of the lower jaw. The density of enamel and dentin of teeth on the right side is higher than that of the