It is ratified
on meeting of chair
surgical stomatology
and maxillofacial surgery
with plastic and reconstructive
surgery of the head and neck
«28» August 2019
Protocol № 1  28.08.2019
The head of chair________ Avetikov D.S.

### METHODICAL RECOMMENDATIONS
FOR INDIVIDUAL WORK OF STUDENTS
DURING PREPARATION TO PRACTICAL (SEMINAR) LESSON

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<th>Educational discipline</th>
<th>surgical stomatology</th>
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<td>Module №</td>
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<td>Theme of the lesson №9</td>
<td>Phlegmon of orbit. Phlegmons of zygomatic, parotid-masticatory areas. Phlegmons of temporal area, ala-palatine and infratemporal fossas.</td>
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Poltava – 2019
1. ACTUALITY OF THEME
At present the problem of abscesses is very crucial. Indeed, the lower the economic situation in the country, the higher is the problem of phlegmon. It is not timely dental treatment at the dentist sooner or later lead to the development of abscesses. These problems are equivalent for both urban and rural areas.

2. CONCRETE AIDS:
2.1. Analyze and know the statistics, classification, characteristics of etiology and pathogenesis, clinical signs of inflammatory processes of the maxillofacial area;
2.2. Explain the methods of diagnosis of superficial and deep abscesses of maxillofacial area.
2.3. Submit to inspect a patient with superficial and deep odontogenic phlegmon of the maxillofacial area.
2.4. Classify deep odontogenic phlegmon of the maxillofacial area.
2.5. To explain the theoretical and clinical research on the problem of odontogenic abscesses maxillofacial.
2.6. Draw diagrams, graphs.
2.7. Review the plan of treatment of odontogenic phlegmon of the maxillofacial area.
2.8. Make a plan for the evaluation and treatment of patients with odontogenic phlegmon of the maxillofacial area.

3. BASE KNOWLEDGE, ABILITIES, SKILLS, NECESSARY FOR STUDY of THEME (INTERDISCIPLINARY INTEGRATION)

<table>
<thead>
<tr>
<th>Names of the previous disciplines</th>
<th>The received skills</th>
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<tbody>
<tr>
<td>1. Topographical Anatomy and Operative Surgery</td>
<td>Anatomic and topographic structure MFA, anatomy of teeth.</td>
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<tr>
<td>2. Pharmacology</td>
<td>Drugs used in the treatment of diseases of the teeth and mouth.</td>
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<td>4. Interdiscipline integration</td>
<td>The need of dental health dentists.</td>
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<td>5. Physiopathology</td>
<td>Stages of inflammation, pathogenesis formation of pus in the tissues.</td>
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4. TASKS FOR INDIVIDUAL WORK DURING PREPARATION TO LESSON.
4.1. List of basic terms, parameters, characteristic, which a student must master at preparation to lesson:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>1. Phlegmon</td>
<td>This diffuse purulent inflammation.</td>
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<tr>
<td>2. Fluctuation</td>
<td>This swing of fluid in inflammation.</td>
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<tr>
<td>3. Trismus</td>
<td>This the muscle dysfunction in.</td>
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4.2. Theoretical questions to lesson:
1. Anatomy of the maxillo-facial area.
2. Spaces of the maxillo-facial area.
3. The ways of infection in maxilla-facial space.
4.3. The practical works (tasks) to be performed in class:
1. The inspection of patients with phlegmon of pterigopalatine space.
2. To perform palpation to determine the fluctuation in inflammation.

4.3. Practical works (task) which are executed on lesson:
1. To determine fluctuations by palpation.
2. Perform the anesthesia by Bershe-Dubov.
3. Perform the anesthesia by Vishnevsky.
5. TABLE OF CONTENTS OF THEME:

Phlegmon – acute diffuse purulent inflammation of the tissue (subcutaneous, intramuscular, which tends to further interpretations of diffusion. Surgical anatomy recognize such facial phlegmons: 1) jaws phlegmon; 2) phlegmon of the mouth floor; 3) the pharyngeal phlegmon 4) phlegmon of the tongue; 5) phlegmon of the neck. There are primary and secondary phlegmon. Primary occur in the maxillofacial area and rarely its reason cannot be explained. Secondary developing against the background of osteomyelitis called osteophlegmon. As a complication of purulent lymphadenitis called phlegmonous adenitis. Phlegmonous adenitis develops as a result of melting of purulent lymph node.

**Phlegmons of orbital area** (phlegmone regionis orbitalis) localized in fat eye socket.

**Clinic:** proptosis of the eyeball and its limitations. This contributes to scar swelling and conjunctivitis (hemoz). Eyelids are swollen.

**Treatment.** The skin incision when it is done in the lower-outer edge of the eye socket.

**Phlegmons of the zygomatic area** (phlegmone regionis zygomatici). On the bottom edge of the zygomatic bone, zygomatic arch in parallel, the incision through the skin approach to inflammation of this area. Thus, the main orient is the place of the greatest fluctuations, considering the topography of the branches of the facial nerve.

**Clinic.** Complaints of pain is radiating to the temple and infraorbital area, possibly limited mouth opening.

**Submasseterial abscess** (phlegmone submasseterica) may occur in the tissue under masticatory muscles.

**Clinic.** Nabryak lower division bilyavuhovo chewing area. The central part of this edema is visualized on carbon mandible. At the site of attachment of the masticatory muscles.

**Treatment.** Lesion, length of 5-7 cm, which is bordering the angle of the mandible in the form of an arc, cut through soft tissue to bone. In the area of attachment of the masticatory muscles to the corner of the lower edge of the branches of the lower jaw it is partially cut and peeled through this muscle always keeping outer surface of the branches of the lower jaw, reach ulcer or pre defoliate muscle along the muscle fibers to the appearance of pus.

**Phlegmons of the parotid area** (phlegmone regionis parotidei). Inflammation distributed foci in 48 and 38 teeth. Spreads by lymphogenous way from the upper molars section.

**Clinic.** Complaints of pain in parotid-masticatory area, enhanced by obstructed mouth opening. Face is asymmetric, due to swelling of the tissues in parotid-masticatory area.

**Treatment.** Stepping back into 1.5-2 cm outside of the angle of the mandible, cut the skin around it, from the subcutaneous tissue, fascia between the sternoclavicular-mastoid muscle and the posterior edge of the branches of the lower jaw. What not to damage the parotid gland, deep penetrating blunt layering tissue.

**Phlegmons of the infratemporal and pterygopalatine fossa** (phlegmonae fossarum infratemporalis et pterygopalatini). Localization of abscesses projected inward from the infratemporal fossa. Within the upper arch of the mouth threshold, in the last two molars level of the upper jaw, cut mucosa to the bone. Then using raspatory or probe Kocher, hill along the upper jaw to penetrate inside the temporal fossa in the direction from front to back and up.

**Phlegmons of temporal area** (phlegmonae regionis temporalis). Phlegmons of this site may be the surface that lie between the skin and the temporal aponeurosis , middle - between the temporal muscle and aponeurosis , deep - under the temporal muscle; spills that apply to all of the above layers. At the forefront of the temporal muscle cut the skin, subcutaneous tissue, muscle aponeurosis, and when in need, provided finger gloves are under the temporal muscle and reveal an abscess. If detected diffuse cellulitis, it is advisable to make the semilunar incision in place of attachment of the temporal muscle and its aponeurosis (linea temporalis). In the presence of deep ulcers temporal areas incision made in the radial direction along the muscle fibers on the basis of the topography of the major arteries of the site. For more reliable outflow of pus often additional cuts are provided (counterpuncture).
**Abscess and phlegmon of peripharyngeal space.** Purulent process in peripharyngeal space can occur as a complication of acute or rarely chronic tonsillitis. Odontogenic source of infection of this space are large indigenous bottom teeth, sometimes of the upper jaw. Peripharyngeal space often amazed at the spread of infection of the submandibular triangle, hyoid, retromandibular area, as well as pterygopalatine mandibular space.

Borders of peripharyngeal space: internal - muscular layer of the pharynx, exterior - medial pterygoid and deep pharyngeal part of the parotid gland; Front - interpterygoidea fascia and the inner surface of the medial pterigoideus muscles; back - fascial side shoots coming from prevertebral fascia to the muscular layer of the pharynx. Stilohioideus, stilopharyngeal, stiloglossus surrounding fascia and muscle peripharyngeal share space on the front and back departments. In anterior peripharyngeal space loose and adipose tissue, in its upper section adjacent pterygoid venous plexus. In the posterior part of the space are the internal carotid artery, internal jugular vein, IX, X, XI, XII cranial nerves, lymph nodes. Fiber located in peripharyngeal space communicates with fibers of palatal fossa sublingual areas submandibular triangle.

**Abscesses and phlegmon distinguish peripharyngeal space.** Inflammatory processes of peripharyngeal space are characterized by pain on swallowing accruing up to impossible fluid and food intake.

If an abscess has been a slight swelling of tissues at the angle of the mandible, enlarged lymph nodes. Mouth opening is severely limited and painful. Inspection of the oral cavity is difficult because information of jaws. Using a spatul, dental mirror, and sometimes frontal reflector fails to inspect the oral cavity and pharynx, where hyperemia and edema of the soft palate are found: palatal-lingual and palatal-pharyngeal arches, uvula, bulging of the side wall of the pharynx.

Phlegmon of peripharyngeal space differs pain when swallowing, difficulty in breathing often, deterioration of general condition, the appearance of fever and other phenomena of intoxication. Angle of the mandible there is a deep tenderness of infiltration. In some patients, there is a swelling in the temporal area. Mouth opening is limited due to inflammation of medial pterygoid muscle contracture III degree. Inspection of oral cavity is difficult. Introduced a wide spatula between the teeth of the upper and lower jaws and turning it, inspecting the throat. Mucosa of soft palate is hyperemic edematous uvula dramatically shifted in a healthy way. Infiltrate spread to the side wall of the pharynx, which protrudes much, swelling - the mucous membrane folds hyoid, tongue, back of the throat.

Diagnosing phlegmon of peripharyngeal space, it should be noted that the process often develops in the spread of infection from the submandibular triangle. When the limitation of mouth opening, build-up of pain when swallowing should carefully examine the mouth and throat.

Abscess peripharyngeal space reveal intraoral mucosal incision medial pterygoid-mandibular folds and parallel to the length of 1.5-2 cm and a depth of 0.75 cm then blunt to penetrate abscess, opening it. More reliable to provide good drainage of pus, especially when cellulitis peripharyngeal space should be considered extraoral access. Carried cut skin and subcutaneous tissue, and then stupidly pus pushing the underlying tissues in the angle of the mandible, to the edge of the bone, pass through the medial pterygoid muscle in peripharyngeal space to middle constrictor, creating an outflow of exudate. At autopsy cellulitis peripharyngeal space should go to the pterygopalatine space-mandibular and hyoid region.

Inflammation in peripharyngeal space can propagate along the pharynx in the anterior mediastinum. Involvement of the anterior and lateral neck regions, including a neurovascular vagina, can also lead to the downward advancement of the chest infections.

Diligence pterygoid venous plexus to peripharyngeal space can cause retrograde spread of purulent process to the meninges and brain. The prognosis for cellulitis peripharyngeal space, especially in the case of such complications are very serious.

**Abscess and phlegmon of the tongue.** Purulent inflammatory diseases of the tongue may be odontogenic, stomatogenic, tonsilligenic nature.

Odontogenic abscess or abscess in intermuscular intervals of the tongue occurs in the transition process from purulent lower front teeth. Abscesses of the back and body of the tongue develop as a result of single or repeated mucosal damage when biting, fish bone injury, dental
instruments, sharp-edged teeth, dentures, etc., as well as stomatitis. In some cases, the inflammatory process in the tongue develops on the background of acute tonsillitis. Spread of the hyoid, rarely from the submental area, also leads to the development of purulent process.

Tongue is a muscular organ. In the back and the body of the tongue muscle bundles are longitudinal, transverse and vertically bound direction. Between them there is a significant of connective tissue streaks. In the root of the tongue, there are other gaps slit located symmetrically outwards from several previous ones, which also has fiber layer. Inside they are limited genioglossal and outside - hyo-lingual muscles. In these intermuscular crevices of cellulitis are the right and left lingual arteries are little lymph nodes.

**Abscesses of the back, body, deep part of the tongue and tongue phlegmon.**

Abscess of back and body of the tongue are localized to the right or left half of it in the center of the tongue, in the middle section back of the tongue. Patients complain of pain in tongue, extending to the ear. Tongue movements are limited and painful, it is difficult, swallowing painful. Externally there are no changes, during palpation there are painful enlarged lymph nodes in the submental or anterior one of the submandibular triangle. Opening of the mouth is free. Marked thickening of the first half due to infiltration of the side of its department, dense, sharply painful coated bright red mucosa. In some patients, inflammatory edema extends to the lower surface of the tongue and sublingual area. Among diffuse infiltrate thicker tongue can mark a pain in the later stages - hearth softening and fluctuation. Sometimes there is a spontaneous breakthrough ulcer, after which the inflammation subsides. In some patients, the process may spread to the other half of the tongue.

Abscess of the tongue develops in connective tissue puffs between paired muscles of the tongue over mylohyoid muscle. Relatively less abscess happens in intermuscular interval, located somewhat laterally from the midline, in a circle passing here lingual artery.

Patients with abscess tongue base note sharp pains in the language, the inability to swallow.

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Patients with abscess of the tongue base note sharp pains in the tongue, the inability to swallow.

Phlegmon of the tongue body is characterized by the proliferation of inflammatory effects on cellular tissue layer between the muscles of the tongue, down - to the seam mylohyoid muscle and up - to weave the tongue muscles. Patients seen better informed sore tongue, smack in the ear, sharply painful swallowing, slurred speech, shortness of breath often.

Inflammatory swelling of the submental triangle extends to the anterior submandibular triangles. Regional lymph nodes are enlarged, painful, brazed together. In the depths of the submental area palpated spilled painful infiltration.

Limited mouth opening, marked inflammatory contracture of the masticatory muscles. Tongue is significantly increased, his movements are limited and sharply painful. Often enlarged tongue does not fit in the mouth, and projecting forward, for the dentition, to the sides and protrudes upward, forcing patients to keep his mouth half open. Tongue coated whitish bloom, from the mouth an unpleasant putrid smell. Swallowing abundant viscous saliva dramatically hindered Neno, sometimes impossible. In some cases, due to the proliferation and swelling on podgortannik arytenoid-epiglottic folds appear difficulty breathing, hoarseness.

Surgery for an abscess of the back and the body tongue is carried out a longitudinal incision along the edge or back of the tongue through a portion of softening or soreness. After dissection of the mucosa by blunt pass between bundles of muscle and empty the abscess.

Abscess or phlegmon of the tongue reveal a cut of up to 4 cm in the submental triangle on the midline. Parting the edges of the wound, sectioned along the seam mylohyoid muscle. If pus in this section is not, blunt penetrate up between mentohyoid and genioglossal muscles or more lateral and posterior - between chin-lingual and sublingual, lingual muscles, which show accumulation of exudate. Aesthetic reasons spend arcuate incision anterior to the hyoid bone and parallel to the edge of the mandible. Cut through the skin, subcutaneous tissue, both anterior belly of the digastric and the seam mylohyoid muscle, and then bluntly penetrate the intermuscular spaces of the tongue.
Purulent inflammation of the tongue can propagate from the back and the body tongue in its other divisions in the sublingual region, on the fabric floor of the mouth, in the pterygopalatine - mandibular and peripharyngeal space, down to the neck. Simultaneous destruction of the tongue, peripharyngeal spaces and floor of the mouth can lead to stenosis of the airways and asphyxia, which makes serious prognosis to patients’ lives.

**Phlegmon of the mouth floor.** Phlegmon of the floor of the mouth is a common disease purulent when different combinations affected sublingual, submandibular region, submental triangle. Phlegmon of the floor of the mouth may develop as a result of infection in some cases of the hyoid or both of these areas, in others - from the submandibular, submental triangle, base of the tongue.

The boundaries of the mouth floor: top - oral mucosa, lower - the skin right and left submandibular and under chin triangles back - root of the tongue and the muscles that attach to the styloid process; front - the inner surface of the body of the mandible. Floor of the mouth has two floors: the top, above the mylohyoid muscle, and the lower, being under it.

Cellulitis at the bottom of the oral cavity of patients complain of intense pain, inability to swallow, limitation of mouth opening, obstructed breathing and speech. Puffy face. Determining spilled infiltration in both submandibular and submental triangles. Depending on the involvement in Pterygopalatine mandibular spaces limited mouth opening, however, the mouth half open. Tongue increased in size due to infiltration, raised toward the palate, often dry and covered with a dirty-brown patina. Swallowing painful, patients cannot swallow saliva and it follows from the half-open mouth. Tongue movements cause sharp pain. Sublingual folds infiltrated, bulging, sometimes above the crowns of the teeth.

Depending on the different combinations over the affected area and submandibular - hyoid muscles, external incisions performed by the skin in the submental and submandibular triangles. Also effectively cut these areas collar skin incision followed by crossing fibers mylohyoid muscle. Sometimes external incisions combined with cuts in the actual mouth - through the mucosa of the alveolar process of the mandible, on sublingual folds.

Cellulitis at the bottom of the oral cavity can be observed spread process Pterygopalatine - mandibular and peripharyngeal space for other front and lateral neck involving the neurovascular sheath, mediastinum.

Note peculiar abscesses within the mouth floor, which participate in the development of anaerobic microbes, including Clostr. perfringens, Act. hystolyticus, Act. aedematicus, Clostr. septicum, etc. Progressive course with the development of gangrenous or putrid, gangrenous tissue inflammation and subsequent necrosis usually denoted as angina Zhansul-Ludwig (angina Ludwig). When Ludwig angina affects all tissues related to the bottom of the oral cavity and pterygopalatine - mandibular and peripharyngeal space. There is a trend to the further spread of the process to other adjacent areas including the front and side of the neck.

Besides complaints characteristic abscesses floor of the mouth, usually celebrate choking, intoxication symptoms: fever, insomnia, agitation, delirium often. Characteristically forced position the patient sitting, reeling head tilted forward, which he avoids moving. The patient's face pale with an earthy shade and often jaundiced color. Dense and diffuse painful infiltration, located in both submandibular, submental areas spread up to the parotid and cheek area, down to the neck. The skin over the infiltration brazed in the early days of the disease in color is not changed. Later it becomes tinged with red, sometimes it visible bluish- purple spots or blisters. On palpation infiltrate dense areas, not defined fluctuations is possible, but often marked crepitus.

Patient's mouth half open, it implies thick viscous saliva. Simultaneously, limited and sharply painful mouth opening. When chewing and conversation difficult, slurred speech.

Sublingual mucosa folds sharply raised, bulging of the shaft, which is above the crown of the tooth. On the mucosal surface is seen fibrinous plaque. Tongue is raised to the palate, lined, putrid odor from the mouth.

When surgery is widely reveal outer sections affected cellular spaces: submandibular, submental triangle, sublingual region, the gap between genioglossal muscles of the tongue, as well as involved in the process and peripharyngeal Pterygopalatine - mandibular space.
The most effective is collar or arcuate incision below the edge of the lower jaw and wide opening of the affected areas by dissection mylohyoid muscle. At autopsy and characteristic changes in the tissues: tissue located here has a gray-green, dark brown to black in color, no pus, fabric stands muddy bloody or brownish-gray fetid liquid, sometimes with gas bubbles. Cellulose, necrotic muscle, grayish stinking mass.

After surgery, a favorable course of the disease is characterized by fever, improvement of the general condition of the patient. Of surgical wounds begins pus, necrotic tissue are rejected if they were not removed during the operation, and gradually appear granulation. Further wound healing usually occurs without complications. In other cases - with rotten - necrotizing cellulitis inflammation tend to progression. Often develop mediastinitis, but can be bullous spread of infection. Inflammatory disease may be complicated by sepsis, in which patients with life-threatening septic shock and acute respiratory failure.

Prognosis: at the bottom of the mouth cellulitis, particularly putrid - necrotic, with complications, serious life patients.

Complications abscesses and abscesses of the face and neck. Abscesses, cellulitis of the face and neck may be complicated by secondary cortical osteomyelitis. In the event of process possible serious complications such as mediastinitis, thrombosis of the cavernous sinus dural, meningitis, meningoencephalitis, brain abscess, sepsis.

Osteomyelitis secondary cortical bones of the face develops in the localization of purulent process in the submandibular, parotid-masticatory, infraorbital, zygomatic, temporal areas. Purulent melting admaxillary tissue dies pus lapped surface area of bone.

The clinical picture is characterized by a lack of regression of inflammation, suppuration of wounds, re-sharpening process. Visible on the radiograph thin laminar sequestrum the lower edge of the body, the outer surface of the branches of the lower jaw, infraorbital edge of the upper jaw, the outer surface of the body of the zygomatic bone and temporal scales. In a laboratory study of the blood revealed a moderate leukocytosis, sometimes leukopenia, lymphocytosis, increased erythrocyte sedimentation rate.

Diagnosis. The diagnosis is made on the basis of clinical, radiological and laboratory data. Secondary cortical bone osteomyelitis person differentiated from odontogenic osteomyelitis, actinomycosis, tuberculosis of the same localization.

Treatment is the same as in case of chronic osteomyelitis of the jaw.

Complications, secondary cortical osteomyelitis of the jaw are rare. Chance of repeated exacerbations, involvement in the process of new bone sites, distribution of purulent process in the adjacent soft tissue abscesses and development, at least - abscesses.

The prognosis is favorable.

Mediastinitis develops in the common abscesses: floor of the mouth; peripharyngeal, submandibular and other spaces where, despite treatment, the inflammatory process progresses, side effects and anterior neck. In other cases, may be vigorous and rapid spread of purulent process in the deep regions of the neck. Distinguish front, rear and diffuse mediastinitis.

Mediastinitis is caused by the spread of purulent infection and interfascial intermuscular tissue of the vagina peripharyngeal space neurovascular bundle of the neck in the anterior mediastinum or floor of the mouth, tongue root through a natural barrier in the hyoid bone in the cellular spaces between the parietal and visceral fascia sheets endocervical neck and along the trachea in the anterior mediastinum. Purulent process, due to propagation along the prevertebral fascia, affects the posterior mediastinum. Diffuse spread of the inflammatory process interfascial cracks leads to the development of total purulent, putrid often necrotizing mediastinitis.

Currently, there are several classifications of mediastinitis, but it is recommended to use the classification proposed A.A. Vishnevsky and A. Adamian (1977). According to this classification distinguishes acute serous, acute and chronic suppurative mediastinitis.

The clinical picture is characterized by mediastinitis deterioration of general condition, increase in body temperature to 39 - 40 °C or more, the appearance and progression of hemodynamic and respiratory disorders. Patient concerned spontaneous chest pain, weakness, malaise, dizziness, cough, shortness of breath. The first symptoms of inflammation are cough, shortness of breath. Then there are: chest pain, aggravated by tilting or rotating the neck, difficulty
in swallowing food. Overall condition is moderate to severe and moribund. On examination, the patient's forced position - reclining on his side or sitting with his head down, reduced to the sternum, tachycardia, elevated blood pressure or unstable. Noteworthy rapid shallow breathing. The skin is cold, pale, grayish jaundiced, covered with sticky sweat, on the extremities - "marble spots" petechial rash at the injection site - extensive bruising. Often there are delirium, coma. In the study of light is determined by hard breathing and only some patients show signs of focal or diffuse inflammation of the lungs, as well as lung abscess and gangrene. Along with common symptoms, observing diffuse cellulitis inflammatory infiltration of the front or side of the neck with the development of edema, hyperemia of the skin surface of the front of the chest. When mediastinitis symptom appears Gerke (per - head movements backward causes increased chest pain), sometimes - a symptom of Ivanova, symptom - Scherbo Ravich (inspiratory retraction of the tissue in the jugular depression) and pain in the mediastinum when tapped on the heels of elongated legs.

X-ray examination (three projections - anteroposterior, lateral and oblique), computed tomography there is an increase boundaries of the middle mediastinum on 5-8th day of illness - pleural effusion. Indicators homeostasis and metabolism correspond to steps pyoseptic disease - reactive, toxic, terminal. In the first two stages expressed leukocytosis, observed a dramatic shift to the left and leukocyte increase in ESR.

Diagnosis of mediastinitis is quite complicated. For the duration of the disease, the presence of local and general symptoms feasibility allocate reactive, toxic and terminal phase contact mediastinitis (M.A. Gubin).

Treatment complex includes preoperative preparation, debridement of purulent foci, opening and drainage of the mediastinum, postoperative therapy.

Surgical treatment should be urgent. Operations are performed after a short period of preoperative preparation, aimed at achieving sustainable livelihood systems by state infusion therapy. Of great importance are increasing the propulsive activity of the heart, the compensation of hypovolemia, correction of water-salt metabolism, acid-base balance of blood disorders and detoxification of the body. Mediastinitis at the upper and middle parts of the neck carried on mediastinotomy Razumovsky (in maxillofacial offices general hospitals). With the defeat of the lower portion of the posterior mediastinum is shown on the neck mediastinotomy Nasilovu. Mediastinotomy neck resection xiphoid process and cross-drainage of the mediastinum is performed for total process (in general surgery or thoracic purulent offices, followed by treatment in intensive care units). According to the testimony required revision of the affected tissues of the face and neck.

Drainage, irrigation, dialysis, fluid aspiration, drug substance is used constantly. General treatment - anti-bacterial, detoxifying, metabolizing, immunostimulatory therapy, HBO performed differently according to the phase of purulent process. Good results give the application of extracorporeal detoxification - hemosorption plasmapheresis and extracorporeal connection donor spleen.

Weather in common complication phlegmons mediastinitis always serious for the patient's life. Development of mediastinitis can be combined with sepsis, which further exacerbates the outcome of the disease.

6. MATERIALS FOR SELF-CONTROL:
A. Questions for self-control:
2. Anatomic parts of the neck.

B. Tasks for self-control:
1. The patient during examination revealed sharply painful inflammatory infiltrate in the left temporal area, which occupies the front 2/3 share of the parcel. The skin over it is flushed, pleated overlooked. In the front-lower regions of infiltration is determined symptom of fluctuation. Opening of the mouth and lateral movements of the jaw are separated, sharply and painful. The oral cavity is not trated. Put diagnosis.
(Answer: Phlegmon of left temporal area.)

2. After 2 days after removal of tooth 18 with exacerbation of chronic periodontitis, the patient 32 years old, appealed with complaints of the limited opening of the mouth, swelling of the zygomatic, temporal areas, fever up to 38 °C, weakness, headache, malaise. OBJECTIVE: mouth opens to 1 cm, the skin color in the temporal area is not changed, swelling, pleated overlooked. Palpation of the temporal area is painful. Transitional crease in the area of 17, 18 swollen, smooth, flushed, acutely painful on palpation. What complication has developed in the patient?
(Answer: Phlegmon of infratemporal and pterygopalatine fossa on the right)

3. Patient, 54 years old, at inspection it was found that skin covers face is pale greyish, body temperature increased to 40°C, pain during tongue movements, difficult breathing, inability to swallow saliva; it is difficult, because of the pain. Tissue swelling of both submandibular and submental sites palpation skin is not going to fold, flushed, very painful. Tongue that swelling, covered with gray patina, sublingual rollers swollen, hyperemic, covered with a grayish bloom. Mouth odor. What diagnosis can assume in this case?
(Answer: Purulent - necrotizing phlegmon of the mouth floor)

C. Materials for test control. Test tasks with the single right answer (a=II):

1. An abscess is:
   A. Diffuse purulent inflammation of the tissue;
   B. Inflammation of the lymph nodes;
   C. Purulent inflammation of the tissue;
   D. Acute inflammation of the muscles;
   E. Traumatic tissue swelling.
   (Correct answer: C)

2. Phlegmon is:
   A. Diffuse purulent inflammation of the tissue;
   B. Inflammation of the lymph nodes;
   C. Purulent inflammation of the tissue;
   D. Acute inflammation of the muscles;
   E. Traumatic tissue swelling.
   (Correct answer: A)

3. Phlegmons are treated:
   A. Only by conservative treatment.
   B. Only by surgical.
   C. Surgical and drug.
   D. Physiotherapeutic.
   E. Untreated.
   (Correct answer: C)

D. Educational tasks of 3th levels (atypical tasks):

1. To the dentist - a surgeon asked the patient 65 with swelling in the parotid region. After the X-ray contrast study on sialograph found that normal branching ducts picture ends abruptly at the edge of a pathological process. After puncture you receive a transparent viscous liquid.
   (Correct answer: A cyst of the parotid salivary gland).

2. Patient, 35 years, addressed to the dentist, complaining of swelling under the tongue. OBJECTIVE: In the hyoid region marked tumor 3x4 cm, transparent in appearance, palpation painless. When food intake was observed discomfort and pain within the gland.
   What is the preliminary diagnosis can be established:
   (Correct answer: Ranula of hyoid salivary gland).

3. Patient, 25 years, complains of the presence of a tumor in the mandible. He considers himself a patient in the last 7 months. On examination marked inflation level 36, 37, 38 jaw teeth, swelling slightly hilly, dense consistency. On radiographs in the lateral projection of the mandible is determined by the fire of destruction with clear contours cellular nature. If you puncture the tumor derived white turbid fluid.
(Correct answer: Adamantinoma of the mandible).