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Analysis of Data Detected in a Special Examination in Painful Pathologies in Impaired Function of the Lower Jaw-Chuck

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Relevance of the topic: A number of domestic and foreign scientists in their scientific research on the diagnosis, treatment and prevention of pain syndromes of the Chakka-mandible with painful articular syndromes or synromia of painful joint disorders as a result of impaired joint activity, it is noted that patients most often turn to dentists (Lebedenko I.Yu., 2008; Kamenova L.A., 2015) and how the main factors of the pathological process are violations of the dental system (Arutyunov S.D., Khvatov I.L. and B., 2003; Kannav V.V. and B., 2007), violation of the state of the neuromuscular components of the maxillary system (Ronkin K.Z., 2012; Dim H., Israel H., 2012; Lapina N.V. and B., 2013; Fernandez G., Vanselms M.K., Gonsalves D.A., 2015; Rybalov O.V., and B., 2016 Shakhmetova A.A., Sinisina T.M., 2017), articular-occlusive syndromes (Chibisova M.A., 2012); others – hypertensive syndromes of masticatory muscles (Bugroveska O.G., Maksimova E.A. and B., 2016; Yulev E.N., Velmagina I.V. and B., 2018), combined effects of various external and internal factors (Baslkan S., Zengingul A., 2006; Bulicheva E.A., 2007; Ivasenko P.I. and B., 2009) also showed that mental disorders are an important etiological factor in the development of the chakra-dysfunction of the lower jaw (Trezubov V.N., 2006; Kosyubinskaya Yu.V. and B., 2014; Sargisyan A.E., 2014; Garelina A.N. and B., 2016).

It is known that a violation of joint activity in the cheek-mandible area in synroma causes difficulty in diagnosing a variety of clinical and symptomatic manifestations and its absence in a constant description (Dolgalev A.A., 2007; Kameneva L.A., 2015), at the same time creating methods that can clearly detect signs of pathology in studies, including clinical and functional, anthropometric, immuno-microbiological, social and hardware studies (Vasilenko A.M., 2006; Gaivoronsky I.V., 2008; Bugroveskaya O.G., 2011), we also observe that this is being carried out. The results of the study noted that the syndrome of violation of joint activity of the chakra-mandible is primarily associated with a violation of the tone of contraction of the masticatory muscle of the lateral wing (Semenyuk V.M., Smirnov K.V., 2003; Sidorenko A.N., 2012), and patients often say that they refer to "noise" phenomena in the lower jaw, pain in the masticatory muscles during prolonged chewing or in colloquial speech, chewing disorders, spikes in the ears and noise in them with complaints (Rabukhina N.A., 2008; Korzh G.M., 2009; Kameneva L.A., 2015). Complaints made by patients are associated not only with morphological and functional changes in the maxillofacial region, but also with mental changes in a person (Sotnikova M.V., 2009; Beschastny D.S., 2010), providing data on the development as a result.

In recent years, in our country there have been painful syndromes of the chakka-lower jaw, including the pathogenesis of the syndrome of impaired joint activity and the correction of changes in the joint (Gafforov S.A., 2016), assessment of the position of metalloproteinase (Saidov A.A., 2021), use of enzymotherapy in treatment (Olimov S.Sh., 2019) received a lot of new information, which led to the formation of new methods of diagnosis and treatment. In patients with pain syndromes of the jaw-lower jaw joint activity disorder, accompanied by a tooth row defect, the risk of developing synromia and the level of severity are much higher, and such factors largely affect the development and clinical course of the disease. In addition, among different segments of the population, scientific research has been carried out by a number of scientists on the early diagnosis, assessment of risk

factors and increasing the effectiveness of treatment of pain syndromes of the chakka-lower jaw. however, in different age groups, the practice of improving the treatment of chakra-lower jaw pain syndromes accompanied by a tooth row defect has not been carried out.

In our study, a modern four-Synapse eectromiograph was used to study the muscles of the chewing gum and the muscles of the chakka. An electromyograph called Synapse consists of the study of bioelectric activity of muscles through a specialized computer complex. Designed for registration, processing, analysis, Graphic Imaging and storage electromyograms and the state of these muscles is determined in the database. The advantage of this device is the software, when it performs data processing on which computer and, as a result, allows you to study the available dimensions. Helps to assess the condition of the muscles with the help of an electromyograph apparatus. In this case, the average amplitude of the bioelectric potentials of the chewing muscles made it possible to determine the data when chewing nuts, the maximum muscle bioelectric potential of the average amplitude at the time of chewing, the rest time of the muscles at the average amplitude[2.3.4.6.8.10.12.14.16].

USB interface connected to a PC via electromyography and receives power from it (does not require a 220V network). This allows you to use the device in conjunction with a laptop (from the batteries the entire system is powered by it). Interaction with an electromyograph is carried out using software. The recording is detected in monitor mode using two or four standard lines. In the lower jaw, it is possible to see the change in indicators at the time of movement and at a calm state, the amplitude scale, the lower and filter indicators from the upper frequency, and the EMG is analyzed by subsequent mathematical indicators. For registration was carried out with skin electrodes. The maximum compression of the teeth was recorded for 5 seconds. Functional chewing tests (15 seconds of chewing 0.8 g of dried almonds), biopotentials of the chewing muscles were recorded during function.

Spiral computed tomography allows you to simultaneously determine the bilateral movement of the maxillofacial bone. Spiral computed tomography - allows you to fully view the position of the patient's lower jaw bone. Using a spiral computed tomography device along the longitudinal axis of the diagram, the patient clearly determines the position of the mandibular bone and the movement of the intra-articular disc.

In all patients AG-1, 2, 3 in the "mouth closed" position, while in the curved projection there was an expansion in the D4 section of the damaged joint according to the results of spiral computed tomography, the opposite case was observed in the D2 and D5 sections of the joint, and narrowing of the joint crack was found in these areas. However, on the healthy side, there was an expansion of the joint areas D2 and D5. Based on the results of SCT in the lower jaw position, Oas is available in 20 (51.28%) patients of the AG - 1 group, NMS is available in 12 (42.85%) patients of the AG - 2 group, BDC is available in the AG - 3 group in 9 (52.94%) patients with Oas – 18 (46.15%), NMS – 13 (46.42%) and BDC – 8 (47.05%) in patients located on the posterior slope of the articular sickle.

During the examination of the lower jaw, all patients in groups AG - 1, 2 and 3 underwent spiral computed tomography in the "mouth closed" and "mouth open" positions, in a curved projection. According to the results of the study of spiral computed tomography in the state of "mouth closed", narrowing of the articular gap in sections D3, D5, D4 was found on the damaged side – expansion, on the healthy side – expansion in sections D3 and D5, D4 – narrowing. When the study was conducted in the "open mouth" state, the heads of the joints respectively 37 (94,87%), 28 (100%) and in 17 (100%) patients with pathology, chpjbs were located on the posterior slope of the articular head from the side and at the tip of the articular head turn to the other side [1.3.5.7.9.11.13.15.17.19.21.23.25.27.29.31.33].

For example, an extract from the medical record of patient No. 23, H.K., on the basis of a clinic 28 years ago, an orthopedic dentist during chewing, chpjb complained of pain and wheezing on the right side, restriction of mouth opening (up to 2.8 cm); the nature of increasing pain on the left side during chewing and yawns are sluggish, sudden, gradual intensification and irritating pain In addition, there is a pathology of CHPJB in the joint, in which it seems that there is a foreign body there, opening the jaw is difficult. they say it is limited. The first clinical signs of chpjb appeared 4 months ago, while

this pathology has not been treated before. As a result of the examination, it was found that the patient in recent years adhered to a right-sided approach to the nutrition process.

During the visual examination, asymmetry was found on the right side of the patient, restriction of mouth opening, displacement of the line by ten in the central occlusion (Fig. palpation of the masticatory muscles is painless, the lateral muscles of m.pterygoideus are more painful on the right side.

А **Б** **С**

Figure 1. Patient X.K., photo, 28 ej, medical card №23.

A) at the time of Admission B) in the course of treatment c) old fas after treatment

In all patients of the control groups, early contacts with occlusiography were most often detected in central occlusion - with 14, 16 - 45, 47, 26, 27 – 37, 38 teeth.

The maxillofacial fissure on the right side narrows in a curved projection with spiral computed tomography malformations D1 section 1.8 mm.ni if set, then this indicator is equal to 1.3 in section D2 mm.ni , while section D3 contains 1.7 mm.ni reconciled. The distance from the head of the joint to the end of the articular notch at the time of opening of the lower jaw was 7.2 mm. Narrowing of the articular gap on the left D1 section 1.2 mm.ni if compiled, section D2 1,2 mm.ni reconciled. The greatest narrowing of the articular gap on the left side was observed at the D3 site and amounted to 1.3 mm. The distance from the head of the joint to the end of the articular notch at the time of opening of the lower jaw was 2.1 mm.

Thus, when the clinical observations of existing patients of Oas, NMS and BDC were analyzed, similar complaints were found to one degree or another. Among the most pronounced complaints are heaviness and pain in the joint area, tingling, noise that is heard in the lower jaw during movement, and fatigue of the chewing muscles during mechanical movement of the lower jaw.

In patients of all AG - 1, 2, 3 groups, the mouth is closed, according to the results of spiral computed tomography in a curved projection, an expansion of the articular gap was found in section D4 on the damaged side, in sections D2 and D5 – narrowing, while on the healthy side – expansion in sections D2 and D5. In the study of the "open mouth" condition, the joint heads are found in 20 (51.28%) patients with AH-1, in 12 (42.85%) patients with AH-2, in 9 patients with AH-3 (52.94%) in three parts, respectively 18 (46,15%); 13 (46,42%) and in 8 (47.05%) patients were located on the posterior slope of the articular bulge (Table 3.4).

During the examination, spiral computed tomography of the upper and lower jaws in a curved projection was performed in all patients of the main group - 1, 2 and 3 in the case of "mouth closed" and "mouth open". When the data of spiral computed tomography in the "mouth closed" state were studied, it was found that the distance from the joint head to the joint notch decreased in sections D3, D5 on the damaged side, and in section D4 this distance increased. And on the side that is not otherwise damaged – in sections D3 and D5, it was found that the distance from the connection head to the recess of the connection increased, and in section D4 this distance was reduced. In the curved projection in the "mouth open" position of the upper jaw, when spiral computed tomography of the articular heads of was performed, pathology of the existing lateral articular depression located on the slope of the posterior part of the Oas was observed in 37 (94.87%) existing patients, in 28 (100%) existing patients with NMS, and in 17 (100%) [18.19.20.22.24.26.28.30.32].

Thus, when the clinical observations of existing patients of As, NMS and BDC were analyzed, similar complaints were found to one degree or another. Among the most pronounced complaints are heaviness and pain in the joint area, tingling, noise that is heard in the lower jaw during movement, and fatigue of the chewing muscles during mechanical movement of the lower jaw.

When studying the history of diseases, it was found that the presence of unilateral chewing, the use of fillings that violate the normal fixation of teeth, increase. This led to a decrease in the developed distance between the mandibular openings, deviation from the central axis during jaw movement and violations of the CHPJB function caused by defects in the dentition [33.34].

Conclusions.

The proposed examination card and database chakka-lower jaw, such as painful activity disorder syndrome allows you to draw up a complete clinical picture of all nosological forms – occlusive articulation syndrome, neuromuscular syndrome and articular disc protrusion, which later becomes a reason for systematization and documentation of electronic information obtained for processing purposes.

Identified that occur in 100% of cases when existing patients were examined, which form the basis for drawing up a detailed developed table of comparative diagnosis of occlusive Oas, NMS and BDC. With Special Research Methods, a relationship is established between the amplitude of the movements of the lower jawvertical, changes in calm bioelectric activity in the chewing muscles and the formation of OAS, NMS and BDC diseases.

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