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**Abstract:** 

### **«INTERDISCIPLINARY APPROACH TO THE DIAGNOSTICS OF PATIENTS WITH HIGH-LOWER JOINT DISEASES»**

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In the scientific and practical direction today in the field of dentistry, dysfunction of the temporomandibular joint (TMJ) is considered an urgent problem, that its significance is determined by its high prevalence, difficulty in diagnosis and treatment, a varied and complex clinical picture, requiring a

differentiated approach of doctors of various profiles [6, 7, 8, 13].

According to some literature data, concepts and other theories have been proposed for etiolMGical factors of TMJ patholMGies - these are occlusivearticulatory, myMGenic and monoetiolMGical [3, 5, 14]. According to representatives of the myMGenic theory, the leading role in the pathMGenesis of TMJ dysfunction is assigned to the masticatory muscles [4, 11]; they believe that the joint, jaw and teeth are passive organs that do what muscles dictate. Other authors have found a significant increase in functional disorders of the TMJ due to emotional disorders [9, 12, 16]. The problem becomes even more urgent in the absence of a single algorithm for a comprehensive examination of patients with TMJ patholMGy and parafunction of the masticatory muscles, which is emphasized by domestic and foreign authors [1, 2]. Thus, the analysis of literature data confirms the polyetiolMGical nature of TMJ dysfunction. The development of this disease is directly related to the state of the muscular apparatus, occlusive-articulatory disorders, changes in the height of the lower 1/3 of the face, disorders of neuroendocrine regulation and the emotional sphere.

Keywords: LAPAROSCOPIC, SPLENECTOMY, Complications, diseases, ITP.

#### **PURPOSE OF THE STUDY:**

Improvement of differentiated diagnostics with an interdisciplinary approach of specialists in patients with pain dysfunction syndrome (SD) of the TMJ.

#### **RESEARCH OBJECT AND METHODS:**

To achieve this goal, comprehensive scientific research was carried out, including: medical-sociolMGical, psycholMGical-diagnostic, neurolMGical, clinical-dental, clinical-functional and special instrumental studies in 1197 patients aged 20 to 70 years living in the Bukhara region.

We carried out the research methods of the subjects in two stages: - first, we studied the anamnestic data from related specialists, such as a neuropatholMGist, psycholMGist, psychiatrist, sociolMGist and, of course, a dentist; - at the second stage, clinical-instrumental and clinical-functional studies were carried out to confirm the preliminary

diagnosis. To improve the efficiency of diagnostics and their differentiation, we used in practice the classification according to ICD-10 - "SBD TMJ" (K07.8 according to ICD-10). The medical card developed and created by us was like a questionnaire for patients and their relatives in order to obtain complete information about the functional and dysfunctional conditions of the TMJ, about the etiolMGical factors in violation of the PCS. Taking into account the WHO dental recommendations, (survey, examination, probing), neurolMGical, palpation. percussion, psycholMGical and sociolMGical studies were carried out. Of the 1197 surveyed people, 51.16% had preliminarily defined TMJ SD, of which 42.92% (478) were women, 57.07% (719) were men, also by age they were 20-29 years old - 88; 30-39 years old - 154; 40-49 years old - 248; 50-59 years - 398 and 60-69 years - 309 surveyed who applied for specialized help in a dental clinic. According to the initial results, the



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number of patients with patholMGies of the TMJ SD was 608 (51.16%), including 245 (20.46%) with a diagnosis of occlusive articulation syndrome - OSA (MG-1): - 154 (12.83%) with neuromuscular syndromes - NMS (MG-2): - 209 (17.46%) patients with habitual dislocation of the mandible head (n / h) - PVH (MG-3) and in the control group (CG) 589 (49.04%) of patients with absolutely healthy PES.

Determination of the dental status of patients was carried out on the basis of a comprehensive examination, including using functional diagnostic tests, collection of anamnestic data, study of models in a biomechanical occluder (Protar evo-9), axiMGraphy "Arcus digma"), (axiMGraph electromyMGraphy ("Synapsis" adapted for dental purposes [10], rheMGraphy (Rheo-Spectrum), electroencephalMGraph (Neuron-Spectrum 2) and also used a cone-beam computed tomMGraphy (CT) (PICASSO EPX - Impla), and magnetic resonance imaging (MRI) ( according to the method of T. V. Bulanova) [2], psychoemotional state of patients using the SCL-90-R scale (Hamilton Rating Scale for Depression - HRDS) (results of questioning parents of children on the prevention and treatment of dental caries in the city of Bukhara, S.A. Gafforov, O.O. Yarieva - Uzbekiston Dentistry Association, 2017), quality of life (QOL) (The Short Form-38) [15] all received data fi were copied into the card "Dental card of objective examination of the TMJ and masticatory muscles.

"The materials were statistically processed using Microsoft Office Excel 2010, Microsoft Corporation (Redmond, WA, USA) and WinPEPI 11.45, and the statistical significance of differences between qualitative variables in groups was assessed using Fisher's exact test or calculating 95% confidence intervals for the ratio odds, correlation analysis of results using Spearman's rank correlation coefficient  $\rho$ ; multivariate analysis of variance (significant  $\rho$  <0.05).

#### **RESULTS AND ITS DISCUSSION.**

According to the respondents, 49.5% had complaints of pain in the TMJ area; joint clicks -46.1%; violation of mouth opening - 29.5% and violation of occlusion was noted by 58.1% of respondents, while symptoms of functional disorders of the TMJ, such as clicking and abnormal occlusion disorders, were noted much more often in women than in men (55.5% and 64.7 %; 38.9% and 53.1%, respectively). Also, a relationship was revealed between the age of the respondents, the frequency and the number of complaints, so if at the age of 20-29, noise phenomena in the joint and pain were recorded in 37.5% of cases, then by 30-39 years -32.3%; 40-49 years old - 45.7%; 50-59 years old -49.7% and by the age of 60-69 years the percentage increased to 53.2%; Pain sensations were noted by

age, respectively - 40.4%; - 48.8%; - 50.3% and - 57.4%; clicks - 37.5%; - 32.3%; -45.7%; - 49.7%; and 53.2%; occlusion disorders - 22.9%; - 31.3%; - 38.6%; - 56.4%; and - 73.4%, respectively; restriction of opening the mouth also showed a direct relationship with an increase in age up to 50 years; - 16.7%; - 30.3%; - 38.6%, respectively.

The results of the study of individual symptoms in the history of patients established; - no complaint - 50.5%, one complaint - 12.3%, two complaints - 26.5%, three complaints - 19.9 and more and more than three complaints. Also, during the survey, 24% of all surveyed confirmed the presence of bad habits, smoking accounted for 45.9%, biting the lower lip - 27.3%. Mouth breathing, cheek biting, gnawing nails, biting hands, bruxism, eating seeds (3.4-4.0% each) were equally common. There were no complaints among women - 52.3%, among men - 48.4%.

The visual method of examination of patients revealed no asymmetry - 53.9% of patients; asymmetry on the right - 10.7%; asymmetry on the left - 9.5%; bilateral asymmetry - 26.5%. By age, the highest indicator is observed asymmetry on the right 40-49 years old in 19.7 patients; asymmetry on the left - 50-59 years old in 18.8%) patient; bilateral asymmetry - 60-69 years in 40.8%; also, when accompanying the movement of n / h with noise phenomena - in 46.1%; including clicked ones when opening the mouth on the right - in 15.8%, on the left - in 28.6%; clicked when closing the mouth on the right - in 32.8%; on the left - in 22.5% of patients. Also, palpation revealed pain in the area of the TMJ muscles and the face; pain on palpation on the right in 59.1%; on the left - in 40.9% of patients, by age the pain is mainly on the right observed more in patients of 40-49 years old, 50-59 and 60-69 years old patients (58.2%; 54.8% and 55.3%), respectively ...

According to the results of the number of symptoms according to the degree of mouth opening and symmetry, it was noted; limited - 11.1%; in full -32.7%; excessively - 2.4%; symmetry - 32.3%; deflection - 9.2%; deviation -12.2%, by sex of all symptom complexes is noted 42.9% in women and 57.1% in men. At the same time, of certain patholMGical symptoms, "in full", "deviation", "limited" are often noted. Also, the surveyed had an orthMGnathic bite - 51.8%, a straight bite - 5.6%; bite anomalies - 48.2% of cases, including frequent narrowing of the dentition of the upper and / or n / h, deep bite - 14%, prMGnathia - 10.8%. When analyzing the state of the dentition, 57% of patients had complete dentition, and only 43% of patients had defects in the dentition of various lengths and localization, while 11.2% had small defects, medium



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and large defects accounted for 17.3 % and 14.6% of patients (respectively).

Also, in studies of patients with OSA (MG-1), NMS (MG-2) and PVH (MG-3) with patholMGies of the TMJ SD according to ICD-10 K07.8, we studied and differentiated the clinical symptoms that were indicated by the studied patients: the upper part of the face; TMJ area; facial muscles and chewing muscles; face area. According to the results obtained, at the time of examination, 11.4% complained of unilateral diffuse pain in the upper half of the face without clear localization; in MG-2 - 14.3% and in MG-3 - 9.6%, the average intensity on the VAS pain scale was 4.2  $\pm$ 1.01; 4.6  $\pm$  1.11; 3.8  $\pm$  0.8 points, respectively, of which unilateral pain with irradiation bothered in 6.9%; 5.8 and 5.3% of the respondents, respectively. Complaints of severity and pain in the neck were noted in patients MG-1 - 29.8%; MG-2 -20.8%; MG-3 -18.2%. With pain in the face on the pain scale, the VAS was  $2.8 \pm 2.2$ ;  $2.7 \pm 1.9$ ;  $2.1 \pm 1.6$  points, respectively. Complaints of a burning sensation in the face area were noted in patients with MG-1 - 9%; MG-2 - 11.7% and MG-3 - 5.3%, and discomfort in the form of local numbness and decreased sensitivity of the facial skin 9.4%; 10.4%; 6.7% of patients, respectively, while pain on the VAS scale was  $3.5 \pm$ 0.5;  $4.2 \pm 0.8 \ 3.0 \pm 0.7$  points, respectively. Pain in the area of the oral cavity, gums and tongue, burning sensation in the tongue worried about MG-1 - 5.7%; MG-2 - 7.1%; MG-3 - 6.7% of people, and a burning sensation in the mouth - 11.4%; - 10.4%; 8.6% respectively. At the same time, the average intensity of burning sensation in the area of the mucous membrane of the mouth and tongue according to the VAS scale was equal to 4.4  $\pm$  1.8; 4.0  $\pm$  1.4; 3.8  $\pm$  1.2 points, respectively.

Thus, patients with predominantly neurological genesis of suffering and dysfunctional syndrome (MG-1 and MG-2) did not have complaints of shooting and paroxysmal pain along the r. n trigeminus, including pain in the face and numbness and a decrease in superficial sensitivity in the area of innervation I-III r. n. Trigeminus, at the same time these patients noted that their pain was not diffuse, but local in nature, without irradiation.

When studying pain in the TMJ; - 20% for MG-1; 13.7% in MG-2 and 9.6% in MG-3 patients had paroxysmal pain; - 20.8%; - 18.2%; - 10.5%, respectively, the patient is permanent; and 20.8%; in 28.6% and 14.8%, respectively, it appeared only after speech or chewing load; - 19.6%; - 14.3%; - 9.1%, respectively, was at night; meanwhile, the average intensity on the VAS pain scale was  $5.1 \pm 0.4$ ;  $4.7 \pm 0.43$ ;  $4.1 \pm 0.4$  points. Analysis of the results indicates that such clinical symptoms are characteristic during the period of exacerbation of the disease and were

observed in all patients with the Helkimo index more than 5 points MG-1 and 2, i.e., partially in MG-3 patients. Proceeding from this, MG-1 patients are characterized by the presence of local pain, constant aching pain and pain in the TMJ associated with exercise, MG-2 patients are characterized by local pain and diffuse pain in the TMJ region, as well as paroxysmal pain in the area. TMJ, MG-3 is characterized by pain in the TMJ associated with exercise. The average intensity on the VAS pain scale was 4.8  $\pm$  1.1; 4.4  $\pm$  1.6; 3.9  $\pm$  1.1 points, respectively.

MG-1 - 69% complained of a feeling of tension in the area of the chewing muscles, appearing against the background of psychoemotional stress and intensifying with excitement, accompanied by closing of the teeth, their clenching and night grinding; MG-2 - 57.8% and MG-3 - 31.1% of patients, while swallowing disorders were observed in 1.22%; 1.29% and 0.47%, respectively.

In the studied groups, mobility of lower respiratory tract with amplitude is normal in patients MG-1 - 48.2%; MG-2 - 59.1%; MG-3 - 30.6%. The amplitude is increased - in 31.8%; in 18.2%; in 21%, respectively, the amplitude is reduced - in 20%; 6.5%; in 13.4%, respectively. According to the results, it can be said that restriction of mouth opening is an important diagnostic criterion for patients MG-1 and 2 and less important in patients MG-3. According to the results of axiography, we analyzed the qualitative and quantitative indicators, assessed the symmetry of the trajectory, the synchronization of the speed of movement of the left and right temporomandibular joint. In patients with clinically identified clicks, axiography accurately showed the moment of their occurrence, which is very important for the design of an occlusive splint, determining the prognosis of treatment and the type of therapy.

According to the results of indicators of the severity of the parafunctional activity of the masticatory muscles according to S. Sato in the supervised patients, it was confirmed that the examined patients with MG had parafunctional activity of the masticatory muscles. So, in 34% of individuals (MG-3); In 26% of individuals (MG-2) and 4% of individuals (MG-1), the sixth, most severe, form of parafunctional articulation prevailed, while in the subjects of the CG analysis it turned out that the largest percentage of observations fell on grades 2 and 3.

The results of assessing the state of the masticatory muscles using EMG of the masticatory muscles and analysis of the bioelectric activity of the muscles revealed the presence of the following phenomena in all examined patients, such as tonic activity at rest - low-amplitude (5-10  $\mu V)$  unstable



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activity recorded at rest, in normal conditions. At the same time, absent changes on EMG, characterized by symmetry of tonic activity of 27.1% in MG-1; 24.3% in MG-2 and 12.8% in MG-3 patients had patholMGical changes on EMG 74.3%; 62.3%; 50% of patients, respectively. According to the ISFM index, the initial picture in patients with MG-1 is from 70% -85%; MG-2 from 130% to 160%; MG-3 85% to 140%. At the same time, in patients with MG, we can see a similar nature of deviations in amplitude-frequency and temporal indicators when performing a test of arbitrary compression of teeth in the usual occlusion, compared with CG.

The results of MRI among the subjects by age ranged from 34 to 42 years, out of the total number of examined patients (45 patients from MG and 15 from CG), changes in the cortical contour were found in only 3 (20.0%) cases in MG-1, 2 and 3 - 26.7% of cases, the sharpness of the head contour n / h was noted in 46.7%, cases in MG-1; in 53.3% of cases in MG-2 and 66.7% of cases in MG-3. Also, at the stage of determining the position of the heads of the n / h, in the n / h pits, the distal location of the right head is

often noted compared to the left in almost all the examined groups. The anterior location of the left condylar process was diagnosed in 13.3% of cases, the right one - in 20.0% in MG-1, 20.0% and 26.7% of MG-3 cases, respectively. The share of the posterior position of the head of the n / h accounted for 33.3%, 13.3% and 33.3% of the right temporomandibular joint and 20.0%; 13.3 and 33.3% left temporomandibular joint in the examined groups, respectively.

CT scan of the temporomandibular joint in patients with TMJ diseases was performed for a comparative analysis of the bone elements of both TMJs, and we adjusted the coordinate system according to the foramen rotundum, which were displayed on the coronal reformat, the axial layer was aligned with their level. Then, on the axial reformat, the frontal layer was aligned along them, and the sagittal layer was installed at the anterior surface of the foramen magnum. In the sagittal reformat, the frontal layer was oriented parallel to the posterior edge of the n / h branch (Figure 1).



Figure Nº 1. Targeted visualization of the bone elements of the TMJ of patient K., born in 1965 (CT was done when the teeth were closed in the central center)

### THE FOLLOWING PARAMETERS WERE DETERMINED ON THE CORONAL REFORM:

- the angle between the long axis of the right and left head  $n\ /\ h$  and the mid-sagittal plane;
- the difference between the long axis of the heads  $n\ /\ h$ , projected onto the mid-sagittal plane;
- the thickness of the outer and inner cortical plates of the left and right angles n / h;
- densitometry of the external and internal cortical plates of the left and right angles of the n / h; densitometry of the coronoid processes.
- Axial reform measures were used to measure:

- - the largest anteroposterior size of the right and left heads of the n / h;
- - the largest mediolateral size of the right and left heads n / h;  $\,$
- - the angle between the long axis of the right and left heads n / h and the mid-sagittal plane;
- - the distance between the geometric centers of the heads of the n / h and the mid-sagittal plane, measured along a line passing through the geometric centers of the heads of the n / h perpendicular to the mid-sagittal plane;



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- the difference between the geometric centers of the heads  ${\sf n}$  /  ${\sf h}$ , projected onto the mid-sagittal plane;
- the difference between the long axis of the heads n / h, projected onto the mid-sagittal plane; the greatest condylar width;
  - the smallest condylar width.

On the sagittal reformat, densitometry of the outer and inner cortical plates of the middle part of the body  $n\ /\ h$  was performed and their thickness was measured.

To do this, on the axial reformat with the left mouse button, the interactive coordinate system was captured and moved to the head under study. The coronal axis was aligned with its mediolateral longitudinal axis. In the coronal reformat, the sagittal axis, and in the sagittal reformat, the coronal plane was oriented along the n / h branch. Thus, each of the mandibular heads was displayed on the monitor screen separately, and the coordinate system corresponded to the proper axes of the bone elements of the temporomandibular joint.

First, the analysis of the qualitative characteristics was carried out. For this, the following parameters were evaluated:

- the position of the head of the lower jaw in the glenoid fossa with the usual occlusion;
- the height and symmetry of the temporomandibular joint space;
  - the contours of the condylar process;
  - the presence of signs of osteoarthritis.
- Then the analysis of the angular and linear parameters of the bone elements of the selected temporomandibular joint was started. For this purpose, the following was determined on the sagittal reformat:
- - the depth of the glenoid fossa from the highest point of the glenoid fossa to the line connecting the lowest point of the articular tubercle to the lowest point of the external auditory canal;
- - anterior articular space the shortest distance between the most anterior point of the head of the lower jaw and the posterior slope of the articular tubercle;
- - upper articular space the smallest distance between the highest point of the articular head and the highest point of the glenoid fossa;
- posterior articular space the smallest distance between the most distal point of the head of the lower jaw and the posterior wall of the glenoid fossa;
- the angle between the posterior surface of the head of the lower jaw and the branch of the lower jaw;

- thickness and densitometry of the cortical plate of the anterior and distal surfaces of the lower jaw head;

When carrying out a variational analysis of the values of the largest anteroposterior dimensions of the right heads of the n / h in the axial plane, we obtained figures from 3.4 mm to 10.6 mm, the left ones - from 3.0 mm to 11.2 mm. Measurements in the axial plane of the largest mediolateral size of the heads made it possible to determine the minimum and maximum values for the right (8.4 mm and 22.2 mm) and left (10.2 mm and 22.4 mm) n / h heads - this shape of the n / h heads indicates variability TMJ anatomy.

Bone structures of the temporomandibular joint in the CG or normally had clear and even contours, compact and cancellous bone tissues were clearly differentiated. In places of muscle attachment, compaction of the cortical plate was determined. The shape of the n / h condylar processes was symmetrical, the thickness of the cortical plate was about 1 mm. When performing measurements on CT of the temporomandibular joint of patients in the frontal plane, it was found that the angle between the long axis of the right articular head and the midsagittal plane was  $65.4 \pm 1.2$  mm, and the left one was  $61.2 \pm 1.1$  mm.

When measurements were taken in the axial plane, the average value of the largest condylar width was  $111.1 \pm 1.1$  mm, and the smallest -  $74.1 \pm 1.6$  mm. The largest cross-sectional area of the right head of the condylar process was  $112.8 \pm 2.2$  and  $101.4 \pm 2.3$  for the left one. The cross-sectional area of the base of the neck of the right and left condylar processes was  $72.3 \pm 3.2$  and  $70.4 \pm 3.2$ , respectively.

The results of a clinical conversation with patients when using a semi-structured interview characterizing his emotional-volitional sphere, as well as features of sleep, the following somatoform complaints were identified, reflecting not only the general background of mood, the emotional state of patients, but also associated with the painful physiological changes in him - impaired appetite, sleep, discomfort in the heart and subjective respiratory distress; at the same time - Anxiety - MG-1 = 35.9%; MG-2 = 33.1%; MG-3 = 24.9%: - Irritability = 24.1%; = 18.8%; = 17.2%: - Emotional lability = 11.8; = 10.4%; = 9.6%: - Decreased mood background = 80.8%; = 82.5%; = 59.3%: -Decreased appetite = 5.7%; = 7.1%; = 8.6%: -Tearfulness = 18.8%; = 16.9%; = 14.8%: - General weakness = 23.7%; = 22.1%; = 8.6%: - Feeling of tension = 19.6%; = 19.5%; = 22.5%: - Chest pressure = 5.3%; = 3.2%; = 6.2%: - Presomnic disorders = 21.2%; = 22.1%; = 4.8%: - Introsomnic disorders = 11.8%; = 10.4; = 7.2%: - Protosymnic disorders = 8.2%; = 7.8%; = 2.4%.



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As a result of the analysis, the symptomatic questionnaire SCL-90-R: - Depressive mood was noted in 30.6% of MG-1 patients; 27.9% of the patient in MG-2 and 11% of the patient in MG-3: - Decreased efficiency - 48.6; - 42.2%; 51.7%: - Signs of mental anxiety - 52.2%; - 45.5%; - 38.3%: - Complaints about somatic anxiety - 49%; - 50% and 23% of patients, respectively.

Analysis of the results of the SF-38 (Medical Outcomes Study Short Form, Health Status Survey) questionnaire of quality of life (QOL), indicates that there were no average indicators for the SF-38 subscales and their comparison with the average norm, physical activity and, accordingly, work capacity in the study groups were not reduced, and they coincide with clinical observations showing that the majority of patients retained their working capacity and did not resort to frequent use of sick leave, which released them from work. At the same time, it is noted - physical functioning (SF1) 0.77; - role functioning due to physical condition (SF2) 0.409; - pain intensity (SF3) 0.93; - general health (SF4) 0.51; - vital activity (SF5) 0.86; - social functioning (SF6) - 0.88; role functioning due to emotional state (SF7) 0.86; mental health (SF8) 0.867.

At the same time, according to the results of psychological testing and assessment of patient complaints, the following adaptation groups were identified: - "Healthy" 112 (18.42%) - a group with a high ability to adapt; - a group with an average level of adaptability of 158 (25.98%), in which somatic complaints and psychological aberrations were revealed, but the potential ability to adapt was preserved; - a group with a low ability to adapt 338 (55.59%). At the same time, according to the methods of K. RMGers and R. Daimon (Hotelling's Trace), multivariate multivariate analysis indicates that; adaptability - 144.14; - maladjustment - 32.21; deceit - 7.92; - deceit + - 7.22; self-acceptance -18.11; self-rejection - 10.04; - acceptance of others -16.22; - rejection of others - 10.40; - emotional comfort - 8.40; - emotional discomfort - 10.44; internal control - 24.38; - external control - 11.22; dominance - 4.25; - statement - 9.23; - escapism -3.21 was observed in the subjects. This fact allows us to conclude about the importance of studying the social and psychological adaptation of patients with SDS of the TMJ in the integrative diagnosis of this suffering and the complex of therapeutic measures associated with it.

Thus, the study carried out indicates a high prevalence of symptoms of BSD TMJ; with a predominantly mixed genesis of suffering in patients with TMJ SD, the following clinical phenomena occurred: - the presence of pain with predominantly one-sided irradiation; - unilateral localization of areas

of hyperesthesia in the face area; - the presence of local and diffuse pain in the TMJ; - the presence of pain in the TMJ associated with the load on it, which occurred during the period of exacerbation or subsiding exacerbation of the TMJ; - the presence of pain and discomfort in the area of the chewing muscles with the presence / absence of local pain; -Difficulty chewing and the occurrence of pain with it: a feeling of "constriction" and discomfort in the face area; - limiting the amplitude of opening the mouth; displacement n / h when opening the mouth; - the presence of "noise" phenomena associated with the tension of the articular-ligamentous apparatus. Also, the psycho-neurological factor distinguishing the studied groups of the examined patients was the nature of their QOL. With somatoform inclusions, a slight decrease in QOL indicators was found due to unpleasant "subjective sensations", "general health at the present time," vital activity due to emotional problems, as well as on the "vitality" and "social activity" subscales. In addition to studying the intrapsychic parameters that ensure the social adaptation of patients with TMJ SD according to the scale of "social and psychological adaptation", a negative influence of somatoform inclusions on them was found, which is most pronounced with a mixed genesis of suffering, manifested at a low level of acceptance of other persons, as well as a low level of acceptance. oneself, the presence of emotional discomfort, which has a very different nature, as well as externality, that is, a strong dependence on other people.

#### LIST REFERENCE

- 1. Антоник, М.М. Компьютерные технологии комплексной диагностики и лечения больных с патологией окклюзии зубных рядов, осложненной мышечно-суставной дисфункцией: автореф. дис. ... д-ра мед. наук М., 2012. 43 с.
- 2. Буланова Т. В. Магнитно-резонансная томография в диагностике заболеваний и травм височно-нижнечелюстного сустава: автореф. дис. ... д-ра мед. наук М., 2005. 22 с.
- 3. Бунина, М. А. Этиотропное и патогенетическое лечение болезней мышечного и височно-челюстного суставного комплекса: автореф. дис. ... д-ра мед. наук М., 2001. 19 с.
- Importance of medical and social factors in etiolMGy of carious and non-carious diseases of children, SA Gafforov, OO Yarieva -International Journal of Pharmaceutical Research, 2019



Volume-3, October-2021 **ISSN: 2749-3644** 

- 5. Improving the methods for the diagnosis of nonarticular patholMGy of the temporomandibular joint, GS Amrulloevich, AN Hasanovich Journal of Critical Reviews, 2020
- Idiyev G.E., Gaffarov S.A. The importance of neurolMGical methods in diagnosis of disorders of the activity of the jaw lower jaw/ International Conference on Social and Humanitarian Research// Germany. – 2021. – P. 126-130
- 7. Kazakova N.N. Dental status in patients with inflammatory disease sof the joints// «Актуальные вызовы современной науки» XIVIII Международная научная конференция. Переяслав. 2020. С .57-58.
- 8. Идиев Г.Э., Гаффаров С.А. Эпидемиология, этиопатогенез и диагностика дисфункции височно-нижнечелюстного сустава. // Тиббиётда янги кун. Бухара. 2020. № 3. Р.47-51.
- 9. Егоров П. М., Карапетян И. С. Болевая дисфункция височно-нижнечелюстного сустава //М.: Медицина. 1986. Т. 128.
- 10. Казакова Ю. М., Демидова А. А. Лечебный массаж и миотерапия при лечении пациентов с симптомами дисфункции височно-нижнечелюстного сустава Белорусский государственный медицинский университет //ББК 5 я73 Т78 Сборник рецензирован Рецензерен (БГМУ); канд. мед. наук, проф. СА Алексеев (БГМУ); канд. мед. наук, доц. АВ Борисов (БГМУ); д-р мед. наук, проф. ИА Карпов (БГМУ); д-р мед. наук. С. 70.
- 11. Колтунов А. В. Топографо-анатомические взаимоотношения связочного аппарата и капсулы височно-нижнечелюстного сустава при различных состояниях окклюзии //Институт стоматологии. 2010. №. 1. С. 96-98.
- 12. Пантелеев В. Д. и др. Исследование психологического статуса пациентов с дисфункциями височно-нижнечелюстного сустава //Стоматология. 2014. Т. 93.  $N^{\circ}_{2}$ . 1. С. 34-36.
- 13. Пузин М. Н., Шубина О. С., Пшепий Р. А. Аффективные расстройства в структуре диагностики и лечения дисфункции височно-нижнечелюстного сустава //Российский стоматологический журнал. 2002. № 5. С. 37-42.
- 14. Kazakova N.N. The Chronic Catarrhal Gingivitis Diagnosis Specifics in Patients with Rheumatism// JournalNX. -2020. №11(6). P. 396-400

- 15. Сысолятин П. Г. и др. История развития хирургии височно-нижнечелюстного сустава //Бюллетень сибирской медицины. 2016. Т. 15. №. 2.
- 16. Тлустенко В. П., Садыков М. И., Нестеров А. М. Электромиографическая характеристика функционального состояния собственножевательных и височных мышц (часть 1) //Врач-аспирант. 2011. Т. 47. №. 4.3. С. 493-499.
- 17. Тревел Д. Г. Миофасциальные боли/Дж. Г. Тревел, ДГ Симоне //М.: Медицина. 1992. Т. 1. С. 255.
- 18. Amrulloevich G. S., Ahadovich S. A., Anatolyevna B. E. Clinical characteristics of the dentition in young men, the role of metalloproteinases and connective tissue markers in the development of temporomandibular joint patholMGy and their correction //European Journal of Molecular & Clinical Medicine. − 2020. − T. 7. − №. 3. − C. 3804-3814.
- 19. Amrulloevich G. S., Hasanovich A. N. Improving the methods for the diagnosis of nonarticular patholMGy of the temporomandibular joint //Journal of Critical Reviews. 2020. T. 7. №. 18. C. 875-880
- 20. Costen J. B. I. A syndrome of ear and sinus symptoms dependent upon disturbed function of the temporomandibular joint //Annals of OtolMGy, RhinolMGy & LaryngolMGy. − 1934. − T. 43. − № 1. − C. 1-15.
- 21. Gafforov S. A., Yarieva O. O. Importance of medical and social factors in etiolMGy of carious and non-carious diseases of children //International Journal of Pharmaceutical Research. 2019. T. 11. №. 3. C. 1026-1029.
- 22. Казакова Н.Н. Использование бактериофагов в профилактике воспалительных заболеваний полости рта при ревматизме// «Актуальные вызовы современной науки» XIVIII Международная научная конференция. Переяслав. 2020. С. 90-92.
- 23. Manfredini D., Lobbezoo F. Relationship between bruxism and temporomandibular disorders: a systematic review of literature from 1998 to 2008 //Oral Surgery, Oral Medicine, Oral PatholMGy, Oral RadiolMGy, and EndodontolMGy. − 2010. − T. 109. − №. 6. − C. 26-50.
- 24. Kazakova N.N., Sobirov A.A. Changes in saliva in children with comorbidities// Journal For Innovative Development in Pharmaceutical



Volume-3, October-2021 **ISSN: 2749-3644** 

and Technical Science. – 2021. -  $\mathbb{N}^{0}$  4(3). – P. 28-31.

- 25. Ж.Н. Бакаев. Доимий тишларнинг чиқиши вақтининг ўзгариши натижасида тиш-жағ тизим аномалияларининг этиопатогенези, замонавий ёндашув.(Адабиётлар шархи) «Тиббиётда янги кун», 4 (32) 2020, С. 119-123
- 26. Olimov S. Sh., Bakaev Zh. N., Rahmonova F. Z. The use of a modern computerized system in the diagnosis, prMGnosis and treatment of retentive permanent postyannyh canines / European Journal of Research Development and Sustainability (EJRDS) //Vol. 2 No. 2, February 2021, ISSN: 2660-5570, P.76-78.