Methodical instructions
for independent work for students during preparation
to practical (seminar) classes and in class

<table>
<thead>
<tr>
<th>Academic discipline</th>
<th>Surgical dentistry</th>
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<td>Module №</td>
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<th>Course</th>
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<td>Faculty</td>
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1. **Relevance of the topic.**

Inflammatory-dystrophic diseases of the TMJ are quite common diseases that are very complex in their clinical course and difficult to treat, the frequency of which increases with age. Therefore, knowledge of the clinic, methods of treatment and prevention of inflammatory-dystrophic diseases of the TMJ is relevant today in the study of this topic.

2. **Specific objectives:**

2.1. Define what is arthritis, osteoarthritis, osteoarthritis of the TMJ.

2.2. Analyze the etiology and pathogenesis of arthritis, osteoarthritis, arthrosis of the TMJ.

2.3. To offer a plan of examination of a patient with acute and chronic arthritis, arthrosis-arthritis, arthrosis of the TMJ.

2.4. Classify arthritis, arthrosis, arthrosis of the TMJ.

2.5. List the main clinical signs of acute arthritis of the TMJ.

2.6. List the main clinical signs of chronic arthritis of the TMJ.

2.7. List the main clinical signs of osteoarthritis of the TMJ.

2.8. List the main clinical signs of osteoarthritis of the TMJ.

2.9. To offer treatment schemes for patients with arthritis, arthrosis-arthritis, arthrosis of the TMJ.

2.10. To analyze the data of additional methods of examination of patients with arthritis, arthrosis-arthritis, arthrosis of the TMJ.

3. **Basic knowledge, skills, abilities necessary for studying the topic (interdisciplinary integration).**

<table>
<thead>
<tr>
<th>Names of previous disciplines</th>
<th>Acquired skills</th>
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<tbody>
<tr>
<td>1. Ethics and deontology</td>
<td>Establish psychological contact with the patient</td>
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<tr>
<td>2. Normal anatomy</td>
<td>Know the anatomical structure of the temporomandibular joint</td>
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<td>3. Normal physiology</td>
<td>Know the functionality of the temporomandibular joint is normal</td>
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<td>4. Pathomorphology</td>
<td>Describe morpho-functional changes in the temporomandibular joint in different types of its pathology</td>
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<td>5. Propaedeutics of</td>
<td>Apply methods of examination of the patient with</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Acute arthritis</td>
<td>This is an acute inflammatory disease of the joint</td>
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<tr>
<td>Chronic arthritis</td>
<td>This is a chronic inflammatory disease of the joint, which alternates between periods of remission and exacerbation of the process</td>
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<tr>
<td>Osteoarthritis</td>
<td>This is a chronic inflammatory-dystrophic disease of the joint</td>
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<tr>
<td>Osteoarthritis</td>
<td>This is a chronic degenerative joint disease</td>
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4.2. Theoretical questions for the lesson:

1. Etiology and pathogenesis of arthritis, osteoarthritis, osteoarthritis of the TMJ.
2. Plan of examination of patients with acute and chronic arthritis, arthrosis-arthritis, arthrosis of the TMJ.
3. Classifications of arthritis, arthrosis-arthritis, arthrosis of the TMJ.
4. Clinical signs and methods of treatment of acute arthritis of the TMJ.
5. Clinical signs and methods of treatment of chronic arthritis of the TMJ.
6. Clinical signs and methods of treatment of arthrosis-arthritis of the TMJ.
7. Clinical signs and methods of treatment of arthrosis of the TMJ.
8. Schemes of treatment of patients with arthritis, arthrosis-arthritis, arthrosis of the TMJ.

4.3. Practical works (tasks) performed in the classroom:
1. Additional methods of diagnosis of inflammatory-dystrophic diseases of the TMJ.
2. Maintaining medical records of patients with inflammatory-dystrophic diseases of the TMJ.
3. Methods of treatment of patients with inflammatory-dystrophic diseases of the TMJ.
4. Surgical methods of treatment of patients with inflammatory-dystrophic diseases of the TMJ.
5. Mechano- and physiotherapy in the complex treatment of patients with inflammatory-dystrophic diseases of the TMJ.

**Topic content:**

Arthritis. Depending on the etiology of the disease, there are infectious and traumatic arthritis, and the nature of the course - acute and chronic. Infectious arthritis can be nonspecific or specific. Traumatic arthritis is the result of mechanical damage.

Acute arthritis. Acute arthritis of the TMJ of traumatic etiology occurs as a result of strong mechanical action: impact, bruising, excessive opening of the mouth, etc.

Patients complain of sharp pain in the joint at the time of injury. When you try to open your mouth there is pain, the chin is shifted towards the damaged joint. Edema develops. Palpation of the joint is sharply painful. At X-ray inspection if there is no fracture of bone structures of a condylar process, deviations from norm are not defined. Exceptions are cases when there is a rupture of the ligament, accompanied by hemorrhage into the joint; in such cases the expansion of a joint crack is defined on the radiograph.

Acute arthritis of infectious origin usually develops on the background of acute tonsillitis, hypothermia, influenza, etc. Rheumatic and rheumatoid arthritis are the result of hematogenous infection or the spread of infection with continued otitis, mastoiditis, osteomyelitis of the jaw, purulent mumps and mumps.

The onset of the disease is acute. There are severe pains in the joint, which are exacerbated when trying to make movements of the jaw. Sometimes the pain can radiate to the ear, tongue, temple, nape, along the auricular-temporal, large auricular, small occipital nerves, the auricular branch of the vagus nerve, which has an anastomosis with the lingual-pharyngeal nerve. However, as a rule, pains are pulsating and local, distinguishing them from pains at a neuralgia of a trigeminal nerve. Mouth opening is limited - by 3-5 mm.

The development of purulent arthritis is accompanied by the formation of infiltrates in the joint, hyperesthesia of the skin, it is tense, does not gather in the fold, hyperemic. The external auditory canal is narrowed: patients notice a
decrease in hearing acuity, dizziness. When you press your finger on the chin forward and up, the pain increases. Body temperature is raised to 38 °C, ESR is increased, the reaction to C-reactive protein is positive. On the radiograph at an exudate effusion the articular crack is expanded. Rheumatoid arthritis can affect both joints, although it should be noted that in recent years it is much less common. Examination of the patient usually reveals heart disease: defects, rheumatic heart disease, etc.

Rheumatoid arthritis usually affects one of the TMJ, but patients also notice pain in other joints: shoulder, hip or knee. In this case, the TMJ is very rarely affected first; the frequency of its defeat at rheumatoid arthritis reaches, according to a number of authors, 50,7% [Kanazyrska Ts., Mazharov D., 1978]. Visible changes in the heart are not detected. Rheumatoid arthritis is not characterized by volatile pain.

Acute arthritis must be differentiated from acute otitis, trigeminal neuralgia, pericoronaritis, as well as from a number of other diseases, in the clinical picture of which the manifestations of arthropathy are very pronounced: dermatomyositis, gout, acute infectious arthritis of viral etiology, Behcet's disease, polymorphism, syndrome syndrome etc.

Treatment of acute arthritis of any etiology begins with resting the joint. This is achieved by means of a sling-shaped bandage, which is individually made, and an interdental one that separates the bite of the plate or pad, which is applied to the affected side for a period of 2-3 days. Food should be liquid.

Treatment for traumatic arthritis is carried out in order to relieve pain, achieve resorption of blood spilled into the joint, as early as possible and to achieve full recovery of mandibular function. The patient is prescribed analgesics (analgin 0.25 g 3 times a day) and local hypothermia for 2-3 days.

Subsequently, UHF therapy for 10-15 minutes daily for 6 days, electrophoresis of potassium iodide and novocaine (alternately). At the same time may be recommended compresses with ronidase, paraffin - or ozokeritotherapy, mud therapy. At long pains it is necessary to appoint Bernard's diadynamic currents (2-3 sessions).

Treatment of rheumatic and rheumatoid arthritis is carried out by conservative means and necessarily together with a rheumatologist. The complex of prescribed therapy includes anti-inflammatory nonsteroidal, antibacterial, steroid drugs. It is very restrained, but it is necessary to treat the recommendations for the use of intra-articular administration of drugs, you can not simultaneously enter the joint more than 1 ml of a solution of any substance, as this leads to stretching of the joint bag. The tasks of the dentist are the rehabilitation of the patient's oral cavity and rational dental prosthetics to normalize the bite height.
At purulent arthritis, urgent operative treatment of the patient is shown: dissection and drainage of the center of an inflammation which do in a hospital.

At the stage of post-treatment, patients are prescribed physiotherapy: dry heat, UHF therapy, electrophoresis, diathermy, compresses.

At untimely and insufficiently complete treatment, acute purulent and traumatic arthritis can be complicated by ankylosis, especially in children. The course of acute rheumatic and rheumatoid arthritis can become chronic.

Chronic arthritis. Chronic arthritis is characterized primarily by aching joint pain, stiffness, crunch, stiffness in the morning and after a more or less prolonged state of rest. The pain is involuntary, constant, exacerbated by the restoration of mandibular function. The patient is able to open his mouth by 2-2.5 cm. Opening of the mouth is accompanied by a moderate crepitating, and sometimes strong crunch, with the chin shifted toward the affected joint. The color of the adjacent skin may not be changed, but palpation of the joint always causes increased pain.

The radiograph shows a narrowing of the joint space - the result of reactive and later destructive changes in the integumentary cartilage of the head of the mandible and the articular fossa.

The general condition of the patient remains satisfactory, body temperature is normal. There are no visible changes in the uterus, the ESR is increased to 25-35 mm / h. With exacerbation of the process, the clinical course becomes acute inflammation.

Treatment of patients with rheumatic and rheumatoid arthritis is carried out by rheumatologists. During the transition of traumatic arthritis to the chronic stage, ultrasound therapy, paraffin and ozokerite therapy, chewing muscle massage, electrophoresis of bee venom, medical bile, and iodine drugs are prescribed. Myogymnastics gives a good result [Rubinov IS, 1965]: dosed opening of a mouth without extension of a mandible is made. To do this, the patient sits on the stool, leaning the back of the head against the wall, and a fist presses on the chin when opening and closing the mouth. The patient does such exercises independently every morning and 2-3 more times during the day for 3-5 minutes for 4-6 weeks.

Modification of the described method of myogymnastics was proposed by BK Kostur et al. (1981). The authors recommend creating a dosed pressure on the chin not only in the direction from the bottom to the top and from front to back, but also in the direction opposite to the displacement of the jaw when opening the mouth. Such exercises are repeated 5-10 times, spend 3-4 sessions a day, making sure that the pressure on the chin is not excessive and does not cause pain.

It is very important that in the complex of treatment the sanitation of the oral cavity and nasopharynx was made, and in the presence of indications rational prosthetics of teeth was carried out.
In the effective treatment of changes in the joint in rheumatoid arthritis, in contrast to those in rheumatoid arthritis, are completely reversible.

Infectious-specific arthritis. Infectious-specific arthritis is relatively rare. There are gonorrheal, tuberculous, actinomycotic, syphilitic arthritis, etc. They arise as a result of spread of an infection on continuation or at its penetration into a joint by a hematogenous (lymphogenic) way.

Gonorrheal arthritis develops during the first month of the disease, but with a complicated form of gonorrhea, on the background of chronic urethritis, it can appear at a later date. The disease begins acutely with the onset of sharp pain, swelling of the soft tissues around the affected joint, narrowing of the ear canal, which leads to a decrease in hearing acuity. The primary serous form of inflammation quickly turns into purulent. An infiltrate is formed. The radiograph shows the expansion of the joint space. The disease is characterized by the early formation of muscle contracture, lesions of the cartilaginous surfaces of the articular surfaces and a tendency to ankylosing spondylitis.

There are three forms of tuberculous arthritis: primary bone, primary synovial and infectious-allergic. The disease begins unnoticed, develops sluggishly, lasts a long time. At radiography gradual resorption of bone structures of a head of a jaw is defined. With tuberculous arthritis, fibrous ankylosis can develop.

Actinomycotic arthritis is usually the result of the spread of the primary focus to those underlying the tissue. The pathological process, affecting the joint capsule, causes the development of unstable contracture, alternating with remissions. The general condition of the patient changes a little: weak pains in a joint which amplify at attempt to open a mouth disturb. During treatment and after its completion morphological changes in a joint do not reveal.

Syphilitic arthritis is characterized by a sluggish course, mild pain. The disease is extremely rare. Treatment of patients with infectious-specific arthritis is aimed at eliminating the underlying disease and is carried out by appropriate specialists.

Osteoarthritis. The etiology of the disease is based on dystrophic processes that develop against the background of prolonged, sluggish inflammation or chronic microtrauma, among which a significant place is occupied by partial adentia, especially in unilateral end defects, dental deformity and improper relationship of articulation prostheses. As a result of simultaneous processes of inflammation and degeneration, accompanied by destruction and proliferation of cartilage and bone tissue, develop the phenomena of osteosclerosis and osteoporosis of the anatomical structures of the TMJ, which leads to their
deformation and violation of congruence. Depending on the severity of these conditions, there are sclerosing and deforming osteoarthritis.

Patients complain of dull pain, which is exacerbated by functional load on the joint. In severe cases, with the development of secondary reactive synovitis, they become permanent, which is especially evident in cold wet weather, overload, in the evening and during the initial movements after rest. Senile pains are similar in their characteristics. They are also characterized by sensations of heaviness and aches in the bones, but are short-lived and low in intensity. Patients often complain, in addition, pain in the eye and ear on the affected side of the joint, headache, glossalgia, paresthesia of the oral mucosa, decreased hearing acuity.

As a result of violation of the congruence of the articular surfaces, muscle spasm, changes in the joint capsule and periarticular tissues develops stiffness in the joint. Patients report rapid fatigue, a feeling of tightness, but the limitation of joint function in them is usually moderate and due to pain or bone growths. Fibrous or bony ankylosis never occurs.

As the formation of irregularities on the articular surfaces as a result of calcareous deposits and sclerosis, a rough crunch appears during the movements of the head of the mandible. There are no local signs of inflammation: the color of the skin is not changed, it is not swollen, but the sensitivity in the auricular-temporal region may be reduced, due to neuritis of the developing auricular-temporal nerve.

The general condition of the patient remains satisfactory. There are no pronounced pathological changes in the blood, but ESR is increased, and the reaction to C-reactive protein is positive.

Clinical manifestations of sclerosing osteoarthritis are less pronounced than deforming. On radiographs in sclerosing arthrosis is determined by sclerosis of the superficial and underlying layers of the spongy bone of the anatomical formations of the joint with some deformation of the head of the mandible. At a deforming arthrosis there are bone growths in the form of exostoses and osteophytes that leads to irreversible structural changes of a head of a mandible and a joint tubercle. The joint space is narrowed. The disease progresses slowly.

The diagnosis is established on the basis of evaluation of the results of clinical, radiographic and laboratory studies.

Treatment of patients is complex: medical, physiotherapeutic, orthopedic and, in the presence of indications, operative. Drug therapy is prescribed by rheumatologists. It includes brufen, voltaren, B vitamins, steroid drugs. However, it should be borne in mind that intra-articular administration of steroids is only ancillary and is a symptomatic therapy. This method should not be recommended in the later stages of the disease with the development of secondary osteoarthritis.
and in the presence of signs of osteoporosis, as it promotes their progression. The use of corticosteroids is contraindicated in deforming osteoarthritis.

In combination with drug treatment prescribe physiotherapy: electrophoresis of bile, bee venom, lidase, iodine. Can also be recommended: paraffin and ozokerite therapy, mud therapy, infrared radiation and laser radiation. At the same time prescribe masticatory muscle massage and therapeutic gymnastics. An important condition for achieving a favorable result is the implementation of rational dental prosthetics.

**Materials for self-control:**

**Means for control.**

Test tasks

1. The patient, 42 years old, complains of sharp pain in the left TMJ with irradiation in the ear, headache, deterioration of the general condition, inability to chew and limited mouth opening. The face is asymmetrical due to swelling in the left TMJ. The skin in this area is hyperemic. The pain is exacerbated by minimal movements of the lower jaw. Palpation of the joint causes severe pain. Mouth opening is limited to 15-20 mm. What diagnosis is most likely in this case?

**Answer options:**

A . Acute arthritis of the left TMJ.
B . Acute purulent mumps.
C . Subluxation of the lower jaw.
D . Deforming arthrosis of the left TMJ.
E . Myogenic osteoarthritis.

**Correct answer:**

A . Acute arthritis of the left TMJ.

2. The patient, 32 years old, was diagnosed with chronic arthritis of the left temporomandibular joint. Which of the symptoms is most characteristic of this disease?

**Answer options:**

A . Crunching during movements of the lower jaw.
B . Pain radiating to the ear, temple, nape.
C . Pain of varying intensity at rest.
D . The pain is exacerbated by movements of the lower jaw.
E . Forced position of the lower jaw.

**Correct answer:**

A . Crunching during movements of the lower jaw.
3. The patient, 47 years old, went to the doctor with complaints of limited mobility of the lower jaw in the morning, periodic dull pain in the right TMJ and stiffness in the joints. According to the patient, the stiffness disappears within a day after the "development" of the joints. Objectively: the face is symmetrical, the opening of the mouth is limited to 2.5 cm, there is a crunch in the joints. The midline is shifted to the right by 3-4 mm, palpation of the right articular head is painful. Make a preliminary diagnosis.

Answer options:
A . Right anterior mandibular dislocation.
B . Acute serous arthritis of the right TMJ.
C . Osteoarthritis of the right TMJ.
D . Chronic arthritis of the right TMJ.
E . Fracture of the right condyle of the lower jaw.

Correct answer:
C . Osteoarthritis of the right TMJ.

4. A 48-year-old woman complained of dull aching pain in the left TMJ, which is aggravated by eating solid food, which appeared almost 2.5 years ago. Objectively: the opening of the mouth is somewhat limited, when opening the jaw is shifted to the side, there is a crunch in the TMJ. In the oral cavity - secondary partial adentia. The radiograph shows sclerosis of the cortical plate of the articular head and narrowing of the joint space. What is the most likely diagnosis?

Answer options:
A . Chronic TMJ arthritis.
B . Acute TMJ arthritis.
C . Osteoarthritis of the TMJ.
D . Painful dysfunction of the TMJ.
E . Exacerbation of chronic arthritis of the TMJ.

Correct answer:
C . Osteoarthritis of the TMJ.

5. A 36-year-old man complained of aching pain in the left TMJ, which is aggravated by eating solid food, which appeared about 2 years ago. Objectively: the opening of the mouth is somewhat limited, when opening the jaw is shifted to the side, there is a crunch in the TMJ. In the oral cavity - there are no molars on the lower and upper jaws. The radiograph shows sclerosis of the cortical plate and deformation of the joint head, narrowing of the joint space. What is the most likely diagnosis?

Answer options:
A. Chronic TMJ arthritis.
B. Acute TMJ arthritis.
C. Osteoarthritis of the TMJ.
D. Painful dysfunction of the TMJ.
E. Exacerbation of chronic arthritis of the TMJ.

Correct answer:
C. Osteoarthritis of the TMJ.

6. The patient, 43 years old, complains of sharp pain in the left TMJ with irradiation in the ear, headache, deterioration of the general condition, inability to chew and limited mouth opening. Objectively: the face is asymmetric due to edema in the left TMJ. The skin in this area is hyperemic. The pain is exacerbated by minimal movements of the lower jaw. Palpation of the joint causes severe pain. Mouth opening is limited to 15 mm. Make a diagnosis.

Answer options:
A. Acute purulent mumps.
B. Deforming arthrosis of the left TMJ.
C. Painful dysfunction of the TMJ.
D. Acute arthritis of the left TMJ.
E. Subluxation of the lower jaw.

Correct answer:
D. Acute arthritis of the left TMJ.

7. The patient, 42 years old, complains of pain in the left TMJ, which is exacerbated by small movements of the lower jaw with irradiation of pain in the left temporal area. The pain appeared 3 days ago after hypothermia. Body temperature 37.4 °C. Objectively: there is an asymmetry of the face due to swelling of the soft tissues of the left parotid region. The skin is not changed in color, palpation is sharply painful. Opening of a mouth is limited, there is a pain in the left TMJ, shift of a lower jaw to the left at mouth opening is noted.

Answer options:
A. Acute purulent arthritis of the left TMJ.
B. Osteoarthritis of the left TMJ.
C. Acute serous arthritis of the left TMJ.
D. Acute serous lymphadenitis of the left parotid region.
E. Acute serous mumps.

Correct answer:
C. Acute serous arthritis of the left TMJ.
8. A 36-year-old man complains of severe diffuse pain in the left TMJ with irradiation to the ear, headache, deterioration of general condition, inability to eat and limited mouth opening. Objectively: the face is asymmetric due to edema in the left TMJ. The skin in this area is hyperemic. The pain intensifies with minimal movements of the lower jaw, palpation of the joint causes severe pain. Mouth opening is limited to 15-20 mm. What diagnosis is most likely in this case?

**Answer options:**
A. Acute arthritis of the left TMJ.
B. Acute purulent mumps.
C. Subluxation of the lower jaw.
D. Deforming arthrosis of the left TMJ.
E. Myogenic osteoarthritis.

**Correct answer:**
A. Acute arthritis of the left TMJ.

9. Patient D., 36 years old, notes stiffness in the temporomandibular joints in the morning, which decreases in the evening, pain in both TMJ, swelling of the soft tissues around other joints, the presence of subcutaneous nodes near the elbow joint. What is the probable diagnosis?

**Answer options:**
A. Acute TMJ arthritis.
B. Infectious arthritis of the TMJ.
C. Osteoarthritis of the TMJ.
D. Chronic TMJ arthritis.
E. Rheumatic arthritis of the TMJ.

**Correct answer:**
E. Rheumatic arthritis of the TMJ.

10. A 60-year-old man complained of dull aching pain, crunch in the right TMJ, hearing loss, and a feeling of congestion in the right ear. Partial secondary adentia in the oral cavity. On radiographs of the TMJ: the articular cleft approaches a straight line, in places sharply narrowed, the depth of the articular fossa is reduced, the articular tubercle is smoothed, the articular surfaces are incongruent. Make a diagnosis.

**Answer options:**
A. Chronic TMJ arthritis.
B. Acute TMJ arthritis.
C. Osteoarthritis of the TMJ.
D. Painful dysfunction of the TMJ.
E. Exacerbation of chronic arthritis of the TMJ.

Correct answer:
C. Osteoarthritis of the TMJ.

Situational tasks

Task 1.
The man, 60 years old, complained of dull aching pains, crunch in the right TMJ, hearing loss, a feeling of congestion in the right ear. Partial secondary adentia in the oral cavity. On radiographs of the TMJ: the articular cleft approaches a straight line, in places sharply narrowed, the depth of the articular fossa is reduced, the articular tubercle is smoothed, the articular surfaces are incongruent. Make a diagnosis.

Answer options:
A. Chronic TMJ arthritis.
B. Acute TMJ arthritis.
C. Painful dysfunction of the TMJ.
D. Osteoarthritis of the TMJ.
E. Exacerbation of chronic arthritis of the TMJ.

Correct answer:
D. Osteoarthritis of the TMJ.

Solution algorithm:
To establish the diagnosis, you should pay attention to the patient's complaints (dull aching pain, crunch in the right TMJ, hearing loss, feeling of congestion in the right ear), the presence of secondary adentia, radiograph data (On radiographs of the TMJ: the joint space approaches a straight line, the depth of the articular fossa is reduced, the articular tubercle is smoothed, the articular surfaces are incongruent). Thus, the correct answer - D.

Task 2.
A 51-year-old woman went to the dentist with complaints of moderate pain in the left earlobe, which occurs after hypothermia or prolonged conversation, crunch in the TMJ. Ill for about 3 years. Objectively: the face is symmetrical. The skin is not changed in color. Mouth opening is free. On the radiograph of the left TMJ the zones of narrowing of a joint crack, the centers of osteoporosis and destruction of an articular head and an articular fossa are defined. Make a diagnosis.

Answer options:
A. Acute post-traumatic arthritis of the left TMJ.
B. Chronic arthritis of the left TMJ.
C . Osteoarthritis of the left thyroid.
D . Trigeminal neuralgia on the left.
E . Painful dysfunction of the TMJ.

Correct answer :
B . Chronic arthritis of the left TMJ.

Solution algorithm:
To establish the diagnosis, attention should be paid to the patient's complaints (moderate pain in the left earlobe, which occurs after hypothermia or prolonged conversation, crunch in the TMJ) and the results of radiological examination (narrowing of the joint space, foci of osteoporosis and ankle destruction). Thus, the correct answer is B.

3. The patient, 42 years old, complains of sharp pain in the right TMJ. Movements of the lower jaw are limited. Three days ago, the patient was injured (during the fall he hit his chin on a hard object). Objectively: the face is symmetrical, the bite is orthognathic, the opening of the mouth is limited to 2 cm. On tomograms, the contours of the bone structures of the articular surfaces are smooth, smooth. The presence of which disease can be assumed?

Answer options :
A . Rheumatic arthritis of the TMJ.
B . Muscle dysfunction syndrome.
C . Acute post-traumatic TMJ arthritis.
D . Deforming arthrosis of the TMJ.
E . TMJ ankylosis.

Correct answer :
C . Acute post-traumatic TMJ arthritis.

Solution algorithm:
To establish the diagnosis, you should pay attention to the patient's complaints (sharp pain in the right TMJ), history (three days ago he was injured - during the fall hit his chin on a solid object), objective examination (symmetrical face, orthognathic bite, opening mouth is limited to 2 cm) and the data of additional examination (on tomograms, the contours of the bone structures of the articular surfaces are smooth, smooth) can be diagnosed: acute post-traumatic arthritis of the TMJ.

Task 4.
The patient, 34 years old, complains of limited mouth opening, swelling and pain in the left TMJ, which occurred 3 days ago after the flu. Examination revealed soft tissue edema in the left TMJ, palpated enlarged and painful parotid lymph nodes.
Opening the mouth is painful by 1.2 cm. Palpation of the left TMJ through the external auditory canal is also painful. X-ray examination of the TMJ revealed dilation of the joint space.

1. What disease can we talk about?
2. Make a treatment plan.

**Solution algorithm:**

1. Post-influenza arthritis of the left TMJ. The presence of post-influenza inflammation in the left TMJ, surrounding soft tissues, enlargement and soreness of the parotid lymph nodes indicate the presence of inflammation in the left TMJ. The presence of exudate in the joint cavity causes limited mobility and persistence of severe pain, which is confirmed by X-ray examination - expansion of the joint space.

2. The treatment is complex, consists of anti-inflammatory therapy and FTL, which will activate local metabolic processes and stop pain in the left TMJ. Restriction of mouth opening, frugal diet.

Task 5.
The patient, 45 years old, complained of aching pain in both TMJs that occurred after sore throat. From the anamnesis it is known that the pain is associated with frequent inflammatory processes in the pharyngeal tonsils. Pain in the TMJ is accompanied by limited mobility of the lower jaw and opening of the mouth. Of the diseases noted frequent sore throats, ARI, rheumatic heart disease, pneumonia. At inspection - insignificant hypostasis in the field of both TMJ. At a palpation at movements of a lower jaw aside the limited mobility of articular heads which is followed by strengthening of pain is defined. In the oral cavity: orthognathic occlusion, the mucous membrane of the oral pharynx is hyperemic, the tonsils are enlarged, enlarged regional lymph nodes are identified. At X-ray inspection of TMJ there is an expansion of articular cracks, and the structures forming a joint are not changed.

1. Justify the diagnosis.
2. Make a treatment plan.

**Solution algorithm:**

1. Bilateral rheumatoid arthritis of the TMJ should be diagnosed based on clinical and radiological findings and additional examinations, such as positive tests for salicylates and pyridomonic acid, and existing cardiac muscle damage (rheumatoid arthritis).

2. Treatment should be joint with a rheumatologist.
Literature:

Basic:

Additional:

Electronic resources:
5. barrmathiars williams barrmathiars@gmail.com 2018

prepared by Steblovskiy D.V.