Topic 4. *Clinical methods of inspection and their importance for diagnostics of oral cavity diseases: the survey (external, face of the patient, vestibule, actually oral cavity, dentition).*

1. Examination of the patient's face revealed asymmetry of the face due to swelling of the buccal area on the right. From the anamnesis it was found out that the swelling appeared 1 day ago. Within 2 days before the onset of swelling, the patient noted presence of constant spontaneous toothache on the lower jaw of the right. Objectively: the skin in the area of swelling is natural in color, soft on palpation, painless, easily folded and straightened afterwards. The temperature of this area is not increase, the mouth opening function is not impaired. What is the probable cause of this condition?

Collateral edema
Infiltration due to cheek abscess
Infiltration due to phlegmon in the cheek area on the right
Asymmetry due to malignant tumor
Asymmetry due to congenital pathology

Solution algorithm:
1. Pay attention to the absence of inflammatory signs of this process (redness, fever, tenderness on palpation, dysfunction). Therefore, the option of infiltration due to abscess or phlegmon can be excluded.
2. Pay attention to softness on palpation, lack of tension and adhesion to the surrounding tissues. Therefore, the option of asymmetry due to malignancy is excluded.
3. Analyze the anamnesis of the disease. The pathological process appeared a few days ago, so the option of asymmetry due to congenital pathology is excluded. So, possible correct answer is collateral edema, which is formed due to spreading of the process from the periapical focus of infection of the causative tooth of the lower jaw on the right.

2. Examination of the oral cavity vestibule of a 78-year-old patient N. in the inner surface distal region of the buccal mucosa (retromolar mucosa) along the line of closure of the teeth revealed pale yellow nodules 1-2 mm in diameter that do not rise above the surface of the mucosa. What did the doctor find?

Sebaceous glands by Fordyce
Cheek salivary glands
The excretory ducts of the parotid salivary gland
The excretory ducts of the sublingual salivary gland
The excretory ducts of the mandibular salivary gland

Solution algorithm:
1. Pay attention to the location of nodules. There are no salivary ducts in this area.

2. Estimate the color and size of the nodules. So the form is characteristic of sebaceous glands which are localized in this site.
3. Analyze the patient's age. In the elderly due to thinning of the mucous membrane of the oral cavity, the sebaceous glands by Fordyce become visible during examination.

3. During examination of the vestibule of the oral cavity of patient M., 28 years old, on the mucous membrane of the lower lip revealed a slight bump with punctate ducts. What did the doctor find? Is this a variant of the norm or pathology?

Lip salivary glands with excretory ducts

Sebaceous glands by Fordyce
Cheek salivary glands
Parotid salivary glands with excretory ducts
Submandibular salivary glands with excretory ducts

Solution algorithm:
1. Pay attention to the localization of the bump. This is the inner surface of the lip (Klein's area), where the small salivary glands are located.
2. Pay attention to the presence of excretory ducts, which are characteristic of the salivary glands.
3. Note the accuracy of the ducts, which is characteristic of the norm. In the case of hyperplasia, heterotopia of the salivary glands due to the expansion of the ostium of the excretory ducts, there is a symptom of "dew" in the Klein area.

Topic 5. *Inspection of disease place (Locus morbi): surveys, probing, percussion, palpation.*

1. Examination of patient A., 56 years old, revealed a tooth on the lower jaw on the left with changed color and loss of natural shine. Vertical percussion of the tooth is sharply painful. Which tissue is damaged at such symptoms?
Apical periodontium
Marginal periodontium
Crown pulp
Enamel
Dentine

Solution algorithm:
1. Pay attention to the result of the tooth examination. Loss of natural shine and discoloration indicates about devital condition of the pulp.
2. Analyze the result of percussion. Vertical percussion determines the condition of the apical periodontium, inflammation of which occurs in the case of untimely treatment of pulpitis and spreading of infection in the periodontal space through the root canal. Painful percussion indicates inflammation of the apical periodontium.

2. Patient V. applied to the clinic of therapeutic dentistry with complaints of prolonged pain from thermal and chemical irritants. Examination of tooth 46 revealed a deep carious cavity on the chewing surface. What method can be used to assess the condition of the pulp of the damaged tooth?
Probing
Vertical percussion
Horizontal percussion
Palpation
Examination of the mucous membrane in the projection of the tooth root apex

Solution algorithm:
1. Horizontal and vertical percussion is used to assess the condition of the periodontium. Therefore, the 2nd and 3rd answers are excluded.
2. Palpation of the mucous membrane in the area of the projection of the tooth root apex and its survey makes it possible to assess the condition of the periapical space, bone, periosteum, mucous membrane in the area of the causative tooth.
3. The condition of the pulp can be assessed by probing. Painful probing, connection of the carious cavity with the tooth cavity indicates inflammation of the pulp.

3. Patient K., 46 years old, went to the clinic of therapeutic dentistry with complaints of pain in the gums around the tooth on the upper jaw in the frontal

area, which arose as a result of injury from a fish bone. Examination revealed the remains of a broken fish bone in the area between the distal gingival papilla and tooth 12, redness, swelling, pain on palpation of the marginal edge of the gums. What other objective method can be used to assess the condition of the marginal periodontium? What is the likely outcome?
Horizontal percussion is painful
Vertical percussion is painful
Thermodiagnostics is painful
Electroodontodiagnostics
Luminescent diagnostics

Solution algorithm:
1. Remember that the periodontium is a connective tissue that is located in the periodontal space and holds the tooth in the alveolus.
2. Note that an objective percussion method is used to determine the condition of the periodontium ligament.
3. Note that there are two types of percussion: vertical and horizontal. Vertical percussion can be used to assess the condition of the apical periodontium, and horizontal percussion is used to assess the marginal periodontium. At an inflammation horizontal percussion is painful.

Topic 6. *Auxiliary methods of inspection of the stomatological patient: thermodiagnostic, EOD, caries-marking: methodology of conducting, interpreting of results.*

1. The reaction of the pulp to a current of 15-20 μA indicates:
Inflammation of the coronal pulp
Inflammation of the root pulp
Inflammation of periodontal tissues
This is a dentin reaction
This is an enamel reaction

Solution algorithm:
1. Pay attention to the reaction of different tissues to irritation by electric shock.
2. Pay attention to the amount of current acting on the tooth tissue in this situation. In this case 15-20mkA.
3. Note that at a current of 100 μA the pulp has already died.
4. Note that the intact tooth responds to a current of 2-6 μA.

2. Test "caries detector" is used to:
Determining the limits of preparation for caries
diagnosis of pulpitis
diagnosis of pulpitis
diagnosis of periodontitis
determination of enamel resistance

Solution algorithm:
1. Pay attention to morphological changes in the tissues of the tooth in various pathologies. 2. Pay attention to the structure of dentin in acute and chronic caries, non-carious lesions. At caries dentin is not dense, various substances get into it.
3. Pay attention to the depth of dentin staining. In acute caries, the dyes penetrate deeper into the dentin.
4. Pay attention to the cavity in the tooth after rinsing the dye with water. Flushing of all dye indicates the density of tooth tissues.

3. Characteristics of pain during the cold test in acute initial caries in the cervical region of the tooth:
moderate short-term
missing
sharp short-term
weak short-term
strong short-term

Solution algorithm:
1. Pay attention to complaints. Causal short-term pain is characteristic of caries and non-carious lesions of the teeth;

2. Pay attention to the duration of the pathological process. Acute initial caries develops within 1 month and is characterized by the appearance of pain from thermal stimuli.
3. Pay attention to the location of defects. Carious cavities localized in the cervical region are very sensitive to stimuli.
4. Pay attention to the presence of a defect in the hard tissues of the tooth. Moderate short-term pain from thermal stimuli may occur when exposing the neck of the tooth.

Topic 7. *X-ray, luminescent and transilluminating diagnostics: the indication to use, feature of realization. Diagnostic tests: with an anaesthesia and on the preparation. Procedure for determining trigger zones and examination of the exit sites of the trigeminal nerve peripheral branches. Laboratory examination methods. Interpretation of the results of analyzes of oral liquid, blood, urine, etc.*

1. The most informative method for diagnosing periodontal disease are:
X-ray examinations
Transluminescent diagnostics
Test with anesthesia
Congratulatory coloring
Thermal tests

Solution algorithm:
1. Pay attention to the structure of the periodontium, the size of the periodontal gap.
2. Pay attention to the density of bone tissue surrounding the periodontium.
3. Pay attention to the possibility of visual access to periodontal tissues, especially at the apex of the root.
4. Pay attention to the possibility of recording on different media changes that occur inside the bone tissue and the root of the tooth.

2. Radiological signs in chronic fibrous periodontitis:
the periodontal fissure in the apical area is dilated, hypercementosis
destruction of bone tissue in the apical area with blurred contours
periodontal fissure without changes
destruction of bone tissue with clear contours in the apical area
destruction of bone tissue with clear contours in the marginal area

Solution algorithm:
1. Pay attention to the structure of the periodontium, the size of the periodontal gap.
2. Pay attention to the density of bone tissue surrounding the periodontium, as well as the periodontal gap at the apex of the root. Prolonged chronic inflammation leads to enlargement of the periodontal gap.
3. Pay attention to the presence of bone compaction, especially at the apex of the root (hypercementosis).
3. A method that allows you to assess the shadowing that occurs when passing through the tooth tissue cold light flux from a halogen lamp:
transillumination
congratulatory coloring
radiological
halogenography
holography

Solution algorithm:
1. Pay attention to the structure of the tooth. Enamel is a light-transmitting structure.
2. Pay attention to the density of dentin. This tissue is permeated with dentinal tubules, is not very transparent and can absorb light.
3. Pay attention to the possibility of visualization of tooth tissues after light penetrates through them.
4. Pay attention to the physical properties of light. Polarized, diffused light is better delayed in areas of teeth where there are defects.

4. Resistance of enamel to action of acids is defined by means of:
TER test
Green Vermilion index
EOD
buffer capacity of saliva
RMA index

Solution algorithm:

1. Pay attention to the structure of the tooth. Enamel is a structure that is sensitive to acids.
2. Pay attention to the possibility of penetration into the enamel of dyes. Especially when damaged.
3. Pay attention to the possibility of visualization of tooth enamel tissues after the dye penetrates into it.
4. Note the different colors of the standardized tests. The color of the painted enamel determines its stability

Topic №8. *Medical documentation of therapeutic reception (forms №043 / o, №037 / o, №039-2 / o) according to the order of the Ministry of Health №110 from 14.02.12 and №527 from 28.07.2014: rules of filling, registration of directions for additional researches, etc. Medical card of a dental patient - a medical, scientific and legal document.*

Task 1.

At the initial admission of the patient to the dentist, to establish a preliminary diagnosis, it is necessary to fill in the section of the medical card "Patient's complaints". What should you pay attention to when clarifying complaints?

Solution algorithm

1. Pay attention to the location of the causative tooth. Determine which jaw it is: upper or lower, localization side - right or left, jaw area - frontal or lateral.
2. Pay attention to the nature of the pain. The pain can be sharp, aching.
3. Pay attention to the cause of pain. If the pain is causal, it is necessary to indicate from which stimulus it arises (temperature (cold, heat), chemical (sour, sweet) or mechanical) (solid food, biting a tooth). If the pain is causeless - you should specify the duration of the attack of pain).
4. Pay attention to the localization of pain. Pain can be felt in one tooth, and can be with irradiation along the branches of the trigeminal nerve.
5. Pay attention to the duration of pain. The pain can be short or long and does not last long.
6. Pay attention to the time of pain. Pain can occur during the day or night, in the evening, after taking hot, when the ambient temperature changes (transition from cold to warm room).
7. Briefly, but capaciously, form the characteristic of pain, write down in the section of the medical card "Complaints of the patient".

Task 2.

At the initial admission of the patient to the dentist, in order to establish a preliminary diagnosis, it is necessary to fill in the section of the medical card "Objective examination data". What methods of basic examination should be performed to determine the preliminary diagnosis?

Solution algorithm

1. Examine the causal tooth. Specify the surface of the localization of the carious cavity, determine the class according to Black.
2. Pay attention to the size of the inlet to the carious cavity. Identify: narrow inlet for acute caries, wide inlet for chronic caries.
3. Probe. Evaluate the data of probing along the enamel-dentin border, at the bottom of the carious cavity6 probing can be sharply painful, sensitive or painless.
4. Pay attention to the condition of the dentin during probing. Dentin can be softened in acute caries or dense, sclerosed, hypermineralized in chronic caries.
5. Pay attention to the condition of the bottom of the carious cavity during probing. Check for a perforation at the bottom of the carious cavity.
6. Perform percussion. Note the result of percussion6 painless in caries, sensitive (in pulpitis and chronic periodontitis) or painful or sharply painful in acute periodontitis.

7. Palpate the mucous membrane of the preoccupation of the oral cavity in the area of the causative tooth. Pay attention to the result of palpation: in caries - painless, in acute pulpitis may be sensitive in acute periodontitis - smoothness in the transitional fold, painful.
8. In view of all the listed data, fill in the section of the medical card "Objective examination data".

Task 3.

At the initial admission of the patient to the dentist, in order to establish the final diagnosis, it is necessary to fill in the section of the medical card "Objective examination data". What additional basic screening methods need to be performed to determine the final diagnosis?

Solution algorithm

1. Carry out thermodiagnostics. Pay attention to the result of thermodiagnostics of the causative tooth: painful in acute caries, pulpitis, painless in periodontitis.
2. Perform electroodontodiagnostics (EDI). Pay attention to the result of EDR of the causal lip: 2-6 μa to 12 μa - for caries, 20-90 μa - for pulpitis, above 100 μa - for periodontitis.
3. Carry out X-ray diagnostics. Pay attention to the result of X-ray diagnosis of the causative tooth: determine the location, depth of the carious cavity in caries, the connection of the carious cavity with the tooth cavity, the condition of the root canals and changes in periapical tissues in pulpitis and periodontitis.
4. Given all the above data, make a final diagnosis and complete the section of the medical card "Objective examination" and "Diagnosis".

Topic № 9. *Oral hygiene and its importance in the comprehensive prevention of diseases of the oral cavity and the body as a whole. Microbial biofilm. The mechanism of formation. Structure, properties, composition of microflora. Methods of indication of microbial biofilm: staining, GI according to Fedorov-Volodkina, Green-Vermillion, index of efficiency of oral hygiene (Podshadley Heley).*

Task 1

Patient N., 34 years old, went to the dentist with complaints of bleeding gums during brushing, the presence of dental plaque and bad breath. From the anamnesis of life it was found out: the presence of concomitant pathology (chronic gastritis). An objective examination of the patient's oral cavity revealed a gingival calculus and a swollen marginal edge of the lower jaw gums in the frontal area. Determination of which hygienic index should be carried out to assess the state of oral hygiene?

Solution algorithm

1. Pay attention to the presence of concomitant pathology in the patient. At chronic gastritis changes in a condition of gums are noted.
2. Pay attention to the existing dental plaque. Tartar can cover the cervical areas of the lingual surface of the teeth, vestibular, interdental spaces.
3. Choose which method of determining the index of oral hygiene will be used to assess the overall level of oral hygiene. It is necessary to determine the state of oral hygiene by Green-Vermillion.
4. Select the dye to determine the GI. 1% iodine-iodide-potassium Schiller-Pisarev solution is used.
5. Paint the surfaces of the teeth when determining the GI. When determining the GI by Green-Vermillion paint the buccal surfaces 16, 26, vestibular surfaces 11, 31 and lingual surfaces 36, 46 of the teeth.
6. Pay attention to the presence and staining of plaque (SC) and the presence of tartar (SC). 0 points - no ZN and ZK, 1 point - for 1/3 of the crown ZN or ZK, 2 points - for 2/3 ZN and ZK, 3 points - more than 2/3 ZN and ZK.
7. Calculate the result and determine the index of oral hygiene. The GI for Green-Vermillion is calculated as the sum of all points divided by the number of painted teeth. The index is defined as low (0-0.6 points) - good, medium (0.7-1.6 points) - satisfactory, high (more than 2.6 points) - bad.

Task 2.

The patient complains of a large amount of plaque, bleeding gums. Examination revealed: soft plaque with localization mainly in the interdental spaces of all groups of teeth. The patient was interviewed about proper brushing at home, it is recommended to use a toothbrush and toothpaste. The patient was taught the standard method of brushing teeth. How to determine the effectiveness of the patient's individual oral hygiene?

Solution algorithm

1. Pay attention to the presence of plaque and the condition of the marginal edge of the gums. The localization of dental plaque in the interdental spaces indicates poor quality of oral hygiene and errors in brushing teeth (no floss is used).
2. Select the dye to determine the IEG (hygiene efficiency index). 1% iodine-iodide-potassium Schiller-Pisarev solution is used.

3. Paint the necessary surfaces of the teeth when determining the IEG. It is necessary to paint 16, 26, 11, 31 - vestibular surfaces of teeth and lingual surfaces 36, 46. In the absence of an index tooth it is possible to examine the next, but within the same group of teeth. Artificial crowns and parts of fixed dentures are examined in the same way as teeth.
4. Pay attention to the areas of staining of the vestibular surface of the teeth. Give a score of 0 or 1 to each surface being inspected. Conditional division of a tooth surface at definition of an index of efficiency of hygiene: 1 - a medial site; 2 - distal area; 3 - mid-cervical region, 4 - central region; 5 - mid-occlusal area.
5. Evaluate and interpret the results. Sum the result and determine the arithmetic mean. The calculation is performed by determining the code for each tooth by adding the codes of each section. Then add up the codes of all examined teeth and divide the amount by the number of teeth. The index is calculated by the following formula: IEG = the sum of the codes of all teeth divided by the number of examined teeth
6. According to the obtained value of the index, evaluate the effectiveness of individual oral hygiene by the patient. 0 points - excellent efficiency of oral hygiene, 0.1 -0.6 points - good efficiency of oral hygiene, 0.7 -1.6 points - satisfactory efficiency of oral hygiene.

Task 3.
Patient N., 22 years old, underwent professional oral hygiene. Three months later, he went to the dentist with complaints of mild plaque and bleeding gums while brushing his teeth. Life history: diabetes mellitus. What are the actions of a dentist in such a situation?
Solution algorithm
1. Pay attention to the patient's comorbidity. At a diabetes mellitus metabolic processes in an organism, firm fabrics of teeth that leads to fast de mineralization of enamel are broken.
2. Pay attention to the condition of the oral mucosa and the condition of the gums. At a diabetes mellitus the patient feels dryness in an oral cavity (xerostomia), blood circulation is broken, there are changes in vessels of a microcirculatory channel of periodontal tissues, the stagnation phenomena in periodontal tissues develop.
3. Pay attention to the density and amount of oral fluid in the patient. With diabetes, the viscosity of saliva increases, the amount of serous component of saliva (liquid fraction) decreases, which leads to a violation of the function of washing the surface of the teeth with oral fluid and to increase the amount of plaque.
4. Pay attention to the localization of plaque. In hard-to-clean areas: in the figures, interdental spaces, gingival areas, the oral fluid does not wash the surface of the teeth, which leads to the accumulation of food residues, microorganisms, increased plaque, etc ..
5. Choose which method of determining the index of oral hygiene will be used to assess the overall level of oral hygiene. It is necessary to determine the state of oral hygiene by Green-Vermillion.
6. Select the dye to determine the GI. 1% iodine-iodide-potassium Schiller-Pisarev solution is used.

7. Paint the surfaces of the teeth when determining the GI. When determining the GI by Green-Vrmillion paint the buccal surfaces 16, 26, vestibular surfaces 11, 31 and lingual surfaces 36, 46 teeth.
8. Pay attention to the presence and staining of plaque (ZN): 0 points - no ZN, 1 point - for 1/3 of the crown ZN, 2 points - for 2/3 ZN, 3 points - more than 2/3 ZN.
9. Calculate the result and determine the index of oral hygiene and assess the state of oral hygiene. The GI for Green-Vermillion is calculated as the sum of all points divided by the number of painted teeth. The index is defined as low (0-0.6 points) - a good level of oral hygiene, medium (0.7-1.6 points) - a satisfactory level of oral hygiene, high (more than 2.6 points) - a poor level of oral hygiene .
10. Give the patient recommendations for personal oral hygiene. Recommend the use of a soft toothbrush, therapeutic and prophylactic toothpaste containing calcium, rinses (to thin saliva), floss, irrigator.
11. Make a plan for professional oral hygiene. Consider removing soft plaque with an abrasive toothbrush and remineralizing therapy.

Topic №10. *Methods of removing dental plaque: manual, hardware (sound, ultrasound), air-abrasive, combined. Chemical control of biofilm. Algorithm of professional oral hygiene.*

Task 1.
The 23-year-old patient complained of bleeding gums during brushing, the presence of dental plaque (tartar) and soft plaque on the teeth. From the anamnesis: transferred and concomitant diseases are denied. He did not apply for professional oral hygiene. He has a bad habit - smoking. Objectively: the marginal edge of the gums in the frontal part of the lower jaw is swollen, hyperemic. Interdental papillae are swollen, bleeding. On the lingual surface of the teeth of the mandible there are over and subgingival dental deposits. GI according to Fedorov-Volodkina is equal to 2.0 (satisfactory). Determine what hygienic measures should be taken for this patient.
Solution algorithm
1. Pay attention to the patient's age
2. Pay attention to comorbidities
3. Pay attention to the presence of a bad habit
4. Pay attention to the state of oral hygiene
5. Pay attention to the presence of dental plaque
6. Pay attention to the condition of the gums
7. Determine the method of removal of gingival dental plaque. Choose hand tools from the Sachs kit to remove dental plaque from the interdental spaces, from the gingival areas and the oral and vestibular surfaces, or use an ultrasonic scaler.
8. Determine the method of removing subgingival dental plaque. Choose hand tools (Gracie curettes) to remove dental plaque or use an ultrasonic scaler.
9. Choose medications for gum treatment. Use 3% hydrogen peroxide solution to stop bleeding, 1% chlorhexidine bigluconate solution (antiseptic), etc.
10. Provide advice to the patient on individual oral hygiene. Recommend a toothbrush of medium hardness, preventive toothpaste, the use of floss, rinses. Pay the patient's attention to the frequency of brushing (twice a day) and the duration of the procedure over time (3 minutes).

Task 2.
A 68-year-old patient needs to have dental plaque removed. From the anamnesis: the patient had arrhythmia for 5 years. Two years ago, the patient was diagnosed with a heart rate driver. Determine what methods of plaque removal can be performed on this patient.
Solution algorithm
1. Pay attention to the patient's age. Elderly patient.
2. Pay attention to the patient's comorbidities. The patient has an arrhythmia and a heart rhythm driver.
3. Pay attention to the patient's life history. The disease has a long course with complications.
4. Determine the method by which the patient will be appropriate to remove dental plaque. A patient with a heart rate driver is contraindicated in the use of ultrasound removal of dental plaque (this can lead to heart failure). Removal of dental plaque in

such a patient should be done manually using hooks from the Sachs set and Gracie curette.

Task 3.
The 56-year-old patient complained of bleeding gums while brushing his teeth, the presence of dental plaque (tartar) and soft plaque on his teeth. From the anamnesis: transferred and concomitant diseases are denied. He did not apply for professional oral hygiene. He has a bad habit - smoking. Objectively: the marginal edge of the gums in the frontal area of the lower jaw is swollen. Interdental papillae are bluish in color, do not bleed. On the lingual surface of the teeth of the lower jaw there are three-dimensional layers over the gingival dental deposits. GI according to Fedorov-Volodkina is equal to 3.4 (bad). Determine what hygienic measures should be taken for this patient.
Solution algorithm
1. Pay attention to the patient's age
2. Pay attention to comorbidities
3. Pay attention to the presence of a bad habit
4. Pay attention to the presence of dental plaque
5. Pay attention to the condition of the gums
6. Determine the method of removal of gingival dental plaque. Choose hand tools from the Sachs kit to remove dental plaque from the interdental spaces, from the gingival areas and the oral and vestibular surfaces, or use an ultrasonic scaler.
7. Determine the method of removing subgingival dental plaque. Choose hand tools (Gracie curettes) to remove dental plaque or use an ultrasonic scaler.
8. Choose medications to treat gums. Use 3% hydrogen peroxide solution to stop bleeding, 1% chlorhexidine bigluconate solution (antiseptic), etc.
9. Give advice to the patient on individual oral hygiene. Recommend a toothbrush of medium hardness, preventive toothpaste, the use of floss, rinses. Pay the patient's attention to the frequency of brushing (twice a day) and the duration of the procedure over time (3 minutes).

Topic № 12. *Tooth caries. Definition of the concept. Statistical indicators of caries. Classification of caries. Modern ideas about the etiology and pathogenesis of caries.*

Task 1.
Patient V., 45 years old, went to the clinic with complaints of a carious cavity in the tooth on the left upper jaw, food retention in the carious cavity, acute toothache from cold water, which quickly disappears after removal of the irritant. From the anamnesis: the tooth was not treated before, the delay of food between the teeth occurred about 3 months ago. Examination revealed: a carious cavity with a narrow inlet on the proximal surface of the tooth. Enamel on the edge of the inlet chalk-like color, brittle. The dentin is soft, light in color. The bottom of the carious cavity within the mantle dentin. Palpation and percussion of the tooth is painless. Diagnose according to the clinical, topographic classification and classification of carious cavities according to Black.

Acute secondary caries, second grade according to Black
Chronic secondary caries, II class according to Black
Acute general pulpitis
Wedge-shaped defect
Acute deep caries. Second grade after Black

Solution algorithm
1. Pay attention to the patient's complaints. Causal short-term pain is characteristic of caries or non-carious lesions.
2. Pay attention to the antiquity of the disease. The rapid development of a carious cavity is characteristic of caries. From 1 to 3 months - typical of acute caries.
3. Pay attention to the localization of the carious cavity. Characteristic localization of the carious cavity - on the proximal surface (class II according to Black). In non-carious lesions, the localization of the defect is usually different.
4. Pay attention to the size of the inlet to the carious cavity. A narrow inlet to the carious cavity is characteristic of an acute process. In non-carious lesions, the defect has no entrance.
5. Pay attention to the condition of the enamel and dentin of the carious cavity. Cretaceous, brittle enamel, softened light-colored dentin is characteristic of acute caries. At non-carious defeats the enamel is dense, dentin is dense.
6. Pay attention to the depth of the carious cavity. Localization of the carious cavity within the mantle dentin is characteristic of secondary caries. In deep caries, the carious cavity is localized within the circle of pulpal dentin.
7. Establish a preliminary diagnosis according to the clinical, topographic classification and classification of carious cavities according to Black.

Task 2.
Patient T., 28 years old, went to the clinic with complaints about the presence of a carious cavity in the tooth on the left lower jaw, food retention in the carious cavity, toothache from very cold water, which quickly disappears after removal of the irritant. From the anamnesis: the tooth has not been treated before, food retention in the tooth occurred about 9 months ago. Examination revealed: a carious cavity with a

wide inlet on the chewing surface of the tooth. Enamel on the edge of the inlet chalk-like color, brittle. Dentin is dense, pigmented, dark in color. The bottom of the carious cavity within the colopulpar dentin. Palpation and percussion of the tooth is painless. Diagnose according to the clinical, topographic classification and classification of carious cavities according to Black.

Chronic deep caries, I class according to Black
Acute secondary caries, I class according to Black
Acute general pulpitis
Wedge-shaped defect
Acute deep caries, I class according to Black

Solution algorithm
1. Pay attention to the patient's complaints. Causal, short-term pain from very cold water is characteristic of caries or non-carious lesions.
2. Pay attention to the antiquity of the disease. The gradual development of a carious cavity is characteristic of caries. Up to 9 months - typical of chronic caries.
3. Pay attention to the localization of the carious cavity. Characteristic localization of a carious cavity - on a chewing surface (I class according to Black). In non-carious lesions, the location of the defect is usually different.
4. Pay attention to the size of the inlet to the carious cavity. A wide entrance to the carious cavity is characteristic of a chronic process. In non-carious lesions, the defect has no entrance.
5. Pay attention to the condition of the enamel and dentin of the carious cavity. Chalk-like, brittle enamel, dense, pigmented dark dentin is characteristic of chronic caries.
6. Pay attention to the depth of the carious cavity. Localization of the carious cavity within the colopulpar dentin is characteristic of deep caries. In secondary caries, the carious cavity is localized within the mantle dentin.
7. Establish a preliminary diagnosis according to the clinical, topographic classification and classification of carious cavities according to Black.

Task 3.
Patient O., 39 years old, went to the clinic with complaints of a cosmetic defect, the presence of a carious cavity in the tooth on the upper jaw in the frontal area, toothache from cold water, which quickly disappears after removal of the irritant. From the anamnesis: the tooth was not treated before, the defect appeared about 3 months ago. Examination revealed: a carious cavity with a narrow inlet on the contact surface of the tooth. The dentin is slightly softened, gray in color, and translucent through the thick enamel. The bottom of the carious cavity within the mantle dentin. Palpation and percussion of the tooth is painless. Diagnose according to the clinical, topographic classification and classification of carious cavities according to Black.

Acute secondary caries, 3rd grade according to Black
Chronic secondary caries, III class according to Black
Chronic deep caries, III class according to Black
Enamel erosion

Acute deep caries, III class according to Black

Solution algorithm

1. Pay attention to the patient's complaints. Causal short-term pain is characteristic of caries or non-carious lesions.
2. Pay attention to the antiquity of the disease. The rapid development of a carious cavity is characteristic of caries. From 1 to 3 months - typical of acute caries.
3. Pay attention to the localization of the carious cavity. Characteristic localization of a carious cavity - on a contact surface (III class according to Black). In non-carious lesions, the localization of the defect is usually different.
4. Pay attention to the size of the inlet to the carious cavity. A narrow inlet to the carious cavity is characteristic of an acute process. In non-carious lesions, the defect has no entrance.
5. Pay attention to the condition of the enamel and dentin of the carious cavity. Cretaceous, brittle enamel, softened gray dentin is characteristic of acute caries. At non-carious defeats the enamel is dense, dentin is dense.
6. Pay attention to the depth of the carious cavity. Localization of the carious cavity within the mantle dentin is characteristic of secondary caries. In deep caries, the carious cavity is localized within the colopulpar dentin.
7. Establish a preliminary diagnosis according to the clinical, topographic classification and classification of carious cavities according to Black.

Topic №13. The concept of structural and functional resistance of tooth hard tissues. Determination of enamel resistance (TER test, Koshre).

Task 1.
Patient M., 29 years old, went to the clinic with complaints of a defect in the hard tissues of the front teeth of the upper jaw, pain from chemical and thermal stimuli. From the anamnesis it is known that the patient has type 2 diabetes. Objectively: in the cervical region of the incisors there is a defect of hard tissues within the mantle dentin, the dentin is soft, removed by an excavator. Probing along the enamel-dentin border is painful, the reaction to cold is positive, percussion is painless. Determine the cause of the carious process. After treatment, give recommendations.
Solution algorithm.
1. Pay attention to the patient's history. There are changes in the functional resistance of the enamel. With diabetes, there is a high probability of rapid development of acute carious process due to metabolic disorders in enamel and dentin, associated with disorders in the vessels of the microcirculatory tract of the tooth pulp on the background of diabetes.
2. Pay attention to the localization of carious lesions. In diabetes, the structural resistance of the enamel is disturbed, which depends on the condition of the oral fluid and saliva. Increased viscosity of saliva and oral fluid in diabetes leads to deterioration of the cleaning function of oral fluid, the accumulation of plaque, the rapid formation of dental plaque in the retention points, which are the cervical areas of the teeth.
3. Pay attention to preventive measures after treatment to prevent further spread of caries. Prescribe to the patient drugs, medications, rinses that dilute saliva. Prescribe to the patient prophylactic toothpastes with high calcium content, carry out remineralizing therapy.

Task 2.
In order to determine the resistance of the enamel to a 20-year-old patient, 1N HCl solution was applied to the vestibular surface of 11 teeth for 5 seconds, after rinsing with distilled water, a swab with 1% aqueous methylene blue solution was applied to the crown surface. After removing the dye, the area of painting the enamel was set to a color that corresponds to №6 on a ten-point scale. What test was performed, how many points were given to the patient and what does it indicate?

TER test
Determination of GI by Fedorov_Volodkina
Determination of GI by Green_Vermillion
Cool test
Congratulatory painting

Solution algorithm
1. Pay attention to the test method. When applying to the vestibular surface of 11 teeth 1N HCl solution for 5 seconds, after rinsing with distilled water on the surface of the crown is applied a swab with 1% aqueous solution of methylene blue and then dry roller erased dye - this is a method of enamel resistance test acids).

2. Evaluate the test result. The area of painting corresponds to №6 on a ten-point scale, where 1-3 - high enamel resistance, 4-5 - moderate enamel resistance, 6-7 - low enamel resistance, 7-10 - very low enamel resistance.
3. Draw a conclusion from the test. 1-3 - high enamel resistance, the patient does not need special measures to increase the enamel resistance, 4-5 - moderate enamel resistance, the patient needs preventive measures once a year, 6-7 and 7-10 - low enamel resistance and very low enamel resistance, the patient needs general and local preventive measures 2-3 times a year.

Task 3.
During the preventive examination of a 24-year-old patient on the incisors of the upper jaw in the cervical area of 11, 21 teeth marked areas with signs of initial demineralization. The patient has diabetes, has a very thick and viscous saliva. After plaque removal and drying, a chalky stain was detected. Spot - without gloss, with a surface that is painted methylene blue in a color corresponding to №6 on a ten-point scale TER test. Establish the main cause that contributes to the development of caries in this case.
Solution algorithm
1. Pay attention to the anamnesis of life. The patient has diabetes. Has a very thick and viscous saliva.
2. Pay attention to the appearance of spots. Spots without gloss, chalky, colored with methylene blue, which is characteristic of the carious process
3. Pay attention to the color of the spots. According to the interpretation of the TER test, the painting area corresponds to №6 on a ten-point scale, where 1-3 is high enamel resistance, 4-5 is moderate enamel resistance, 6-7 is low enamel resistance, and 7-10 is very low enamel resistance.
4. Draw a conclusion from the test. 1-3 - high enamel resistance, the patient does not need special measures to increase the enamel resistance, 4-5 - moderate enamel resistance, the patient needs preventive measures once a year, 6-7 and 7-10 - low enamel resistance and very low enamel resistance, the patient needs general and local preventive measures 2-3 times a year.
5. Identify the root cause of caries in this case. Impaired structural and functional resistance of enamel associated with diabetes.

Topic №14. *Acute and chronic initial caries (in the stage of spots). Pathomorphology, clinic, diagnostics, differential diagnosis.*

Task 1.
Patient N., 26 years old, went to the clinic with complaints of a cosmetic defect in the form of white chalky spots on the front teeth of the upper jaw, a feeling of bitterness when eating acidic foods. From the anamnesis it is established: spots were noticed 2 months ago. The patient is currently pregnant (first trimester of pregnancy). Objectively: on the contact-vestibular surfaces of 11,12, 21 teeth the enamel has a chalky color, the spots have clear contours, when dried - the spots become dull, the probing is painless, the surface of the spots is rough. Thermodiagnostics, percussion of teeth, palpation of CO - painless. The spots are painted methylene blue. Determine the most likely diagnosis.
Acute initial caries
Chronic initial caries
Acute secondary caries
Chronic superficial caries
Enamel hypoplasia
Fluorosis
Solution algorithm
1. Pay attention to the patient's complaints. Complaints of a cosmetic defect in the form of white chalk-like spots, a feeling of bitterness when eating acidic foods are characteristic of the acute course of caries (initial form).
2. Pay attention to the age of onset of the disease. Acute caries is characterized by rapid development from 1 to 3 months. For hypoplasia or fluorosis, the development of the disease begins from the moment of laying the teeth (before birth), the teeth erupt with a defect.
3. Pay attention to the location of defects. Localization of defects on the contact-vestibular surfaces (class III according to Black) is characteristic of caries. For non-carious lesions, the localization is different.
4. Pay attention to the symmetry of the location of the spots. The spots are not symmetrical, which is characteristic of caries. Enamel hypoplasia and fluorosis are characterized by symmetry of defects.
5. Pay attention to the contours of the spots. Clear contours of spots are characteristic of carious defeat. Enamel hypoplasia and fluorosis are characterized by "blurring" of the contour of the spots.
6. Pay attention to the condition of the stains after drying. Carious spots after drying become dull. Non-carious lesions (enamel hypoplasia, fluorosis) remain brilliant.
7. Pay attention to the result of staining. Carious spots are painted with methylene blue. The reason is the expansion of the interprism spaces of the surface layer of enamel. Spots in enamel hypoplasia and fluorosis are not stained with methylene blue.

Task 2.
Patient V. went to the clinic with complaints of a feeling of burning in the tooth on the left lower jaw. From the anamnesis: the tooth has not been treated before. The patient noticed unpleasant sensations about 2 weeks ago. Objectively: on the chewing

surface 37 in the area of the fissure, the enamel is chalky in color, when dried it becomes matte. The defect has clear contours. Probing is painless, the probe slides on the fissure. The roughness of the enamel surface is felt. Thermodiagnostics, percussion and palpation of CO are painless. The defect is stained with methylene blue. Determine the most likely diagnosis.

Acute initial caries

Chronic initial caries

Acute superficial caries

Chronic superficial caries

Enamel hypoplasia

Fluorosis

Solution algorithm

1. Pay attention to the patient's complaints. Complaints of a feeling of bitterness while eating acidic foods are characteristic of the acute course of caries (initial form).
2. Pay attention to the age of onset of the disease. Acute caries is characterized by rapid development from 1 to 3 months. For hypoplasia or fluorosis, the development of the disease begins from the moment of laying the teeth (before birth), the teeth erupt with a defect.
3. Pay attention to the location of the defect. Localization of the defect on the masticatory surface in the fissure (Class I according to Black) is characteristic of caries. For non-carious lesions, the localization is different.
4. Pay attention to the result of probing the defect. At initial caries the probe does not cling, slides on a defect surface, enamel is rough, and at superficial caries enamel is fragile, the probe clings and does not slide on a defect surface.
5. Pay attention to the symmetry of the location of the defect. The defect is located on one tooth, which is characteristic of caries. Enamel hypoplasia and fluorosis are characterized by symmetry of defects.
6. Pay attention to the contours of the defect. Clear contours are characteristic of carious lesions. Enamel hypoplasia and fluorosis are characterized by "blurring" of the contour of the spots.
7. Pay attention to the condition of the stains after drying. The carious defect after drying becomes opaque. Non-carious lesions (enamel hypoplasia, fluorosis) remain brilliant.
8. Pay attention to the result of staining the defect. The carious defect is stained with methylene blue. The reason is the expansion of the interprism spaces of the surface layer of enamel. Spots in enamel hypoplasia and fluorosis are not stained with methylene blue.

Task 3.

Patient M. went to the clinic with complaints of a cosmetic defect in the tooth of the frontal area on the upper jaw on the right. From the anamnesis: Notes the appearance of a feeling of burning in the tooth about 11 months ago. She did not seek treatment. Over time, the feeling of bitterness disappeared, and the spot began to acquire a dark color. Objective: On the contact surface 11 is determined by the change of color of the enamel to brown. The defect has clear contours. When air-dried, the stain fades. Defective probing, CO palpation and tooth percussion are painless. The probe slides

on the surface of the stain, does not linger, there is a rough surface of the stain. The spot is painted with methylene blue. Determine the most likely diagnosis.

Chronic initial caries

Acute initial caries

Acute superficial caries

Enamel hypoplasia

Fluorosis

Solution algorithm

1. Pay attention to the age of onset of the disease. Acute caries is characterized by rapid development from 1 to 3 months. For chronic caries from 6 months and more. For hypoplasia or fluorosis, the development of the disease begins from the moment of laying the teeth (before birth), the teeth erupt with a defect.
2. Pay attention to the location of the defect. Localization of the defect on the contact surface (class III according to Black) is characteristic of caries. For non-carious lesions, the localization is different.
3. Pay attention to the color of the defect. In chronic caries, the defect becomes colored, and in acute caries, the defect is chalk-like in color.
4. Pay attention to the result of probing the defect. At initial caries the probe does not cling, slides on a defect surface, enamel is rough, and at superficial caries enamel is fragile, the probe clings and does not slide on a defect surface.
5. Pay attention to the contours of the defect. Clear contours are characteristic of carious lesions. Enamel hypoplasia and fluorosis are characterized by "blurring" of the contour of the spots.
6. Pay attention to the symmetry of the location of the defect. The defect is located on one tooth, which is characteristic of caries. Enamel hypoplasia and fluorosis are characterized by symmetry of defects.
7. Pay attention to the condition of the defect after drying. The carious defect after drying becomes opaque. Non-carious lesions (enamel hypoplasia, fluorosis) remain brilliant.
8. Pay attention to the result of staining the defect. The carious defect is stained with methylene blue. The reason is the expansion of the interprism spaces of the surface layer of enamel. Spots in enamel hypoplasia and fluorosis are not stained with methylene blue.

Topic 15 *Treatment of acute and chronic initial caries. Medicines: groups, properties, features of use. Remineralizing therapy techniques.*

1. A 20-year-old woman at 22 weeks of pregnancy consulted a dentist complaining of sensitivity of the upper front teeth from thermal irritants, which appeared a month ago. Diagnosed with acute initial caries of 12, 11, 21, 22 teeth, Black grade V. The hygienic index of Fedorov-Volodkina is 1.8. Determine the optimal treatment tactics:
Professional teeth cleaning and remineralizing therapy.
Professional teeth cleaning, remineralizing therapy and filling of 12, 11, 21, 22 teeth.
Professional teeth cleaning and filling of 12, 11, 21, 22 teeth.
Postpone treatment until 30 weeks of gestation.
Remineralizing therapy and filling of 12, 11, 21, 22 teeth.

Solution algorithm:
1. Pay attention to the diagnosis. In acute initial caries, subsurface demineralization occurs, without the formation of a defect in hard tissues.
2. Note the GI = 1.8, which indicates satisfactory oral hygiene.
3. Pay attention to the localization of the lesions. The lesions are located in the cervical region, which indicates the presence of Black Class V caries.

2. A 16-year-old patient consulted a doctor complaining of a set of teeth in the upper jaw for 2 weeks. When viewed in the cervical region of 11 and 21 teeth, whitish spots with a matte shade and indistinct contours are determined, which are intensely stained with dyes. Diagnosed with acute initial caries of 11, 21 teeth, Black grade V. What should be the treatment for the 11th and 21st teeth?
Professional teeth cleaning and remineralizing therapy.
Professional teeth cleaning, remineralizing therapy and filling of 11, 21 teeth.
Professional teeth cleaning and filling of 11, 21 teeth.
Postpone treatment until defects appear.
Remineralizing therapy and filling of 11, 21 teeth.

Solution algorithm:
1. Pay attention to the diagnosis. In acute initial caries, subsurface demineralization occurs, without the formation of a defect in hard tissues.
2. Pay attention to the duration of the development of the pathological process. The first signs were noted within two weeks, which indicates the initial stage of the disease.
3. Pay attention to the localization of the lesions. The lesions are located in the cervical region, suggesting the presence of Black grade V canaries.

3. A 20-year-old patient applied for rehabilitation. Objectively: on the vestibular surfaces of 11 and 12 there are several chalky spots with a diameter of 2x3 mm of

a semi-oval shape. The surface is rough when probed. What test will be the most informative in the differential diagnosis of this pathology?
Vital coloration.
TEP test.
Thermal diagnostics.
Probing.
EDI.

1. Pay attention to the type and location of defects. On the vestibular surface, in the cervical region, chalky spots with indistinct contours are found, which is characteristic of caries in the initial stage.
3. Please note that with the initial caries, sub-surface demineralization of the enamel occurs, which leads to an increase in micro-spaces in the enamel and an increase in its permeability.

4. A 18-year-old boy complains of sensitivity to sweet and sour in the region of 14, 13, 12, 23, 24. When viewed in the cervical region, there are single chalky matte spots with indistinct edges. What research method will most accurately confirm the diagnosis?
Vital coloration.
Probing.
Thermometry.
Radiography.
Electroodontometry.

1. Pay attention to complaints: the presence of white spots on the teeth in the frontal area, sensitivity when taking sweet, sour (typical for caries and non-carious lesions).
2. Pay attention to the type and location of the defect. On the vestibular surface, in the cervical region, chalky spots with indistinct contours are found, which is characteristic of caries in the initial stage.
3. Please note that with the initial caries, sub-surface demineralization of the enamel occurs, which leads to an increase in micro-spaces in the enamel and an increase in its permeability.

5. A 18-year-old patient living in an area with a fluoride content of 0.7 mg / l in drinking water complains of white spots on the teeth in the frontal area, sensitivity when taking sweets. Objectively: chalky spots are found on the vestibular surface, in the cervical region. The gloss of the enamel is lost. Which of the following methods will make it possible to establish a diagnosis?
Vital staining.
Electroodontodiagnostics.
Thermal test.
Probing.
Radiography.

Solution algorithm:
1. Pay attention to the fluoride content of the water. 0.7 mg / l is the lower limit of the norm, which excludes the development of a disease such as fluorosis.
2. Pay attention to complaints: the presence of white spots on the teeth in the frontal area, sensitivity when taking sweets (typical for caries and non-carious lesions).
3. Pay attention to the type and location of defects. On the vestibular surface, in the cervical region, chalky spots are found. Enamel gloss is lost, which is typical for caries in the initial stage.
4. Please note that at the initial caries, sub-surface demineralization of the enamel occurs, which leads to an increase in micro-spaces in the enamel and its permeability.

Topic 16 *Acute, chronic superficial and medium caries: pathomorphology, clinical picture, diagnosis, differential diagnosis, treatment***.**

1. The patient complains of pain from thermal stimuli in the lower jaw on the right, which quickly disappears after they are removed. Objectively: on the chewing surface of the 26 tooth, there is a carious cavity with a narrow "entrance" opening within the mantle dentin. Dentin is soft, light in color. Percussion of the 26th tooth is painless. Diagnose:
Acute medium caries.
Acute deep caries.
Chronic superficial caries.
Chronic medium caries.
Chronic deep caries.

Solution algorithm:
1. Pay attention to complaints. Short-term pain from irritants is characteristic of caries and non-carious lesions of the teeth.
2. Pay attention to the localization of the defect. The carious cavity is located on the chewing surface of the molar, which is typical for caries.
3. Pay attention to the shape of the defect. Carious cavity with a narrow inlet, which is typical for an acute course of caries.
4. Pay attention to the depth of the defect. The carious cavity is located within the mantle dentin, which is typical for middle caries.
5. Pay attention to the consistency of hard tissue. Dentin is softened, which is typical for the acute course of caries.

2. A 41-year-old patient after 46 tooth extraction, on the contact-distal surface of tooth 45 revealed a defect within the enamel with indistinct contours, dark brown in color, the enamel is fragile (breaks off) during probing. Diagnose:
Chronic superficial caries II class according to Black.
Chronic superficial caries IV Black class.
Chronic initial caries IV Black class.
Chronic medium caries IV Black class.
Chronic initial caries II class according to Black.

Solution algorithm:
1. Pay attention to the localization of the defect. The carious cavity is located on the contact surface of the premolar, which is typical for the localization of caries of the II class according to Black.
2. Pay attention to the depth of the defect. The carious cavity is located within the enamel, which is typical for superficial caries.
3. Pay attention to the type of defect. A defect with indistinct contours, which is characteristic of the chronic course of caries.

4. Pay attention to the texture and color of the hard tissue. The enamel is dark brown in color, fragile (breaks off) when probed, which is typical for the chronic course of caries.

3. An 18-year-old boy consulted a dentist with complaints of short-term sensitivity of the teeth when eating sweets on the lower jaw on the left. On examination: on the chewing surface of the 37th tooth in the fissures, the enamel is white, without shine, fragile (breaks off) during probing. Diagnose:
Acute superficial caries of tooth 37.
Chronic superficial caries of tooth 37.
Chronic initial caries of tooth 37.
Acute initial caries of tooth 37.
Chronic average caries of tooth 37.

Solution algorithm:
1. Pay attention to complaints. Short-term sensitivity to sweetness is characteristic of caries and non-carious dental lesions.
2. Pay attention to the localization of the defect. The carious cavity is located on the chewing surface of the molar in the fissures, which is typical for caries.
3. Pay attention to the texture and color of the hard tissue. The enamel is white, without shine, fragile (chips off) when probing, which is typical for an acute course of caries.

4. A 35-year-old man consulted a doctor for oral cavity sanitation. Objectively: on the vestibular surface in the cervical region of the 22 tooth, a defect in hard tissues was found within the mantle dentin, the dentin was hard, dark in color, and the bottom was rough. Probing, cold does not cause pain. What is the most likely diagnosis?
Chronic medium caries.
Hard tissue necrosis.
Wedge-shaped defect.
Erosion of the enamel.
Fluorosis, destructive form.

Solution algorithm:
1. Pay attention to the localization of the defect. The carious cavity is located on the vestibular surface in the cervical region of tooth 22, which is typical for the localization of Black Class V caries.
2. Pay attention to the depth of the defect. The carious cavity is located within the mantle dentin, which is typical for middle caries.
3. Pay attention to the texture and color of the hard tissue. Dentin is hard, dark in color, the bottom is rough, which is typical for the chronic course of caries.
4. Pay attention to the results of probing the defect. Probing is painless, which is typical for the chronic course of caries.
5. Pay attention to the results of additional methods. The reaction to cold is

painless, which is typical for the chronic course of caries.

5. A 25-year-old woman consulted a dentist complaining of acute pain in the left upper jaw region, which occurs when eating. Objectively: on the proximal-distal surface of the 26 tooth, a carious cavity is determined within the mantle dentin with a narrow inlet, made with light soft dentin. Probing is slightly painful on the dentin-enamel junction, percussion is painless. Cold water causes pain that quickly passes. What is the most likely diagnosis?
Acute medium caries.
Chronic deep caries.
Acute deep caries.
Chronic medium caries.
Chronic fibrous pulpitis.

Solution algorithm:
1. Pay attention to complaints. Short-term pain from irritants is characteristic of caries and non-carious lesions of the teeth.
2. Pay attention to the localization of the defect. The carious cavity is located on the proximal-distal surface of the molar, which is typical for caries.
3. Pay attention to the shape of the defect. Carious cavity with a narrow inlet, which is typical for an acute course of caries.
4. Pay attention to the depth of the defect. The carious cavity is located within the mantle dentin, which is typical for middle caries.
5. Pay attention to the consistency of hard tissue. Dentin is softened, which is typical for the acute course of caries.
6. Pay attention to the sounding results. Probing is painful along the dentin-enamel border, which is typical for the acute course of caries.
7. Pay attention to the results of additional survey methods. The reaction to a cold stimulus is painful, short-term, which is characteristic of the acute course of caries.

6. For filling a carious cavity with an average depth of 37 (Black class II) in a 35-year-old man, the doctor chose the technique of layer-by-layer restoration. Which of the composites in this case should be used to cover the bottom and walls of the carious cavity to create an initial super-adaptive layer?
Fluid.
Microfilled.
Macro-filled.
Condensable.
Microhybrid.

Solution algorithm:
1. Pay attention to the location of the cavity. A carious cavity of the II class according to Black has a complex configuration, which requires a decrease in the influence of the C-factor.

2. Pay attention to the chosen restoration technique. This technique provides for the creation of an adaptive layer from a material that has the properties compensate for the stresses arising during the "traditional polymerization" of composites.

7. In a 20-year-old patient, during a routine examination, class V carious cavities of 11, 21 teeth were found. What filling material is advisable to use for filling carious cavities of 11, 21 teeth?
Microhybrid composite.
Macro-filled composite.
Amalgam.
Phosphate cement.
Plastic.

Solution algorithm:
1. Pay attention to the location of the defects. A carious cavity of the V class according to Black, is located in the cervical region of the central incisors of the upper jaw, which presents increased requirements for aesthetics when restoring defects.
2. Pay attention to the properties of the proposed materials. Microhybrid materials have positive properties: good aesthetic qualities, good physical and mechanical properties, good polishability, good surface quality, high color fastness.

8. A 35-year-old patient was diagnosed with chronic medium caries 36. A cavity of the II class according to Black with lesions of the chewing surface. What is the best material for filling?
Light curing microhybrid composite material.
Flowable composite of light polymerization.
Glass ionomer cement.
Silicophosphate cement.
Microphilized light curing composite.

Solution algorithm:
1. Pay attention to the location of the defect. Carious cavity of the II class according to Black in the 36th tooth, which presents increased requirements for the strength properties of the material.
2. Pay attention to the properties of the proposed materials. Properties of microhybrid composites that provide them with the qualities of universal restorative materials: good aesthetic qualities; good physical properties; high polishability; good surface quality; excellent color fastness.

Topic 17-18 *Acute and chronic deep caries: pathomorphology, clinical picture, diagnostics, intrasyndromic and non-syndromic differential diagnostics.*
One-session and two-session methods of treatment of acute deep caries. Medical pads: groups, properties, methods of use. Treatment of chronic deep caries.

1. Patient K. complains about the presence of a carious cavity in the tooth in the upper jaw. When sour, sweet, cold enters the cavity, pain occurs in the tooth. The pain disappears after rinsing the tooth with warm water. When viewed on the chewing surface 16, a carious cavity with a narrow inlet within the peri-pulpal dentin is determined. The dentin of the bottom and walls of the cavity is light, softened. When probing the bottom and walls of the cavity, pain is felt. The EDI gives a result of 12 μA. Make a diagnosis.
Acute deep caries.
Chronic glycosis caries.
Acute medium caries.
Chronic medium caries.
Pulp hyperemia.

Solution algorithm:
1. Pay attention to complaints. Short-term pain when sour, sweet, cold enters the cavity. The pain disappears after rinsing the tooth with warm water. Pain from irritants is characteristic of caries and non-carious dental lesions.
2. Pay attention to the localization of the defect. The carious cavity is located on the chewing surface of the molar, which is typical for caries.
3. Pay attention to the shape of the defect. Carious cavity with a narrow inlet, which is typical for an acute course of caries.
4. Pay attention to the depth of the defect. The carious cavity is located within the peri-pulpal dentin, which is characteristic of deep caries.
5. Pay attention to the consistency of hard tissue. Dentin is softened, which is typical for the acute course of caries.
6. Pay attention to the sounding results. When probing the bottom and walls of the cavity, pain is felt, which is characteristic of glib caries.
7. Pay attention to the results of additional research methods. EOD gives a result of 12 μA, which is typical for acute glibous caries.

2. The patient complains of food stuck in the tooth on the upper jaw on the right. Four months ago, there was pain in this tooth from sweet and cold. After the termination of the action of the stimulus, the pain quickly subsided. Examination at 15 revealed a deep carious cavity. The dentin of the bottom and walls of the cavity is dense, pigmented. When probing the bottom and walls in the area of the enamel-dentin border, slight pain is determined. EDI gives the sensitivity of the tooth to a current of 10 μA.
Chronic glycosis caries.
Acute deep caries.
Acute medium caries.

Chronic medium caries.
Pulp hyperemia.

Solution algorithm:
1. Pay attention to complaints. Stuck food in the tooth, which can be typical for caries and non-carious lesions.
2. Pay attention to the localization of the defect. The carious cavity is located on the chewing surface of the molar, which is typical for caries.
3. Pay attention to the depth of the defect. The carious cavity is located within the peri-pulpal dentin, which is characteristic of deep caries.
4. Pay attention to the consistency of hard tissue. The dentin of the bottom and walls of the cavity is dense, pigmented, which is typical for the chronic course of caries.
5. Pay attention to the sounding results. When probing the enamel-dentin border, slight pain is determined, which is characteristic of deep caries.
7. Pay attention to the results of additional research methods. EDI gives a result of 10 μA, which is typical for chronic glibous caries.

3. A 35-year-old patient complains of a cavity in the tooth on the lower jaw on the left, pain from sweet, sour and when eating solid food. Examination in 36 tooth revealed a deep carious cavity filled with light softened dentin. Probing is painful along the bottom of the carious cavity, the reaction to cold is painful, quickly passing. What is the most likely diagnosis?
Acute deep caries.
Chronic glycosis caries.
Acute medium caries.
Chronic medium caries.
Pulp hyperemia.

Solution algorithm:
1. Pay attention to complaints. Short-term pain when sour, sweet enters the cavity. Pain from irritants is characteristic of caries and non-carious dental lesions.
2. Pay attention to the localization of the defect. The carious cavity is located on the chewing surface of the molar, which is typical for caries.
3. Pay attention to the shape of the defect. Carious cavity with a narrow inlet, which is typical for an acute course of caries.
4. Pay attention to the depth of the defect. The carious cavity is located within the peri-pulpal dentin, which is characteristic of deep caries.
5. Pay attention to the consistency of hard tissue. Dentin is softened, which is typical for the acute course of caries.
6. Pay attention to the sounding results. When probing the bottom of the cavity, pain is felt, which is characteristic of glib caries.

4. A 25-year-old woman consulted a dentist with complaints of acute pain in the lower jaw on the right, arising from eating. Objectively: on the distal-chewing

surface of the 45th tooth, a deep carious cavity with a narrow entrance opening, made with light softened dentin, is determined. Probing is slightly painful throughout the bottom, percussion is painless. Cold water pain quickly passes. Which of the suggested remedies will you place on the bottom of the cavity for this patient?

Calcidont.

Arsenic paste.

Phosphate cement.

A paste containing a corticosteroid.

Phosphate-cement with silver

Solution algorithm:

1. Pay attention to complaints. Short-term pain when sour, sweet, cold enters the cavity. The pain disappears after rinsing the tooth with warm water. Pain from irritants is characteristic of caries and non-carious dental lesions.
2. Pay attention to the localization of the defect. The carious cavity is located on the distal chewing surface of the 45 tooth, which is typical for caries.
3. Pay attention to the shape of the defect. Carious cavity with a narrow inlet, which is typical for an acute course of caries.
4. Pay attention to the depth of the defect. The carious cavity is located within the peri-pulpal dentin, which is characteristic of deep caries.
5. Pay attention to the consistency of hard tissue. Dentin is softened, which is typical for the acute course of caries.
6. Pay attention to the properties of the proposed materials. For the treatment of acute deep caries, it is necessary that the paste has an odontotropic effect.

5. Patient D., 35 years old, was diagnosed with chronic deep caries 33. Composite material "Degufil" was selected for filling. What is the most appropriate gasket for use?

Glass ionomer cement.

Phosphate of cement with silver.

Dentin paste.

Zinc eugenol paste.

Evgenol-thymol paste.

Solution algorithm:

1. Pay attention to the diagnosis. In chronic deep caries, replacement dentin is produced.
2. Pay attention to the properties of the proposed materials. For the treatment of chronic glibous caries it is necessary: chemical adhesion to dentin, fluoride-dependent caries-static and antibacterial effect, good biocompatibility, non-toxicity.

6. A 25-year-old woman consulted a dentist with complaints of acute pain in the lower jaw on the right, arising from eating. Objectively: (on the distal-chewing

surface 45 there is a deep carious cavity filled with light softened dentin. Probing is weakly painful throughout the bottom, percussion is painless. Cold water gives a quickly passing pain. Which of the proposed remedies will you place on the bottom of the cavity?

Calcium-containing paste.

Antibiotic paste.

A paste containing a corticosteroid.

Bactericidal cement.

Phosphate-cement.

Solution algorithm:

1. Pay attention to complaints. Short-term pain when sour, sweet, cold enters the cavity. Pain from irritants is characteristic of caries and non-carious dental lesions.
2. Pay attention to the localization of the defect. The carious cavity is located on the distal chewing surface of the 45 tooth, which is typical for caries.
3. Pay attention to the shape of the defect. Carious cavity with a narrow inlet, which is typical for an acute course of caries.
4. Pay attention to the depth of the defect. The carious cavity is located within the peri-pulpal dentin, which is characteristic of deep caries.
5. Pay attention to the consistency of hard tissue. Dentin is softened, which is typical for the acute course of caries.
6. Pay attention to the properties of the proposed materials. For the treatment of acute deep caries, the odontotropic action of the paste is necessary.

Topic 19: *Blooming (multiple) caries: causes of development, pathomorphology, clinical picture, diagnosis.*

1. Patient A. 66 years old Suffers from diabetes mellitus, is observed by an endocrinologist. The development of the present disease: over the past 15 years, the teeth of the upper and lower jaws have been sore and destroyed. Past and concomitant diseases: allergy to novocaine. He denies HIV, syphilis, hepatitis. Diabetes mellitus type 1. The general condition is satisfactory. Body temperature 36.5 ° C. On examination: the configuration of the face is not changed. Opening the mouth is free, painless, in full. Regional lymph nodes are not palpable. In the oral cavity: the crown parts of 1.7, 1.4, 1.3, 2.1, 3.5, 3.6, 3.7, 4.5 teeth are significantly destroyed. The mucous membrane in the area of these teeth is loose, slightly hyperemic. What is the most likely diagnosis?
Multiple caries.
Acute medium caries.
Acute general pulpitis.
Chronic caries.
Pulp hyperemia.

Solution algorithm:
1. Pay attention to the localization of defects. The crown parts of 1.7, 1.4, 1.3, 2.1, 3.5, 3.6, 3.7, 4.5 teeth are significantly destroyed, which is typical for multiple caries.
2. Pay attention to the duration of the development of the pathological process. The development of the present disease: over the past 15 years, the teeth of the upper and lower jaws hurt and collapsed, which is characteristic of non-carious lesions.
3. Pay attention to the presence of comorbidities. Type 1 diabetes mellitus, which can affect the condition of the oral organs.

2. A 50-year-old patient complains of a large number of carious lesions, loss of fillings, dry mouth. Examination revealed a simultaneous defeat of 8 teeth. The lesions are located around the neck of the teeth, forming "circular caries". Large amounts of soft plaque. Life history - type 2 diabetes mellitus. Make a preliminary diagnosis.
Multiple caries.
Acute medium caries.
Acute general pulpitis.
Chronic caries.
Pulp hyperemia.

Solution algorithm:

1. Pay attention to the patient's complaints. The presence of a large number of carious lesions, loss of fillings, dry mouth, which is characteristic of multiple caries.
2. Pay attention to the localization of defects. The lesions are located around the neck of the teeth, forming "circular caries", which is characteristic of multiple caries.
3. Pay attention to the presence of comorbidities. Type 2 diabetes mellitus, which can affect the condition of the oral organs.

3. A 40-year-old patient complains of a large number of carious lesions, loss of fillings, dry mouth. Examination revealed damage to 8 teeth. Carious cavities are located on the masticatory tubercles of teeth 1.7, 1.6, 1.5, in teeth 3.1, 3.2, 4.1, 42, 4.3 lesions are located in the cervical region, forming a "circular caries". All lesions are made with softened dentin, which is removed with a layer. Large amounts of soft plaque. Life history - type 2 diabetes mellitus. What is the peculiarity of the local treatment of multiple caries in this patient?
use of odontotropic pastes, as gaskets, permanent filling with glass ionomer cements...
the use of iodoform pastes as gaskets, permanent filling with amalgams.
filling - with restoration materials.
use of iodoform pastes as gaskets, permanent filling with restoration materials.
use as gaskets - phosphate cement.

1. Pay attention to the patient's complaints. The presence of a large number of carious lesions, loss of fillings, dry mouth, which is characteristic of multiple caries.
2. Pay attention to the localization of defects. The lesions are located around the neck of the teeth, forming "circular caries", which is characteristic of multiple caries.
3. Pay attention to the presence of comorbidities. Type 2 diabetes mellitus, which can affect the condition of the oral organs.
4. Pay attention to the features of the course of multiple caries and the need for odontotropic action of materials.

Topic 20. *Treatment of flowering (multiple) caries: general and local. Therapeutic agents: groups, dosages, methods of use.*

1. A 24-year-old pregnant woman went to the dentist on her 6th months of pregnancy. Complains on fast destruction of teeth and loss of old restorations. An active systemic (multiple) caries was diagnosed. The doctor completes the rehabilitation of the oral cavity. What should a recommended toothpaste contain that will be offered to this patient for brushing teeth during pregnancy and lactation?

Mineral components
Metronidazole
Infusions of medicinal herbs
Salt additives
Antifungal drugs

Solution algorithm:
1. Pay attention to complaints. Rapid tooth decay and loss of old fillings (several at a time) is characteristic of multiple caries.
2. Pay attention to the accompanying physiological condition of the patient - pregnancy within 6 months. During this period, the fetus actively develops and removes from the mother's body.
3. Pay attention to the choice of toothpaste for remineralization of hard tissues of teeth.

2. Patient Ch., 23 years old, is passing a procedure of multiple caries treatment, complains of increased sensitivity of the teeth in the initial caries from thermal stimuli. The physiotherapist prescribed electrophoresis with 2.5% solution of calcium glycerophosphate № 10, duration 15 minutes. For electrophoresis appoint:

DC
AC
Electromagnetic current
Darsonval
Ultrasound.

Solution algorithm:
1. Pay attention to the patient's diagnosis - multiple caries, therefore, you need to treat multiple teeth at once.
2. Pay attention to the patient's complaints - the increased sensitivity of the teeth from thermal stimuli. This indicates an acute carious process.
3. Pay attention to the topography of the pathological process - the initial caries. This carious process develops in the enamel - the hard tissue of the tooth and is characterized by demineralization (Demineralization - a pathological process of loss of tooth tissue mineral components, resulting in dullness, hypersensitivity, porosity of their surface). In this case, it is possible to restore the structure.
4. Reconsider the physical effects of electrophoresis. With its help it is possible to enter medicinal substances into deep layers of fabrics therefore as a result in the

center of the center of defeat there is a depot of ions and particles of medicinal substances that provides steady remineralizing effect.

3. Patient G., 24 years old, is undergoing treatment for multiple caries. The physiotherapist prescribed electrophoresis of 2.5% solution of calcium gluconate № 10 on the cervical region, duration 15 minutes. Current power for electrophoresis is:
1-5 μA
10-15 μA
20-30 μA
1-5 μA
5-10 μA.

Solution algorithm:
1. Pay attention to the patient's diagnosis - multiple caries.
2. Pay attention to the choice of physiotherapy for the patient - electrophoresis of 2.5% solution of calcium gluconate № 10.
3. Reconsider the physical effects of electrophoresis. With its help it is possible to enter medicinal substances into deep layers of fabrics therefore as a result in the center of the center of defeat there is a depot of ions and particles of medicinal substances, provides steady remineralizing effect.

4. A 40-year-old patient complains of a large number of carious lesions, loss of restorations, xerostomia. Examination revealed lesions of 8 teeth. Carious cavities are located on the masticatory mounds of teeth 1.7,1.6, 1.5, in teeth 3.1,3.2, 4.1, 42, 4.3 lesions are located in the cervical region, forming a “circular caries.” All lesions are filled with softened dentin, which is removed by the layer. history of life - type 2 diabetes mellitus Previous diagnosis: Multiple caries What is the peculiarity of local treatment of multiple caries in this patient?
Usage of odontotropic pastes as a base liner, permanent sealing - glass ionomer cement
Usage of devitalizing pastes as a base liner, permanent sealing - glass ionomer cement
Sealing with composite material without base liner
Sealing with composite material with base liner
Filling of carious cavities with silicate cement

Solution algorithm:
1. Pay attention to the patient's complaints (the presence of a large number of carious lesions, loss of seals, dry mouth).
2. Pay attention to the location of the lesion and the type of lesion (on the masticatory mounds of teeth, in the cervical region, forming a "circular caries").
3. Pay attention to the consistency of hard tissues (lesions are filled with softened dentin, which is removed by a layer).

Topic 21. *Prevention of caries. The importance of individual and community prevention. Prevention means. Organization of dental caries prevention in persons of decreed population groups. Efficiency mark.*

1. An 18-year-old girl consulted a dentist about the presence of multiple dark brown spots on the teeth of the upper and lower jaws. She was born and lived in an area with a fluoride content in drinking water of 2.2 mg / l. Which of the following could prevent the development of hard tissue pathology?
Ingestion of calcium and phosphorus preparations
Introduction to the diet of seafood
Teeth sanitation
Thorough hygienic oral care
Ingestion of fluoride preparations

Solution Algorithm
1. Pay attention to the patient's age - 18 years old, which means permanent bite
2. Pay attention to the patient's complaints - the presence of multiple dark brown spots on the teeth of the upper and lower jaws (symptoms of caries and non-carious lesions).
3. Pay attention to the life history - she was born and lived in an area with a fluoride content in drinking water of 2.2 mg / l. (The norm is 0.8-1.2 mg / l), which is typical for fluorosis.
3. Taking into account the patient's dental status, it was necessary to select drugs that balance the level of trace elements in hard tissues and in the body as a whole.

2. A pregnant woman (36 weeks) complains of bleeding gums, abundant plaque formation, despite careful hygienic care of the oral cavity. Objectively: the gingival papillae and the marginal edge of the gums are loose, bleed when touched. The hygienic index according to Fedorov-Volodkina is 3.7 points. What paste should be recommended for this patient after professional oral hygiene?
Containing chlorhexidine
Containing herbal preparations
Gel
Containing mineralizing preparations
Fluorinated

Solution Algorithm
1. Pay attention to the patient's condition - pregnant.
2. Pay attention to the patient's complaints - bleeding gums, profuse plaque formation, despite careful hygienic care of the oral cavity (gingivitis symptoms).
3. Taking into account the dental and physiological status of the patient, it was necessary to choose a paste that would have an etiotropic and pathogenetic effect.

3. A 56-year-old man complained of increased tooth sensitivity to all types of irritants. Objectively: the gingival mucosa is anemic, thinned, dense to the touch; the necks and roots of teeth are exposed to 1/3 of the length, touching them with a tool causes pain. The teeth are stable. Wedge-shaped defects were found in the cervical areas of all premolars. What kind of paste should be recommended for this patient for cleaning teeth, carrying out complex therapy of the disease?

Gel containing trace elements

Salt-containing paste

Proteolytic enzyme paste

Paste containing herbal infusions

Chlorhexidine paste

Solution Algorithm

1. Pay attention to the patient's complaints - on the increased sensitivity of teeth to all types of irritants (symptoms of caries and non-carious lesions).
2. Pay attention to the results of an objective examination: the gingival mucosa is anemic, thinned, dense to the touch; the necks and roots of teeth are exposed to 1/3 of the length, touching them with a tool causes pain. The teeth are stable. Wedge-shaped defects were found in the cervical areas of all premolars.
3. Considering the patient's dental status, it is necessary to select a paste with a mineralizing effect and very low abrasive properties.

Topic 23. *Pathomorphology, clinic and diagnostics of non-carious teeth lesions, which arise after teeth eruption: clinoid defect, enamel erosion, traumatic defeats, chemical defeats, hyperesthesia. Modern desensitizers for treatment of hyperesthesia: kind, composition*

1. A 35-year-old woman has complaints of cosmetic defects of the front upper teeth crowns. The defects have been aggravating for the last 10 years. The patient suffers from unpleasant sensations when brushing her teeth, and when chemical stimuli are applied. Objective examination revealed defects localized in the enamel of the front upper teeth vestibular surface. The defects are oval, saucer-shaped, and have clear margins. Response to probing and cold stimuli was positive. Make the diagnosis:

Enamel erosion

Enamel hypoplasia

Cuneiform defect

Chemical necrosis of the tooth

Hyperesthesia of tooth hard tissues

Algorithm solution:

1. Pay attention to complaints. Cosmetic defect and unpleasant sensation from irritants (causal short-term pain or hyperesthesia from mechanical and chemical irritants) are characteristic for caries and non-carious teeth lesions;

2. Pay attention to the duration of the pathological process. Carious lesions develop over a period of 1 month to 1 year. In this case, the duration is about 10 years, which indicates a non-carious lesion.

3. Pay attention to the location of defects. Carious cavities are localized in places of food retention, in this case - a convex vestibular surface of the upper front teeth, which is characteristic of non-carious lesions;

4. Pay attention to the shape of the defects. In the case of carious lesions - a defect in the form of a cavity, in this case, the defect has a saucer-shaped shape, which is characteristic of enamel erosion.

2. A 40-year-old man, a chemical industry worker, notes the sour sensation in his mouth, pain response to thermal and chemical stimuli. On examination: on the

vestibular surface and cutting edge of the front teeth there are chalky enamel defects with uneven scalloped margins. Make the diagnosis:

Acidic necrosis of enamel

Superficial caries

Enamel hypoplasia (erosive form)

Fluorosis (erosive form)

Median caries

Algorithm solution:

1. Pay attention to complaints. Cosmetic defect and unpleasant sensation or causal short-term pain from irritants (thermal and chemical) are characteristic for caries and non-carious teeth lesions;

2. Pay attention to the patient's life history. He works at a chemical factory, the industrial hazards of which can provokes non-carious damage to the hard tooth tissues;

3. Pay attention to the location of defects. Carious cavities are localized in places of food retention, in this case - a convex vestibular surface and the cutting edge of the crowns of the upper front teeth, which is characteristic of non-carious lesions;

4. Pay attention to the shape of the defects. In the case of carious lesions, it is a defect in the form of a cavity, in this case the defect within the enamel has uneven scalloped edges and a chalky color, which is characteristic of chemical necrosis of the enamel.

3. A 35-year-old man complains of sour sensation in his mouth and front teeth sensitivity to thermal and mechanical stimuli. Objective examination revealed visible changes in the enamel of 13, 12, 11, 21, 22, and 23. The enamel is dull, rough, missing on the cutting edge. Probing of the vestibular surface of these teeth is painful, response to thermal stimuli is positive. The patient’s medical record states his occupation in industrial production of inorganic acids. What is the most likely diagnosis?

Necrosis of dental hard tissues

Fluorosis

Enamel erosion

Pathologic teeth grinding

Enamel hypoplasia

Algorithm solution:

1. Pay attention to complaints. Cosmetic defect and unpleasant sensation or causal short-term pain from irritants (thermal and chemical) are characteristic for caries and non-carious teeth lesions;

2. Pay attention to the patient's life history. He works at a chemical factory, the industrial hazards of which can provokes non-carious damage to the hard tooth tissues;

3. Pay attention to the location of defects. Carious cavities are localized in places of food retention, in this case - a convex vestibular surface and the cutting edge of the crowns of the upper front teeth, which is characteristic of non-carious lesions;

4. Pay attention to the shape of the defects. In the case of carious lesions, it is a defect in the form of a cavity, in this case the enamel is dull, rough, missing on the cutting edge, which is characteristic of chemical necrosis necrosis of dental hard tissues.

4. A 48-year-old patient has addressed a hospital with complaints of defects in the paragingival area and slight sensitivity to thermal stimuli. Objectively there are hard tissue defects that resemble a wedge with smooth polished walls on the precervical vestibular surface of the 23 and 24 teeth. Thermal test is slightly positive. What is the most likely diagnosis?

Cuneiform defect
Enamel necrosis
Acute deep caries
Enamel erosion
Endemic fluorosis

Algorithm solution:

1. Pay attention to complaints. Cosmetic defect and unpleasant sensation from irritants (causal short-term pain or hyperesthesia from mechanical and chemical irritants) are characteristic for caries and non-carious teeth lesions;

2. Pay attention to the location of defects. Carious cavities are localized in places of food retention, in this case - a convex vestibular surface of the upper canine and premolar, which is characteristic of non-carious lesions;

3. Pay attention to the shape of the defects. In the case of carious lesions - a defect in the form of a cavity, in this case, the defects are wedge shaped which is characteristic of cuneiform defect.

5. A 47-year-old female patient complains of inability to eat hot and cold food, as well as of intense pain caused by sour, sweet and salty food. Objectively: there is a slight loss of enamel on the molars and incisors. Probing and cold test cause acute pain. What is the most likely diagnosis?

Hyperesthesia of dental hard tissues
Enamel hypoplasia
Enamel necrosis
Enamel erosion
Pathological abrasion of dental hard tissues

Algorithm solution:

1. Pay attention to complaints. Cosmetic defect and unpleasant sensation from irritants (causal short-term pain or hyperesthesia from mechanical and chemical irritants) are characteristic for caries and non-carious teeth lesions;

2. Pay attention to the location of defects. Carious cavities are more often single defects localized in places of food retention, in this case – there are a lot of defects on a convex vestibular surface of the incisors and molars, which is characteristic of non-carious lesions;

3. Pay attention to the shape of the defects. In the case of carious lesions - a defect in the form of a cavity, in this case there is slight loss of enamel which is characteristic of hyperesthesia of dental hard tissues.

Topic 29: *Pulpitis. Etiology, pathogeny, classification (E.M. Gofung, I.O.Novik, IKD-10), its positive parties and disadvantages. The concept of reversible and irreversible forms. Acute traumatic pulpitis: pathomorphology, clinic, diagnostics, differential diagnostics*.

1. A 19-year-old patient applied to the clinic with complaints of a 21 tooth crown chipping as a result of trauma. Objectively: the medial angle 21 is absent. Pulp is visible through the cleavage line at one point. Probing at this point is painful; percussion is painless. EOD - 25 μA. What is the most likely diagnosis?
Acute traumatic pulpitis
Acute localized pulpitis
Pulp hyperemia
Acute deep caries
Chronic fibrous pulpitis

Solution algorithm:

1. Pay attention to the complaints: chipping of the crown of tooth 21 due to trauma, which is typical for traumatic pulpitis.

2. Note that the pulp is visible through the cleavage line at one point, probing at this point is painful, the percussion is painless, which is typical for acute traumatic pulpitis.

3. Pay attention to the EOD indicators, which are below the norm, which is typical for acute traumatic pulpitis.

2. A 20-year-old patient complains of acute short-term pain from all stimuli during the last month in a tooth in the upper jaw on the left. Objectively: a deep carious cavity was found in the 26 tooth on the chewing surface. When preparing a carious cavity, the anterior buccal horn of the pulp is accidentally revealed. Probing the opened point is sharply painful. Make a final diagnosis:
Acute traumatic pulpitis
Pulp hyperemia
Acute localized pulpitis
Acute deep caries
Chronic fibrous pulpitis

Solution algorithm:
1. Pay attention to complaints. The patient complains of acute short-term pain from all irritants in the 26th tooth, which is characteristic of acute deep caries.
2. Pay attention to the fact that during the treatment of the fundus the pulp horn is accidentally opened in the region of the anterior buccal tubercle, which is typical for acute traumatic pulpitis.

3. Pay attention to the fact that probing of the opened point is sharply painful, which is typical for acute forms of pulpitis.

3. A 25-year-old patient was going to a polyclinic about the treatment of a tooth, while climbing the stairs he fell and damaged tooth 11. As a result of an injury, the crown of tooth 11 was broken off. Objectively: the medial angle 11 is absent. Pulp is visible through the cleavage line at one point. Probing at this point is painful, percussion is painless. EOD - 25 μA. What is the most likely diagnosis?
Acute traumatic pulpitis
Chronic fibrous pulpitis
Acute localized pulpitis
Acute deep caries
Pulp hyperemia

Solution algorithm:

1. Pay attention to the complaints: the 11 tooth crown is chipped due to trauma, which is typical for traumatic pulpitis.

2. Note that behind the cleavage line at one point the pulp is visible, probing at this point is painful, percussion is painless, which is typical for acute traumatic pulpitis.

3. Pay attention to the EOD indicators, which are below the norm, which is typical for acute traumatic pulpitis.

Topic 30: *Pulp hyperemia and acute limited pulpitis: pathomorphology, clinical picture, diagnostics, differential diagnostics.*

1. A 33-year-old patient has involuntary short-term pains for 15 minutes, pains from cold, sweet, do not subside after the stimulus stops acting. Objectively: there is a deep carious cavity in the 35 tooth on the chewing surface, the dentin of the bottom and walls is hard, pigmented. Probing the bottom of the cavity is painful at one point. The reaction to the cold is painful, without stopping for a long time after the elimination of the irritant, the EOD is 35 μA. What is the most likely diagnosis?
Acute localized pulpitis
Exacerbation of chronic pulpitis
pulp hyperemia
Acute purulent pulpitis
Acute diffuse pulpitis

Solution algorithm:
1. Pay attention to complaints. The patient is disturbed by involuntary short-term pains for 15 minutes, pains from cold, sweet, do not subside after the termination of the stimulus, which is characteristic of acute limited pulpitis.
2. Analyze that in the tooth on the chewing surface there is a deep carious cavity, the dentin of the bottom and walls is hard, pigmented, the probing of the bottom is painful at one point, the reaction to cold is painful, does not go away for a long time after the removal of the irritant, which is typical for acute limited pulpitis.
3. Pay attention to the EOD indicators, which are below the norm, which is typical for acute limited pulpitis.

2. A 40-year-old woman complains of short-term sudden pain, as well as pain from hot and cold food in the area 46. On the chewing surface 46 there is a carious cavity with a large amount of softened dentin. Probing the bottom is painful at one point. The reaction to thermal stimuli is painful and does not disappear immediately after they are removed. EOD 25 μA. What is the most likely diagnosis?
Acute localized pulpitis
Exacerbation of chronic pulpitis
Acute diffuse pulpitis
Acute purulent pulpitis
Chronic fibrous pulpitis

Solution algorithm:

1. Analyze the patient's complaints of short-term sudden pain, as well as pain from hot and cold food in the area 46, which is characteristic of acute limited pulpitis.

2. Note that on the chewing surface 46 there is a carious cavity with a large amount of softened dentin, probing of the bottom is painful at one point, the reaction to thermal stimuli is painful and does not disappear immediately after their elimination, which is typical for acute limited pulpitis.

3. Pay attention to the EOD indicators, which are below the norm, which is typical for acute limited pulpitis.

3. A 19-year-old patient complains of aching pain at 36 when he gets cold, sweet, which subsides immediately after the stimulus is removed. Objectively: there is a deep carious cavity on the chewing surface 36, containing softened light dentin. Sounding agonizing all over the bottom. What is the most likely diagnosis?
Pulp hyperemia
Acute deep caries
Chronic deep caries
Chronic fibrous pulpitis
Acute localized pulpitis

Solution algorithm:

1. Analyze the patient's complaints of aching pain in the tooth when cold, sweet, which subsides immediately after the removal of the irritant, which is characteristic of pulp hyperemia.

2. Note that on the chewing surface 36 there is a deep carious cavity containing softened light dentin, which is typical for pulp hyperemia.

3. Note that probing is painful throughout the bottom, which is typical for pulp hyperemia.

Topic 7. *Acute general pulpitis: an aetiology, pathomorphology, clinic, diagnostics, differential diagnostics.*

1. A patient went to the dentist with complaints of toothache on the upper jaw, which had irradiation in the ear and lasted for 2 days. On objective examination, probing is painful at the bottom of the carious cavity, EOD 30 μA. Acute diffuse pulpitis was diagnosed. What other pains happen at such diagnosis.

Spontaneous, paroxysmal with irradiation
Pain from chemical irritants;
Pain with changes in atmospheric pressure;
Aching constant pain

Solution algorithm:

1. Pay attention to complaints. Spontaneous, paroxysmal pain is characteristic of pulpitis.

2. Pay attention to the duration of the pathological process. Acute pulpitis develops in a few days.

3. Pay attention to the irradiation of pain. It occurs in inflammation of both the coronal and root pulp.

4. Pay attention to probing of a carious cavity. With inflammation of the coronal and root pulp, probing will be painful throughout the bottom of the carious cavity.

5. Pay attention to electroodontic diagnostics. At an inflammation of a coronal and root pulp EDI will be from 25 to 30 mka.

2. A 28-year-old patient applied to the dental office with complaints of spontaneous paroxysmal toothache in the lower jaw. On objective examination, probing is painful at the bottom of the carious cavity, EOD 30 μA. Acute diffuse pulpitis was diagnosed. What will be the reaction of the tooth to the cold stimulus in this pathology:

There is an attack of pain for several hours with irradiation;
There is an attack of pain up to 30 minutes;
There is constant pain;
The pain passes in 2 minutes
The tooth does not respond to stimuli

Solution algorithm:

1. Pay attention to complaints. Spontaneous, paroxysmal pain with irradiation is characteristic of pulpitis;

2. Pay attention to the duration of the pathological process. Acute pulpitis develops in a few days.

3. Pay attention to the irradiation of pain. It occurs in inflammation of both the coronal and root pulp.

4. Pay attention to probing of a carious cavity. With inflammation of the coronal and root pulp, probing will be painful throughout the bottom of the carious cavity.

5. Pay attention to electroodontic diagnostics. At an inflammation of a coronal and root pulp EDI will be from 25 to 30 mka.

6. Pay attention to the thermal test, in this situation there is an attack of pain for several hours.

3. A 20-year-old girl went to the dentist with complaints of toothache on her upper jaw with irradiation to her temple. The pain lasted for 2 days. On objective examination, probing is painful at the bottom of the carious cavity, percussion is painless. EOD 25 μA. Acute diffuse pulpitis was diagnosed. What other pains happen at such diagnosis.

At an acute general pulpitis percussion of a tooth:

Painless percussion;
Painful vertical percussion;
Painful horizontal percussion;
Sharply painful percussion;
Everything is correct.

Solution algorithm:

1. Pay attention to complaints. Spontaneous, paroxysmal pain with irradiation is characteristic of pulpitis;

2. Pay attention to the duration of the pathological process. Acute pulpitis develops in a few days.

3. Pay attention to the irradiation of pain. It occurs in inflammation of both the coronal and root pulp.

4. Pay attention to probing of a carious cavity. With inflammation of the coronal and root pulp, probing will be painful throughout the bottom of the carious cavity.

5. Pay attention to percussion. At pulpitis percussion is not painful.

6. Pay attention to electroodontic diagnostics. At an inflammation of a coronal and root pulp EDI will be from 25 to 30 mka.

Topic 32. *Acute purulent pulpitis: an aetiology, pathomorphology, clinic, diagnostics, differential diagnostics*

1. A 39-year-old patient complains of acute, spontaneous nocturnal pain in a tooth in the upper jaw on the right. The pain is pulsating in nature, radiates to the zygomatic region and practically does not disappear, lasts 3 days. Objectively: at 15 - a deep carious cavity. Dentin of dirty gray color, soft consistency. Probing - painful throughout the bottom, vertical percussion is mildly painful. The cold stimulus reduces the intensity of the pain. EOD - 55 mkA. What is the most likely diagnosis?

Acute purulent pulpitis 15
Acute serous pulpitis 15
Acute purulent periodontitis 15
Acute limited pulpitis 15
Acute diffuse pulpitis 15

Algorithm solution:
1. Pay attention to the patient's complaints. Acute spontaneous night pain with irradiation testifies in favor of acute forms of pulpitis. The pulsating nature of pain and the absence of intermissions testifies in favor of a purulent process.
2. Pay attention to the results of the physical examination. The presence of a carious cavity with dentin of a dirty gray color, of a soft consistency confirms the acute course of the process. Slightly painful vertical percussion indicates the presence of perifocal inflammation in the periodontium, which is characteristic of acute purulent pulpitis, which is also confirmed by a decrease in pain from a cold stimulus and an EDI value of 55 mkA.

2. The patient complains of acute, spontaneous, paroxysmal pain, without a period of intermission, with irradiation to the temple; pain is ameliorated by cold water. Objectively: deep carious cavity at 26, which does not communicate with the tooth cavity. Probing - sharply painful along the bottom of the carious cavity, vertical percussion - sensitive. Make a diagnosis:

Acute purulent pulpitis 26
Acute diffuse pulpitis 26
Hyperemia of a pulp 26
Chronic fibrous pulpitis 26
Chronic hypertrophic pulpitis 26

Algorithm solution:
1. Pay attention to the patient's complaints. Acute spontaneous pain with irradiation testifies in favor of developed acute forms of pulpitis. The absence of intermissions and the relief of pain from cold water speaks in favor of a purulent process.
2. Pay attention to the results of objective research. The absence of communication between the carious cavity and the tooth cavity speaks in favor of acute forms of

pulpitis; sharply painful probing along the entire bottom of the carious cavity confirms the extensive inflammation of the pulp; sensitive vertical percussion indicates the presence of perifocal inflammation in the periodontium. Considering the complaints and the results of objective research, we establish the diagnosis of acute purulent pulpitis.

3. The patient came to the appointment with a bottle of cold water, soothes toothache. What is the most likely diagnosis?
Acute purulent pulpitis
Acute diffuse pulpitis
Exacerbation of chronic pulpitis
Acute serous periodontitis
Acute focal pulpitis

Algorithm solution:
1. Pay attention to the patient's complaints: toothache is soothed by cold water. The «bottle symptom» is a specific symptom of only one form of pulpitis - acute purulent.

Topic 33. *Chronic fibrous pulpitis: pathomorphology, clinic, diagnosis, differential diagnosis.*

1. A 45-year-old patient complains of aching, prolonged pain in 46 teeth, which appears under the influence of temperature and chemical stimuli. Examination of 46 teeth in the cervical region on the vestibular surface reveals a deep carious cavity filled with pigmented softened dentin. Probing is sharply painful at one point. Cold water causes a slow-growing aching pain. Diagnose:

Chronic fibrous pulpitis
Chronic gangrenous pulpitis
Chronic deep caries
Acute deep caries
Chronic fibrous periodontitis

Solution algorithm:

1. Pay attention to complaints. Prolonged causal pain (from irritants) is characteristic of chronic forms of pulpitis;

2. Pay attention to the depth and condition of the dentin of the carious cavity. Deep carious cavity, which is localized within the near-pulp dentin, the dentin of the bottom and walls of which is softened, is a characteristic feature of deep caries or various forms of pulpitis.

3. the probing result. In the case of caries, probing along the bottom of the carious cavity is painless or sensitive. In this case, probing is sharply painful at one point, which is characterized by inflammation of the pulp.

4. Pay attention to the result of thermodiagnostics. In caries, the pain that occurs when irritated by a cold stimulus is short-lived. In this case, there is a slowly increasing aching pain, which confirms the diagnosis of chronic fibrous pulpitis.

2. A patient complains of dull aching pain in the 16 tooth, which occurs during eating cold food. Previously the tooth had been filled due to deep caries, the filling was lost 1 year ago. Objectively: a deep carious cavity that does not communicate with the tooth cavity is present; percussion is painless, probing is painful along the whole floor of the carious cavity. Electric pulp test - 50 microamperes. Thermodiagnosis is painful. Make the diagnosis:

Chronic fibrous pulpitis
Chronic deep caries
Chronic fibrous periodontitis
Acute deep caries
Chronic gangrenous pulpitis

Solution algorithm:

1. Pay attention to complaints. Prolonged causal pain (from irritants) and pain with changes in ambient temperature are characteristic of chronic forms of pulpitis;

2. Pay attention to the depth and condition of the dentin of the carious cavity. Deep carious cavity, which is localized within the near-pulpal dentin, is a characteristic for deep caries or various forms of pulpitis.

3. Note the probing result. In the case of caries, probing along the bottom of the carious cavity is painless or sensitive. In this case, probing is painful along the whole floor of the carious cavity, which is characterized inflammation of the pulp.

4. Pay attention to the result of electroodontodiagnostics. The electrical excitability of the pulp at 50 μA indicates irreversible inflammatory changes in pulp and is characteristic of chronic fibrous pulpitis.

3. A 27-year-old man complains of prolonged aching pain in 15 teeth while eating, especially cold. Sometimes there is pain when the temperature changes. Objectively: in 15 teeth on the distal surface of a carious cavity filled with softened dentin. At probing pain is noted. The electrical excitability of the pulp is 35 μA. What is the most likely diagnosis?

Chronic fibrous pulpitis
Exacerbated chronic pulpitis
Chronic deep caries
Hyperemia of the pulp
Acute deep caries

Solution algorithm:

1. Pay attention to complaints. Prolonged causal pain (from irritants) and pain with changes in ambient temperature are characteristic of chronic forms of pulpitis;

2. Pay attention to the depth and condition of the dentin of the carious cavity. Deep carious cavity, which is localized within the nearpulpal dentin, the dentin of the bottom and walls of which is softened, is a characteristic feature of deep caries or various forms of pulpitis.

3. Note the probing result. In the case of caries, probing along the bottom of the carious cavity is painless or sensitive. In this case, probing is sharply painful at one point, which is characterized for inflammation of the pulp.

4. Pay attention to the result of thermodiagnostics. In caries, the pain that occurs when irritated by a cold stimulus is short-time. In this case, there is a slowly increasing aching pain, which confirms the diagnosis of chronic fibrous pulpitis.

4. A 49-year-old patient complains of prolonged aching pain in tooth 46 while eating, especially cold drinks. Sometimes there is pain when the ambient temperature changes (during inhaling cold air). Objectively: in the tooth 46 on the chewing surface revealed a carious cavity, dentin of the bottom and walls is pigmented, softened. At probing pain is noted. The electrical excitability of the pulp is 40 μA. What is the most likely diagnosis?

Chronic fibrous pulpitis
Acute deep caries
Chronic deep caries
Exacerbated chronic pulpitis
Hyperemia of the pulp

Solution algorithm:

1. Pay attention to complaints. Prolonged causal pain (from irritants) and pain with changes in ambient temperature are characteristic of chronic forms of pulpitis;

2. Pay attention to the depth and condition of the dentin of the carious cavity. Deep carious cavity, which is localized within the nearpulpal dentin, the dentin of the bottom and walls of which is pigmented and softened, is a characteristic feature of deep caries or various forms of pulpitis.

3. Note the probing result. In the case of caries, probing along the bottom of the carious cavity is painless or sensitive. In this case, probing is painful at the bottom of the carious cavity, which is characterized by inflammation of the pulp.

4. Pay attention to the result of electroodontodiagnostics. The electrical excitability of the pulp at 40 μA or more indicates irreversible inflammatory changes in the coronal part of the pulp and is characteristic of chronic fibrous pulpitis.

Topic 34. *Chronic hypertrophic pulpitis: pathomorphology, clinic, diagnostics, differential diagnostics*.

1. A 18-year-old patient complains of a cavity in the 27th tooth, pain when eating solid food. Anamnesis: severe pain in 27 tooth a year ago, did not go to the doctor. Objectively: on the chewing surface of tooth 27, there is a deep carious cavity connected to the pulp chamber, filled with the growth of granulation tissue, which covers almost the entire carious cavity. Probing granulation results in bleeding and minor pain. Percussion is painless. EDI - 45 mkA. Determine the diagnosis:

Chronic hypertrophic pulpitis
Chronic fibrous pulpitis
Chronic hypertrophic gingivitis
Chronic granulating periodontitis
Chronic fibrous periodontitis

Solution algorithm:

1. Pay attention to complaints. Pain while eating solid foods is characteristic of hypertrophic gingivitis and complications of dental caries.
2. Pay attention to the patient's age - 18 years (hypertrophic changes in the pulp are found in children and at a young age).
3. Pay attention to the medical history. Carious lesions develop from 1 month to 1 year and are not accompanied by severe pain. In this case, severe pain in the 27th tooth appeared a year ago, I did not go to the doctor, which indicates a complication of the carious process.
4. Pay attention to the localization of the carious process and the depth of the lesion. On the chewing surface of the 27 tooth, there is a deep carious cavity filled with the growth of granulation tissue, which covers almost the entire carious cavity, which is characteristic of hypertrophic gingivitis. In this case, the carious cavity is connected to the pulp chamber, which is typical for hypertrophic changes in the pulp.
5. Pay attention to the diagnostic methods - probing of granulations (leads to bleeding and minor pain), percussion is painless, and EOD is 45 mkA, which is typical for changes in all structural elements of the pulp in chronic hypertrophic pulpitis.

2. A 16-year-old patient is worried about bleeding from the tooth cavity when eating. Objectively: at 16 on the chewing surface, there is a deep carious cavity, filled with growths of soft purple-red tissue, which bleeds easily when touched. Probing of the neoplasm is slightly painful. Ro-gram showed no pathological changes in the hard tissues of the tooth and periapical tissues. What is the most likely diagnosis?

Chronic hypertrophic pulpitis
Chronic granulomatous periodontitis
Chronic granulating periodontitis
Chronic gangrenous pulpitis
Hypertrophic papillitis

Solution algorithm:

1. Pay attention to complaints: bleeding from the tooth cavity when eating. It is characteristic of hypertrophic papillitis and carious complications.
2. Pay attention to the patient's age -16 years (hypertrophic changes in the pulp are found in children and at a young age).
3. Pay attention to the localization of the carious process and the depth of the lesion. At 16, on the chewing surface, there is a deep carious cavity, filled with growths of soft tissue of a purple-red color, which bleeds easily when touched (characteristic of hypertrophic papillitis and chronic hypertrophic pulpitis).
4. Notice the color of the granulation tissue - soft, purplish red that bleeds easily when touched (the pulp is usually young granulation tissue). Probing of the neoplasm is slightly painful.
5. Pay attention to the radiograph: Ro-gram of pathological changes in hard tissues of the tooth and periapical tissues was not found, which excludes periodontal disease, but is characteristic of changes in all structural elements of the pulp in chronic hypertrophic pulpitis.

3. A 21-year-old patient complains that blood is released from the cavity in the tooth in the upper jaw when eating. Objectively: in the 27th tooth, on the approximal chewing surface, there is a deep carious cavity filled with the proliferation of purple-red soft tissues, bleeding easily when touched with the probe. Probing is slightly painful. The reaction to a cold stimulus is slightly painful. EOD - 60 mkA. No pathological changes were found on the Ro-gram. What is the most likely diagnosis?

Chronic hypertrophic pulpitis

Chronic gangrenous pulpitis

Chronic granulating periodontitis

Chronic fibrous periodontitis

Hypertrophic papillitis

Solution algorithm:

1. Pay attention to complaints - blood is released from the cavity in the tooth on the upper jaw when eating.
2. Pay attention to the age of the patient -21 years (hypertrophic changes in the pulp are found in children and at a young age).
3. Pay attention to the localization of the carious process and the depth of the lesion: in the 27th tooth, on the approximal chewing surface, there is a deep carious cavity filled with the growth of soft tissues of a purple-red color, bleeding easily when touched with the probe.
4. Note the color of the granulation tissue - soft, purplish red that bleeds easily when touched (the pulp is usually young granulation tissue).
5. Pay attention to the diagnostic methods: probing is slightly painful, Reaction to a cold stimulus is slightly painful. which is typical for hypertrophic papillitis and chronic pulpitis. EDI - 60 mkA and X-ray (no pathological changes were found on the Ro-gram), which excludes periodontal diseases, but is characteristic of changes in all structural elements of the pulp in chronic hypertrophic pulpitis.

Topic 35. *Chronic gangrenous pulpitis: pathomorphology, clinic, diagnostics, differential diagnostics.*

A 32-year-old patient complains of prolonged aching pain in a tooth from a hot. The pain appeared a month ago. Objectively: the 26th tooth is discolored, there is a deep carious cavity on the occlusal surface connected to the tooth cavity. Superficial pulp probing is painless, deep - painful. EOD - 85 mkA. What is the most likely diagnosis?

Chronic gangrenous pulpitis
Chronic calculous pulpitis
Chronic hypertrophic pulpitis
Chronic fibrous pulpitis
Chronic fibrous periodontitis

Solution algorithm:

1. Pay attention to complaints: prolonged aching pain in the tooth from a hot one is characteristic of chronic forms of pulpitis and periodontitis.
2. Pay attention to the development of the disease. The pain started a month ago, which indicates a chronic illness.
3. Pay attention to the causative tooth. The 26th tooth is discolored, on the chewing surface there is a deep carious cavity connected to the tooth cavity, which is characteristic of chronic forms of pulpitis and periodontitis.
4. Pay attention to the diagnostic methods: Superficial pulp intubation is painless, deep - painful, EOD - 85 mkA, which is typical for prolonged pulp inflammation in chronic gangrenous pulpitis.

A 22-year-old patient complains of hot pain and a feeling of fullness in the tooth. Six months ago, I was worried about short-term night pains, which became more and more prolonged. Objectively: there is a large carious cavity in the 24th tooth, communicating with the tooth cavity, deep probing is painful. EOD - 80 mkA. Determine the most likely diagnosis:

Chronic gangrenous pulpitis
Chronic calculous pulpitis
Chronic hypertrophic pulpitis
Acute purulent pulpitis
Chronic fibrous pulpitis

Solution algorithm:

1. Pay attention to complaints: hot pain and fullness in the tooth. It is typical for irreversible exudative (infectious) forms of pulpitis.
2. Pay attention to the development of the disease. Six months ago, short-term night pains worried, which became more and more prolonged, which indicates a chronic course of the disease.

3. Pay attention to the causative tooth. In the 24th tooth there is a large carious cavity communicating with the cavity of the tooth, which is characteristic of chronic forms of pulpitis and periodontitis.
4. Pay attention to diagnostic methods: deep probing is painful. EOD - 80 mkA, which is typical for prolonged inflammation of the pulp in chronic gangrenous pulpitis.

A 30-year-old female patient consulted a dentist complaining of discomfort of swelling in the right upper jaw tooth, aggravated by hot, bad breath. Objectively: there is a deep carious cavity in 17 tooth, which communicates with the tooth cavity. Deep probing causes severe pain, 17 tooth percussion is painful. On the roentgenogram, a slight expansion of the periodontal gap at the root apex. EOD - 70 mkA. What is the final diagnosis?

Chronic gangrenous pulpitis

Chronic fibrous pulpitis

Acute purulent pulpitis

Chronic fibrous periodontitis

Exacerbation of chronic fibrous periodontitis

Solution algorithm:

1. Pay attention to complaints: on the unpleasant sensations of distention in the tooth of the upper jaw on the right, aggravated by hot, bad breath. It is typical for irreversible exudative (infectious) forms of pulpitis.
2. Pay attention to the causative tooth. In 17 tooth there is a deep carious cavity, which communicates with the cavity of the tooth, which is typical for chronic forms of pulpitis and periodontitis.
3. Pay attention to diagnostic methods. Deep probing causes severe pain, percussion of the 17th tooth is painful., EOD - 70 mkA. which indicates that the root pulp is in a state of chronic fibrous inflammation. On the roentgenogram, a slight expansion of the periodontal gap at the root apex. which is typical for prolonged inflammation of the pulp in chronic gangrenous pulpitis.

Topic 36. *Chronic calculus and root pulpitis: pathomorphology, clinical picture, diagnosis.*

1. A 30-year-old patient complains of spontaneous paroxysmal pain in the tooth in the lower jaw on the left, which appeared 2 hours ago during an airplane flight. Objectively: there is pathological abrasion in 36 tooth, percussion of 36 is slightly painful. After additional research, the diagnosis was made - chronic calculous pulpitis. What research has led to this diagnosis?
X-ray
Luminescent diagnostics
Electroodontometry
Sounding
Temperature samples

Solution algorithm:
1. Pay attention to complaints - spontaneous paroxysmal pain in the tooth in the lower jaw on the left, which appeared 2 hours ago during a flight in an airplane (Paroxysmal pain is characteristic of acute processes and exacerbations, increased pain from stimuli - on the plane, is characteristic of pulpitis).
2. Pay attention to the data of an objective examination - there is pathological abrasion in 36 tooth, percussion 36 is slightly painful. (It is characteristic of pulpitis - mildly painful vertical percussion indicates focal inflammation, and in defense of pathological abrasion, the pulp produces replacement dentin or calculi. X-ray diagnostics will confirm the presence of pathological changes).

2. The patient complains of aching pain in the 16th tooth, which occurs with a sharp movement of the body. Anamnesis: the tooth was filled due to deep caries, the filling fell out a year ago. Objectively: a deep carious cavity that does not communicate with the tooth cavity. Percussion is painless, probing is painful throughout the bottom of the carious cavity, EOD is 45 μA, thermodiagnostics is painful. On the intraoral contact X-ray image within the tooth cavity, there is an oval-shaped darkening area, free-lying, filling 1/2 of the cavity. What is the most likely diagnosis?
Chronic calculous pulpitis
Chronic fibrous pulpitis
Acute deep caries
Chronic fibrous periodontitis
Chronic gangrenous pulpitis

Solution algorithm:
1. Pay attention to the complaints - the aching pain in the 16th tooth, which occurs with a sharp movement of the body. (Pain with a sharp movement of the body is characteristic of pulpitis, and aching - for a chronic course).

2. Pay attention to the anamnesis - the tooth was filled due to deep caries, the filling fell out a year ago. (It is possible that a calcium-containing medicinal pad was used. It could provoke the development of calculus).
3. Pay attention to the data of an objective examination - a deep carious cavity that does not communicate with the tooth cavity. Percussion is painless, probing is painful throughout the bottom of the carious cavity, EOD is 45 μA, thermodiagnostics is painful. (Typical for pulpitis).
4. Pay attention to the additional survey data - on the intraoral contact X-ray image within the tooth cavity there is an oval-shaped darkening area, free-lying, filling 1/2 of the cavity. (X-ray diagnostics confirm the presence of calculus in the tooth cavity).

3. The patient complains of aching pain in the 27th tooth, which occurs when going up in an elevator. Anamnesis: the tooth was filled with deep caries. Objectively: the filling in the tooth is preserved, the hermeticity is not broken, the probing is painless, the percussion is slightly painful, the EOD is 50 μA, the thermodiagnostics is painful. On the intraoral contact X-ray image within the cavity of the tooth there is an irregularly shaped darkening area, free-lying, filling 3/4 of the cavity. What is the most likely diagnosis?
Chronic calculous pulpitis
Chronic fibrous pulpitis
Chronic deep caries
Chronic fibrous periodontitis
Chronic gangrenous pulpitis

Solution algorithm:
1. Pay attention to the complaints - the aching pain in the 27th tooth that occurs when going up in an elevator. (Pain with a sharp movement of the body is characteristic of pulpitis, and aching - for a chronic course).
2. Pay attention to the anamnesis - the tooth is filled for deep caries. (It is possible that a calcium-containing medicinal pad was used. It could provoke the development of calculus).
3. Pay attention to the data of an objective examination - the percussion is slightly painful, the EOD is 50 μA, the thermodiagnostics is painful. (Typical for pulpitis).
4. Pay attention to the additional survey data - on the intraoral contact X-ray image within the tooth cavity there is an irregularly shaped darkening area, free-lying, filling 3/4 of the cavity. (X-ray diagnostics confirm the presence of calculus in the tooth cavity).

Topic 37. *Exacerbation of chronic pulpitis: pathomorphology, clinical picture, diagnosis, differential diagnosis.*

1. A 29-year-old woman complains of acute paroxysmal pain in the upper jaw on the left, aggravated by cold pain, radiating to the ear and temple. A year ago, tooth 26 had a severe pain and did not go to the doctor. Three days ago, the pain reappeared. Objectively: tooth 26 has a deep carious cavity, communicating with the tooth cavity. Probing the opened point is sharply painful. What is the most likely diagnosis?

Exacerbation of chronic pulpitis
Acute serous periodontitis
Acute localized pulpitis
Acute diffuse pulpitis
Exacerbation of chronic periodontitis

Solution algorithm:
1. Pay attention to complaints - acute paroxysmal pain in the upper jaw on the left, aggravated by cold, radiating to the ear and temple (acute pain is characteristic of acute processes and exacerbations, increased pain from irritants with irradiation is characteristic of pulpitis).
2. Pay attention to the history - a year ago, tooth 26 had a severe pain and did not go to the doctor. Three days ago, the pain reappeared. (Repetition of painful sensations of the same nature indicates an exacerbation of the process).
3. Pay attention to the data of an objective examination - in tooth 26 there is a deep carious cavity, connected to the tooth cavity. Probing the opened point is sharply painful... (It is typical for pulpitis, since there is a communication between the carious cavity and the tooth cavity and the pulp reacts to probing).

2. The patient complains of paroxysmal pain in the left upper jaw tooth, aggravated at night and from the action of various stimuli, radiating to the left temple and eye. Similar pains were three months ago, no treatment was carried out. Objectively: there is a deep carious cavity in 25, communicates with the tooth cavity. Probing at the point of communication is sharply painful, vertical percussion is slightly painful, horizontal percussion is painless. The mucous membrane in the projection of the root apex 25 is unchanged, palpation is painless. Thermal diagnostics is sharply painful, the pain attack is prolonged. EOD - 60 μA. X-ray diagnostics - slight widening of the periodontal gap at the root apex 25 What is the most probable diagnosis?

Exacerbation of chronic pulpitis
Exacerbation of chronic periodontitis
Acute purulent pulpitis
Acute purulent periodontitis
Acute general pulpitis

Solution algorithm:

1. Pay attention to complaints - paroxysmal pain in the tooth of the upper jaw on the left, aggravated at night and from the action of various stimuli, radiates to the left temple and eye. (Paroxysmal pain is characteristic of acute processes and exacerbations, increased pain from irritants with irradiation is characteristic of pulpitis).
2. Pay attention to the history - there were similar attacks three months ago, no treatment was carried out. (Repetition of painful sensations of the same nature indicates an exacerbation of the process).
3. Pay attention to the data of an objective examination - in 25 a deep carious cavity communicates with the tooth cavity. Probing at the point of communication is sharply painful, vertical percussion is slightly painful, horizontal percussion is painless. The mucous membrane in the projection of the root apex 25 is unchanged, palpation is painless. (It is characteristic of pulpitis, since there are messages of the carious cavity with the cavity of the tooth and at the same time the pulp reacts to probing, a slightly painful vertical percussion indicates focal inflammation).
4. Pay attention to the data of the additional examination - the thermodiagnostics is sharply painful, the pain attack is prolonged. EOD - 60 μA. X-ray diagnostics - a slight expansion of the periodontal gap at the root apex 25 (the pulp reacts to a thermal stimulus with sharp pain, which indicates its vitality, as well as EDI, and a slight expansion of the periodontal gap at the root apex indicates an exacerbation of a chronic focal pathological process).

3. A 40-year-old woman complains of short-term sudden pain, as well as pain from hot and cold food at 46. Such attacks were half a year ago, no treatment was carried out. On the chewing surface 46 there is a carious cavity with a large amount of softened dentin. Probing the bottom is painful at one point. The reaction to thermal stimuli is painful and does not disappear after their elimination. EOD - 25 μA. What is the most likely diagnosis?
Exacerbation of chronic pulpitis
Acute purulent pulpitis
Acute diffuse pulpitis
Acute localized pulpitis
Chronic fibrous pulpitis

Solution algorithm:
1. Pay attention to complaints - short-term sudden pain, as well as pain from hot and cold food at 46. (Sudden pain from hot and cold food is characteristic of acute processes and exacerbations in the pulp).
2. Pay attention to the history - similar attacks were half a year ago, no treatment was carried out. (Repetition of painful sensations of the same nature indicates an exacerbation of the process).
3. Pay attention to the data of an objective examination - a carious cavity with a large amount of softened dentin. Probing the bottom is painful at one point.

(Typical for pulpitis, as the pulp reacts to probing in the area of the nearest horn).
4. Pay attention to the data of additional examination - the reaction to thermal stimuli is painful and does not disappear after their elimination, EOD - 25 μA. (The pulp reacts to a thermal stimulus with sharp pain, which indicates its vitality, like the EDI).

38. Anesthesia in the treatment of pulpitis: types, indications. Groups of anesthetics, mechanism of action, comparative characteristics of efficacy and toxicity. Premedication: a **concept, medicinal substances, features of the conduct.**

1. A patient 35-year-old is complains of fear of the dentist has a restlessly behaves and reluctant to allow himself to be examined at a doctor's appointment. What group of drugs is it desirable to give to the patient before dental manipulation?

sedatives

desensitizing

analgesics

cardiac glycosides

hypotensive

1. Pay attention that the age of patient is 35 years old the young

2. Pay attention to the patient's behavior at the dentist's office a patient behaves is restlessly, expresses fear and reluctant to allow himself to be examined. It is affects the violation of psycho-emotional state of a patient.

3. Pay attention that using sedatives is made correction of the psycho-emotional state of a patient.

2. A 64-year-old patient had a myocardial infarction a month ago. In the dental office he should be treated for pulpitis 12. Choose the method of anesthesia:

Drug preparation + anesthetics without vasoconstrictor

Premedication + anesthetic without vasoconstrictor

Premedication + anesthetic with vasoconstrictor

Drug preparation + anesthetics with vasoconstrictors

Anesthetic with vasoconstrictor

1. Pay attention to the patient's life history: month ago the patient had a myocardial infarction, which provides for a consultation with a cardiologist and timely administration of prescribed medications before dental intervention, that is, carrying out medication

2. Pay attention to the diagnosis: pulpitis of the tooth 12. Treatment of pulpitis is accompanied by severe pain sensations, which involves the use of local anesthesia.

3. Pay attention that when using local anesthetics that contain a vasoconstrictor is arise complications such as high blood pressure, arrhythmias, tachycardia attacks which is a contraindication for use in patients after a recent myocardial infarction. Therefore, local anesthetics without a vasoconstrictor must be used for local anesthesia in the patient.

3. A 25-year-old woman complained of acute spontaneous pain in tooth 16. The pain intensifies at night, worries for 24 hours. Objectively: there is a deep carious cavity on the chewing surface of tooth 16, it does not communicate with the tooth cavity. EOD - 25 μA. Diagnosis: acute limited pulpitis of tooth 16. What type of pain relief is most effective when using a biological method of treatment?

conduction anesthesia

application anesthesia

general anesthesia

electrical anesthesia

infiltration anesthesia

1. Pay attention to the patient's complaints: severe pain - acute unauthorized pain, pain intensifies at night.

2. Pay attention to the diagnosis: acute limited pulpitis of tooth 16. Treatment of pulpitis is accompanied by severe pain, therefore, anesthesia is necessary.

3. Please note that general anesthesia can be used for local anesthetic intolerances.

4. Note that application anesthesia is used as a complementary method of pulp anesthesia.

5. Please note that during infiltration anesthesia are blocked only peripheral nerve endings and small nerve fibers, so the preparation may be painful.

6. Please note that electric anesthesia with direct current can be used for the preparation of a carious cavity in the conservative treatment of pulpitis only if there is special equipment: INNAAN -3 apparatus

7. Please note that during conduction anesthesia, in the treatment of acute limited pulpitis is carried out a directed injection of anesthetic in the conductive nerve trunks and their plexuses, which ensures painless manipulations

Topic 39. *Methods of treatment of a pulpitis. Substantiation of the pulpitis treatments method choosing depending on the form, course and general condition of the patient. Conservative method of treating pulpitis (biological): substantiation, indications for use. Technique of treatment. Medicinal substances, their recipe. Efficiency and possible complications.*

During the treatment of acute deep caries of the 16th tooth, the pulp chamber was perforated in an 18-year-old patient. Perforation in the form of a point in the projection of the horn of the pulp. What treatment tactics are advisable to use in this case?

Biological method

Apply an insulating pad and a permanent seal

Devital extirpation

Vital extirpation

Devital amputation

Solution algorithm:

1. Pay attention to the primary diagnosis when treating tooth 16 (acute deep caries).
2. Pay attention to the features of preparation in the treatment of acute deep caries (softened dentin and the proximity of the pulp chamber), which led to acute traumatic pulpitis.
3. Pay attention to the patient's age - 18 years. Patient under 30 years old. The pulp functions are preserved. 48 hours have not passed since the onset of pain, no concomitant diseases.
4. Pay attention to the type of injury - Perforation in the form of a point in the projection of the horn of the pulp. (The largest number of odontoblasts)
5. Based on the above, a biological method of treatment is selected as it allows to eliminate the inflammatory process in the pulp and stimulates dentinogenesis.

In a 27-year-old woman, during the treatment of acute deep caries at 26, a tooth cavity was accidentally opened in the projection of her medial-buccal horn. Choose a treatment method:

Biological method

Devital extirpation

Vital amputation

Vital extirpation

Devital amputation

Solution algorithm:

1. Pay attention to the primary diagnosis when treating tooth 26 (acute deep caries).
2. Pay attention to the features of preparation in the treatment of acute deep caries (softened dentin and the proximity of the pulp chamber), which led to acute traumatic pulpitis.
3. Pay attention to the patient's age - 27 years. Patient under 30 years old. The pulp functions are preserved. 48 hours have not passed since the onset of pain, no concomitant diseases.
4. Pay attention to the type of injury - Perforation in the form of a point in the projection of her mesio-buccal horn (the largest number of odontoblasts)
5. Based on the above, a biological method of treatment is selected as it allows to eliminate the inflammatory process in the pulp and stimulates dentinogenesis.

A 20-year-old patient was accidentally perforated the bottom of the pulp chamber during the preparation of the carious cavity and the pulp horn was exposed. In the area of the carious cavity floor, a punctate foramen is visible, surrounded by a rim of white preentin. Pink pulp is visible through the perforated area, its probing is sharply painful. What treatment should the patient receive?

Biological method

Vital amputation

Vital extirpation

Devital amputation

Devital extirpation

Solution algorithm:

1. Pay attention to the cause of the pulp chamber perforation (during the preparation of the carious cavity, the bottom of the pulp chamber was accidentally perforated and the horn of the pulp was exposed).
2. Pay attention to the defect of hard tissues (punctate foramen surrounded by a rim of white preentin. Pink pulp is visible through the perforated area)
3. Pay attention to the patient's age - 20 years. Patient under 30 years old. The pulp functions are preserved. 48 hours have not passed since the onset of pain, no concomitant diseases.
4. Pay attention to probing - sharply painful.
5. Based on the above, a biological method of treatment is selected as it allows to eliminate the inflammatory process in the pulp and stimulates dentinogenesis.

Topic 40. *Vital amputation method of pulpitis treatment: essence, indications, stages of carrying out. The effectiveness of the method.*

A 17-year-old man complains of spontaneous pain in the 27th tooth, which occurred suddenly and lasts about 5-7 minutes. Objectively: in the 27th tooth, on the distal surface, there is a deep carious cavity with overhanging walls, filled with light soft dentin and not connected with the tooth cavity. A sharp pain arises on the cold stimulus, which gradually subsides. Percussion is painless. Choose the best treatment method:

Vital amputation

Vital extirpation

Devital extirpation

Combined method

Devital amputation

Solution algorithm:

1. Pay attention to the patient's complaints: spontaneous pain in the 27th tooth, which occurred suddenly and lasts about 5-7 minutes. It is characteristic of acute partial pulpitis.
2. Pay attention to the patient's age - 17 years. Patient under 30 years old. The pulp functions are preserved. There are no associated diseases.
3. Pay attention to the duration of pain - 5-7 minutes, typical for acute partial pulpitis.
4. Pay attention to the defect of hard tissues - in the 27th tooth on the distal surface there is a deep carious cavity with overhanging walls, made with light soft dentin and not communicating with the tooth cavity.
5. Pay attention to the reaction of the tooth to cold stimuli - there is a sharp pain that gradually subsides.
6. Based on the above, vital amputation may be the optimal treatment.

In a 26-year-old patient, while treating acute deep caries 37, during preparation, the medial-buccal horn of the pulp was accidentally opened. Prescribe the most rational treatment 37:

Vital amputation method

Biological method

Vital extirpation method

Devital amputation method

Devital extirpation method

Solution algorithm:

1. Pay attention to the initial diagnosis when treating tooth 37 (acute deep caries).
2. Pay attention to the features of preparation in the treatment of acute deep caries (softened infected dentin and the proximity of the pulp chamber), which led to acute traumatic pulpitis (the medial-buccal horn of the pulp was opened).

3. Pay attention to the patient's age - 26 years. Patient under 30 years old. The pulp functions are preserved. 48 hours have not passed since the onset of pain, no concomitant diseases.
4. Pay attention to the type of injury - the medial-buccal horn of the pulp was opened.
5. Based on the above, the vital amputation method
   Pulp, as it allows you to maintain the functional properties of the tooth.

A 20-year-old man complains of spontaneous pain in the 27 tooth, which came on suddenly and lasts about 10 minutes. Objectively: in the 27th tooth, on the chewing surface, there is a deep carious cavity with overhanging walls, filled with light soft dentin and not communicating with the tooth cavity. A sharp pain arises on the cold stimulus, which gradually subsides. Percussion is painless. Choose the best treatment method:

Vital amputation
Vital extirpation
Biological method
Devital extirpation
Devital amputation

Solution algorithm:

1. Pay attention to the patient's complaints: spontaneous pain in the 27 tooth, which occurred suddenly and lasts about 10 minutes. It is characteristic of acute partial pulpitis.
2. Pay attention to the patient's age - 20 years. Patient under 30 years old. The pulp functions are preserved. There are no associated diseases.
3. Pay attention to the duration of the pain - 10 minutes, which is typical for acute partial pulpitis.
4. Pay attention to the defect of hard tissues - in the 27th tooth on the chewing surface there is a deep carious cavity with overhanging walls, made by light soft dentin and not communicating with the tooth cavity.
5. Pay attention to the reaction of the tooth to cold stimuli - there is a sharp pain that gradually subsides. Percussion is painless.
6. Based on the above, vital amputation may be the optimal treatment.

Topic 41: *Vital extrapatient method of pulpitis treatment: essence, indications, stages of implementation. The effectiveness of the method, possible complications. Diathermocoagulation. Indications, technique, complications.*

1. A 20-year-old patient complained of the occurrence of unreasonable pain attacks (5-7 minutes) in the area of the 36 tooth during the day. Objectively: tooth 36 has a deep carious cavity on the chewing surface. Sounding painful at one point, painful cold test, with aftereffect of 5 minutes. Percussion is painless. On the roentgenogram, the root canals have a slight bend, the canal lumen is clearly reflected. The tooth is planned as a support for the bridge. Which of the following treatments is most appropriate?
Vital extirpation
Filling a carious cavity
Devital amputation
Biological method
Vital amputation

Solution algorithm:
1. Analyze the patient's complaints: the occurrence of unreasonable pain attacks (5-7 minutes) in the area of the tooth on the lower jaw during the day.
2. Please note that the tooth has a deep carious cavity on the chewing surface, probing is painful at one point, the cold test is painful, with an aftereffect of 5 minutes, the percussion is painless. On the roentgenogram, the root canals have a slight bend, the lumen of the canals is clearly reflected, which is characteristic of the indication for vital extirpation.
3. Note that the tooth is planned as a support for a bridge, which is an indication for vital extirpation.

2. A 25-year-old patient complains of involuntary paroxysmal pain in the left temple. The pain occurs spontaneously in the evening. Sometimes pain occurs when the head tilts, when the plane takes off. Objectively: all teeth are intact; exposure of the necks of teeth 24 and 36. Percussion of the 24 tooth gives mild pain. On the roentgenogram of the 24 tooth in the central part of the coronal cavity, the dentine density of the formation is determined - 0.5x 0.5 mm. Suggest a treatment method:
Vital extirpation of 24 tooth pulp
Electrophoresis with potassium iodide in the projection of the apex of the 24 tooth
Vital amputation of 24 tooth
A course of novocaine blockade with vitamin B1
Remineralizing therapy in the cervical region of teeth 24 and 36

Solution algorithm:

1. Analyze the patient's complaints: involuntary paroxysmal pain in the left temple. The pain occurs spontaneously in the evening. Sometimes pain occurs when the head is tilted, when an airplane takes off.

2. Note that all teeth are intact; exposure of the necks of teeth 24 and 36. Percussion of the 24 tooth gives mild pain, which is a characteristic indication for vital extirpation.

3. Please note that on the roentgenogram of the 24 tooth in the central part of the coronal cavity, the dentin density of the formation is determined - 0.5x0.5 mm.

3. The patient complained of pain at 26, arising when eating hot food, bad breath. History: occasional spontaneous pain occurs. Objectively: in 26 there is a deep carious cavity, communicates with the tooth cavity. Sensitive percussion, probing, thermal diagnostics are painless. EOD - 70 μA. Which of the treatment methods will be optimal in this case?

vital extirpation
devital amputation
conservative
vital amputation
devital extirpation

Solution algorithm:

1. Analyze the patient's complaints: pain in the tooth in the upper jaw on the left, which occurs when eating hot food, bad breath. History: occasional spontaneous pain occurs.

2. Note that there is a deep carious cavity in the tooth, which communicates with the tooth cavity. Percussion is sensitive, probing, thermodiagnostics are painless, which is a typical indication for congratulatory extirpation.

3. Pay attention to the increase in EOD, which is a characteristic indication for congratulatory extirpation.

Topic 42: *Devital extirpation of the pulp: essence, indications, stages of treatment. Medicines for pulp devitalization: indications for use, mechanism of action, features of use. Possible complications and methods of their elimination. The effectiveness of the method.*

1. A 24-year-old patient with hemophilia was diagnosed with an exacerbation of chronic pulpitis of the 11th tooth. Choose the optimal method of tooth treatment in this case:
devital extirpation
Biological treatment method
vital extirpation
devital amputation
vital amputation

Solution algorithm:
1. Please note that the patient suffers from hemophilia, which is a characteristic indication for devital extirpation.
2. Please note that an exacerbation of chronic pulpitis is diagnosed, which is characteristic of the indication for devital extirpation.
3. Please note that you need to choose the optimal method of tooth treatment in this case.

2. A 27-year-old woman was treated for pulpitis by the method of devital extirpation. At 15, Arsenovista pasta was left. The patient came to the second appointment only on the fourth day. There was a toxic periodontitis. What is the best way for root canal treatment in this case?
Unithiol
eugenol
hydrocortisone emulsion
Cresofen
Trypsin

Solution algorithm:

1. Please note that the patient was treated for pulpitis by the method of devital extirpation, which is a characteristic indication for the use of unitiol.

2. Note that in 15 arsenovist pasta was left. The patient came to the secondary appointment only on the fourth day, which is a characteristic indication for the use of unitiol.

3. Please note that toxic periodontitis has occurred, which is a characteristic indication for the use of unitiol.

3. A 56-year-old patient treated pulpitis 47 in order to devitalize the pulp using arsenic paste. At the appointed time, the patient did not appear to continue treatment. Developed toxic "arsenic" periodontitis. Which of the following physiotherapeutic methods is advisable to use to eliminate the complication that has arisen?
Potassium iodide electrophoresis
d'arsonvalization
galvanization
fluctuating
UHF

Solution algorithm:

1. Please note that arsenic paste was used in the treatment of pulpitis in order to devitalize the pulp.

2. Please note that the patient did not appear at the appointed time to continue treatment. Developed toxic "arsenic" periodontitis, which is a typical indication for the use of potassium iodide electrophoresis.

3. Please note that it would be advisable to choose a physiotherapeutic method to eliminate the complication of "arsenous" periodontitis using potassium iodide electrophoresis.

Topic 43. *Devital amputation and combined method of pulpitis treatment. A choice of a method. A technique, medicinal substances. Disadvan-tages of a method.*
Methods of treatment of instrumentally impassable root canals: medicines for chemical expansion, mummification of pulp and impregnation of impassable root canals. Depoforesis. Disadvantages and possible complications (independent work).

1. A dentist was invited to the cardiology department of the hospital to a patient after a myocardial infarction. He was diagnosed with chronic fibrous pulpitis of 48 teeth in the acute stage. What method of treatment of pulpitis should be used, given the severe general condition of the patient?
Devital amputation
Conservative method
Congratulatory extirpation
Congratulatory amputation
Devital extirpation

Solution algorithm:
1. Pay attention to life history. The patient suffered a myocardial infarction.
2. Pay attention to the impossibility of using a dental chair in the cardiology department.
3. Pay attention to the location of the causative tooth. This is a lot of root tooth.
4. Pay attention to the possibility of using endodontic instruments for the passage of root canals and their filling.
5. Pay attention to substances that can preserve (mummify) the pulp

2. What method of treatment of chronic fibrous pulpitis can be used in 38 teeth, if the medial canal is impassable.
combined
devital extirpation of the pulp
congratulatory pulp extirpation
congratulatory amputation of the pulp
devital amputation of the pulp

Solution algorithm:
1. Pay attention to the location of the tooth.
2. Pay attention to the possibility of endodontic access to the tooth.
3. Pay attention to the possibility of the presence of 38 channels in many teeth.
4. Note that one of the canals in the tooth is passable and we can seal it.
5. Pay attention to the possibility of using endodontic instruments for the passage of root canals and their filling.
6. Pay attention to substances that can preserve (mummify) the pulp.
3. What therapeutic effect should we achieve when using the devital amputation method of pulpitis treatment?

removal of coronal pulp, root mummification
preservation of biomimetic properties of hard tissues
elimination of inflammatory processes of the tooth stump, stimulation of reparative functions in it
elimination of inflammatory processes of the entire pulp of the tooth, stimulation of reparative functions in it
complete removal of the pulp, followed by filling of the root canals

Solution algorithm:
1. Pay attention to the location of the tooth.
2. Pay attention to the possibility of endodontic access to the tooth.
3. Pay attention to the possibility of many channels in the teeth.
4. Pay attention to the possibility of using endodontic instruments for the passage of root canals and their filling.
5. Pay attention to substances that can preserve (mummify) the pulp.

3. Devital combined method of pulpitis treatment is:
devitalization, removal of the coronal part of the pulp from well-permeable root canals, their filling, application of mummifying paste on the root pulp of poorly permeable root canals
removal of pulp under anesthesia in well-permeable root canals
removal of pulp completely under anesthesia
anesthesia, removal of the coronal part of the pulp, application of medicated paste on the root pulp, filling
devitalization, removal of the coronal part of the pulp, application of mummifying paste on the root pulp, sealing

Solution algorithm:
1. Pay attention to the location of the tooth.
2. Pay attention to the possibility of endodontic access to the tooth.
3. Pay attention to the possibility of many channels in the teeth.
4. Pay attention to the possibility of using endodontic instruments for the passage of root canals and their filling.
5. Pay attention to substances that can preserve (mummify) the pulp

Topic 44. *Sealers and fillers for filling root canals: groups, properties, indication to application, technique of root-canals filling by the method of central pin, vertical condensation of gutta-percha, cold and warm lateral condensation of gutta-percha. Mistakes and complications.*

1. A 35-year-old patient is being treated for chronic fibrous pulpitis of 25 teeth. It is planned to seal the channel by the method of vertical condensation of heated gutta-percha. What tool is needed to condense gutta-percha?
Plager
Endodontic probe
K-file
Root needle
Spreader

Solution algorithm:
1. Pay attention to the material that will seal the root canal.
2. Note that the gutta-percha is plastic and compacts when pressed.
3. Pay attention to the shape of the working part of the tool, which will condense gutta-percha.
4. Note that pressed with a heated tool gutta-percha, better obturates the root canal.

2. Which method of filling the root canal gives the lowest coefficient of periapical resorption:
root canal filling using the "Thermophile" system
single pin sealing method
sealing with one paste
sealing using silver pins
lateral condensation method

Solution algorithm:
1. Pay attention to the way in which the root canal will be sealed.
2. Note that in the "Thermophile" system, gutta-percha is located on a plastic rod and is inserted into the channel for the working length.
3. Note that in the "Thermophile" system, gutta-percha warms up and becomes plastic before being introduced into the root canal.
4. Note that the heated gutta-percha tightly fills the root canal.

3. The method of sealing the channels by the method of cold lateral condensation of gutta-percha involves:
introduction into the channel of several gutta-percha pins with the subsequent lateral consolidation
introduction into the channel of one central pin
introduction of heated gutta-percha on a metal or polymer basis
sequential filling of the channel with a filling material of pasty consistency

impregnation into the drug channel with its subsequent polymerization

Solution algorithm:
1. Pay attention to the material that will seal the root canal.
2. Note that the gutta-percha is plastic and compacts when pressed.
3. Note that the introduction of several gutta-percha pins into the root canal increases the chances of better root canal obturation.
4. Pay attention to the shape of the working part of the tool, which will condense the gutta-percha by pressing the gutta-percha pins in the root canal to each other.

4. What filling material should be used if it is necessary to seal 11 teeth after the vital extirpation of the pulp:
viedent
vinoxol
artificial dentin
thymol paste (on glycerin)
silver pins

Solution algorithm:
1. Pay attention to the groups of materials used to seal the root canals.
2. Note that the material used in the 11th tooth should not change the color of the tooth tissue.
3. Note that the material must be pliable and good
obturate the root canal.
4. Note that the material should not be absorbed in the channel and combined with gutta-percha.
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Topic 47. Periodontitis: etiology, pathogenesis (I. Lukomskogo, M.A. Groshikova, S.A. Vayndrukh, ICD-10). Classification of injuries according to Chuprikina N.M. (1985).

A 37-year-old patient consulted a dentist with complaints of tooth 16 mobility, pain in the tooth when biting off food. Three days ago, the patient received a 16 tooth injury. During the examination it was found that the electrical excitability of the pulp is more than 100 μA. Which of the following complications does the patient have?

Traumatic periodontitis

Periodontitis

Radicular cyst

Periostitis

Osteomyelitis of the upper jaw

Solution algorithm:

1. Pay attention to complaints. Pain when biting on a tooth is characteristic of periodontitis.
2. Pay attention to the history. Three days ago there was a tooth injury. Together with the trauma of the tooth, the periodontium was damaged, thus causing traumatic periodontitis.
3. Pay attention to the electrical excitability of the pulp. EOD-100 μA confirms that this is precisely traumatic periodontitis.

A 20-year-old patient consulted a doctor for a routine examination. No complaints. On examination, it was revealed that the 15th tooth was changed in color, a fistula was detected on the gum in the area of the tooth. The tooth was previously treated. What is the etiological periodontitis?

Chronic granulating periodontitis

Traumatic periodontitis

Medication periodontitis

Chronic fibrous periodontitis

Acute serous periodontitis

Solution algorithm:

1. Pay attention to the fact that the patient has no complaints, but came for the purpose of a routine examination.

2 .It is known from the anamnesis that the tooth was previously treated, therefore it is discolored. Most likely, the tooth was treated for pulpitis, and it can be assumed that the canals were poorly sealed, therefore, periodontal inflammation occurred when the infection entered the periodontium through the root canal. Thus, we are dealing with chronic granulating periodontitis of infectious origin.

3. Pay attention to the survey data. There is a fistula on the gum, which suggests that periodontitis is chronic granulating.

The patient complains of pain at 31, aggravated by biting. From the anamnesis it is known: the patient was treated for pulpitis 31. A devitalizing paste was applied, he did not appear for a second appointment. Objectively: carious cavity 31 is closed with a dentin bandage. The reaction to percussion is painful. The mucous membrane in the projection of the root apex 31 is hyperemic, edematous, painful on palpation. What is the probable diagnosis according to the etiological factor?

Acute arsenic periodontitis

Acute purulent pulpitis

Pulpitis complicated by focal periodontitis

Acute infectious periodontitis

Exacerbation of chronic periodontitis

Solution algorithm:

1. Pay attention to the history. Tooth 31 was treated for pulpitis, a devitalizing paste was applied for 24 hours, since it is a single-rooted tooth, but the patient did not appear for a second appointment. An untimely visit to the dentist led to the toxic effect of devitalizing paste on the periodontium,

Thus, arsenic periodontitis arose.Tsei periodontitis is non-infectious, but of drug origin.

Topic 48. Acute medical and traumatic apical periodontitis: etiology, pathomorphology, clinical picture, diagnostics.

A 27-year-old female patient consulted a dentist complaining of slight mobility of 11, 21 teeth, pain in these teeth when biting off food. 3 days ago the patient was injured 11, 21 teeth. During the examination, it was found that the electrical excitability of the pulp of the above teeth is more than 100 μA. Which of the following complications does the patient have?

Traumatic periodontitis

Periodontitis

Radicular cyst

Periostitis

Osteomyelitis of the upper jaw

Solution algorithm:

1. Pay attention to complaints. Pain when biting on a tooth is characteristic of periodontitis.

2. Pay attention to the history. 3 days ago there was a tooth injury. Considering that the injury was received three days ago, it is considered acute, and together with the injury to the teeth, the periodontium could also be damaged, thus arose
traumatic periodontitis.

3. Pay attention to the electrical excitability of the pulp. EOD - 100 μA, which is typical for periodontitis, when the pulp died, and the periodontium reacts to the electric current.

The patient complains of pain at 31, worsening when biting. From anamnesis: the patient was treated for pulpitis 31. A devitalizing paste was applied, but did not appear for a second appointment. Objectively: carious cavity 31 is closed with a dentin bandage. The reaction to percussion is painful. The mucous membrane in the projection of the root apex 31 is hyperemic, edematous, painful on palpation. What is the most likely diagnosis?

Acute arsenic periodontitis

Acute purulent pulpitis

Pulpitis complicated by focal periodontitis

Acute infectious periodontitis

Exacerbation of chronic periodontitis

Solution algorithm:

1. Pay attention to complaints. Tooth pain, aggravated by biting, is characteristic of periodontitis.

2. Pay attention to the history. Tooth 31 was treated for pulpitis, a devitalizing paste was applied for 24 hours, since this is a single-rooted tooth, but the patient did not appear for a second appointment. An untimely visit to the dentist led to the toxic effect of devitalizing paste on the periodontium, which indicates arsenic periodontitis.

3. Pay attention to the data of the physical examination. The reaction to percussion is painful. The mucous membrane in the projection of the root apex 31 is hyperemic, edematous, painful on palpation. Such data are typical for acute periodontitis.

The patient complains of a slight persistent aching pain at 45, which intensifies when biting on a tooth. From the anamnesis it is known that the day before the tooth was treated for pulpitis and the root canal was sealed.

Objectively: the reaction to percussion is painful. The mucous membrane in the projection of the root apex 45 is hyperemic, edematous, painful on palpation. R-diagnostics showed that the root canal was sealed and the filling material was brought out beyond the apex into the periodontal gap.

Probable diagnosis?

Acute traumatic periodontitis

Periodontitis

Radicular cyst

Periostitis

Osteomyelitis of the lower jaw

Solution algorithm:1. Pay attention to complaints. Aching constant pain in the tooth, which increases when biting, is characteristic of periodontitis.

2. Pay attention to the history. The tooth was treated for pulpitis, followed by filling of the root canal, which could lead to injury to the periodontal sealer, and therefore traumatic periodontitis occurred.

3. Pay attention to objective data. The mucous membrane is hyperemic, edematous, its palpation is painful, which indicates the severity of the process, as well as the periodontal reaction to irritation.

Topic 49. Acute serous and purulent apical periodontitis: pathomorphology, clinical picture, diagnostics, differential diagnostics.

A 25-year-old patient consulted a dentist complaining of constant throbbing pain that lasts 2 days, pain when biting. On examination, the carious cavity on the chewing surface of the 26 tooth is not communicated with the tooth cavity, the probing of the bottom is painless, the vertical and horizontal percussion is sharply painful, the tooth is mobile. There are no changes in the periodontal tissues on the roentgenogram. What is the most likely diagnosis?

Acute purulent periodontitis

Exacerbation of chronic periodontitis

Exacerbation of chronic pulpitis

Acute purulent pulpitis

Acute serous periodontitis

Solution algorithm:

1. Pay attention to complaints. Constant throbbing pain, aggravated by biting on a tooth, is characteristic of an acute purulent process, or exacerbation of a chronic one. Considering that the pain lasts 2 days, the process is acute purulent.

2. Pay attention to the survey data. Probing of the bottom is painless, vertical and horizontal percussion is sharply painful, the tooth is mobile. These data indicate that the patient has purulent periodontitis.

3. Pay attention to the data of X-ray examination. If it was an exacerbation of chronic periodontitis, then the picture would have destructive changes in the periodontal tissues. In this case, there are no

changes in the periodontal tissues on the roentgenogram, which is typical for acute periodontitis.

The patient complains of constant pain in the area 25 during the day. Objectively: there is a carious cavity on the medial surface of 25, it does not communicate with the tooth cavity. The reaction to cold is painless. Ro-gram: bone tissue of the periapical region without pathological changes. What is the most likely diagnosis?

Acute serous periodontitis

Acute purulent periodontitis

Acute purulent pulpitis

Exacerbation of chronic periodontitis

Acute diffuse pulpitis

Solution algorithm:

1. Pay attention to complaints. Constant pain during the day is characteristic of periodontitis.

2. Pay attention to the duration of the pain. The pain lasts for a day, and this is a characteristic symptom for the onset of the disease, that is, for serous inflammation.

3. Pay attention to objective data. The carious cavity does not communicate with the tooth cavity, which is characteristic of the acute form of periodontitis. The reaction to thermal stimuli is painless - in acute periodontitis. Ro-gram: perapical tissues unchanged, also speaks in favor of acute periodontitis.

A 21-year-old patient complains of constant increasing pulsating pain at 27. Objectively: a large carious cavity, filled with softened dentin, the tooth cavity is closed. Probing of the bottom is painless, percussion is sharply painful, tooth mobility is II degree. Palpation of the mucous membrane in the area of the projection of the apex of the roots 27 causes pain. X-ray changes were not revealed. What is the most likely diagnosis?

Acute purulent periodontitis

Acute serous periodontitis

Acute purulent pulpitis

Exacerbation of chronic periodontitis

Acute diffuse pulpitis

Solution algorithm

1. Pay attention to complaints. Constant, growing, throbbing pain is characteristic of an acute purulent process or with an exacerbation of a chronic one.

2. Pay attention to the objective examination. A deep carious cavity, does not communicate with the tooth cavity, probing of the bottom is painless, percussion is sharply painful, palpation of the mucous membrane in the projection area of the root apex causes pain - these data are characteristic of periodontitis.

3. Pay attention to Ro-diagnostics. No destructive changes in the periapecal tissues were found. This is typical for acute forms of periodontitis.

Topic 50. Chronic granulating periodontitis: pathomorphology, clinical picture, diagnosis, differential diagnosis

A 34-year-old patient complains of a decayed tooth in the lower jaw. Objectively: the crown 26 is destroyed by 2/3, the carious cavity communicates with the tooth cavity, the reaction to cold and probing is painless, percussion is painless. On the mucous membrane in the area of the root projection there is a scar from the fistula. On the roentgenogram, areas of destruction in the area of the apex of the roots with indistinct contours. What is the most likely diagnosis?

Chronic granulating periodontitis

Chronic fibrous pulpitis

Chronic granulomatous periodontitis

Chronic fibrous periodontitis

Chronic gangrenous pulpitis

Solution algorithm:

1. Pay attention to complaints. Asymptomatic, only the tooth crown is destroyed. This is typical for a chronic process.

2. Pay attention to the survey data. The carious cavity communicates with the tooth cavity, probing at the site of communication is painless, percussion is painless, there is a scar from the fistula on the mucous membrane. The reaction to a thermal stimulus is painless. This is typical for chronic periodontitis.

3. Pay attention to the X-ray data. Areas of destruction in the area of the root tops with indistinct contours. Such changes are characteristic of granulating periodontitis.

A 20-year-old patient consulted a doctor for a routine examination. No complaints. On examination, it was revealed that the 15th tooth was discolored, a fistula was detected on the gum in the area of the tooth. The tooth was previously treated. What is the most likely diagnosis?

Chronic granulating periodontitis

Chronic fibrous periodontitis

Chronic gangrenous pulpitis

Chronic fibrous pulpitis

Chronic granulomatous periodontitis

Solution algorithm:

1. Pay attention to the fact that the patient has no complaints, but came for the purpose of a routine examination.
2. Pay attention to the history. The tooth was previously treated. Most likely, the tooth was treated for pulpitis, and, possibly, the canals were poorly sealed, which is why periodontitis occurred.
3. Pay attention to the survey data. The tooth is discolored, which is typical for a pulped tooth. There is a fistula on the gum, which gives reason to talk about chronic granulating periodontitis.

A 20-year-old patient complains of a carious cavity in a tooth on the upper jaw on the right. Objectively: at 16 there is a deep carious cavity, communicates with the tooth cavity, probing at the point of communication is painless, percussion is slightly painful. There is a fistula on the gum in the projection area of the root apex 16. What is the most likely diagnosis?

Chronic granulating periodontitis

Chronic fibrous periodontitis

Chronic granulomatous periodontitis

Chronic gangrenous pulpitis

Chronic hypertrophic pulpitis

Solution algorithm:

1. Pay attention to complaints. Asymptomatic course, only the presence of a carious cavity. It can be assumed that the pulp in the tooth has died.
2. When examining the tooth, a deep carious cavity is noted, communicates with the cavity of the tooth, probing at the point of communication is painless, percussion is slightly painful. There is a fistula on the gum in the projection area ofthe root apex 16. Such data indicate that the tooth has chronic granulating periodontitis.

Topic 51. *Chronic fibrous, granulomatous apical periodontitis: etiology, pathogenesis, clinical picture, diagnosis.*

1. A 37-year-old female patient complained of the presence of a cavity in tooth 34. The cavity marks throughout the year. Objectively: 34 has a deep carious cavity connected to the tooth cavity. Probing and percussion are painless. X-ray data indicate deformation of the periodontal gap, expansion of the latter at the root apex. What is the most likely diagnosis?

Chronic fibrous periodontitis

Chronic fibrous pulpitis

Chronic granulomatous periodontitis

Chronic granulating periodontitis

Chronic gangrenous pulpitis

Solution algorithm:

1. Pay attention to the complaints - the presence of a cavity in tooth 34 (typical for non-carious lesions, caries and its complications).
2. Pay attention to the anamnesis - the cavity marks the course of the year.
3. Pay attention to the data of an objective examination - a deep carious cavity connected to the tooth cavity. Probing and percussion are painless (typical for periodontitis, since the pulp does not respond to stimuli).
4. Pay attention to the data of X-ray examination - deformation of the periodontal gap (typical for chronic fibrous periodontitis).

2. A 30-year-old man complains of a carious cavity. Objectively: color 16 is changed, deep carious cavity, which is connected to the tooth cavity. Probing, percussion are painless. EOD - 100 μA. The radiograph shows the expansion of the periodontal gap. What is the most likely diagnosis?

Chronic fibrous periodontitis

Chronic deep caries

Chronic granulomatous periodontitis

Chronic gangrenous pulpitis

Chronic granulating periodontitis

Solution algorithm:

1. Pay attention to complaints - the presence of a carious cavity (typical for non-carious lesions, caries and its complications).
2. Pay attention to the data of an objective examination - color 16 is changed, a deep carious cavity connected to the tooth cavity. Probing, percussion are painless. (It is characteristic of periodontitis, since the pulp does not react to stimuli).
3. Pay attention to the additional examination method (EDI - 100 μA, which indicates pulp necrosis).
4. Pay attention to the data of X-ray examination - the expansion of the periodontal gap (typical for chronic fibrous periodontitis).

3. A 22-year-old patient came to the clinic with complaints of a discoloration of the crown 11. A year ago, the tooth was treated for chronic deep caries. Immediately after treatment, minor pain was disturbed. I did not go to the doctor. On the roentgenogram - the expansion of the periodontal gap in the area of the root apex 11. Percussion is painless. What is the most likely diagnosis?

Chronic fibrous periodontitis

Chronic fibrous pulpitis

Chronic deep caries

Chronic granulating periodontitis

Chronic granulomatous periodontitis

Solution algorithm:

1. Pay attention to complaints - a change in the color of the crown 11 (typical for a tooth with necrotic pulp or pulpless).
2. Pay attention to the anamnesis - a year ago the tooth was treated for chronic deep caries. Immediately after the treatment, minor pain was disturbed. I did not go to the doctor.
3. Pay attention to the physical examination data - color 11 is changed, percussion is painless. (It is characteristic of periodontitis, since a tooth with necrotic pulp changes color, and painless percussion testifies to a chronic course).
4. Pay attention to the data of X-ray examination - the expansion of the periodontal gap (typical for chronic fibrous periodontitis).

4. A 25-year-old student complains of a carious cavity in tooth 22. The seal fell out 2 months ago. The tooth was previously treated for pulpitis. Objectively: in 22 tooth on the medial surface there is a deep carious cavity, partially filled with a filling. The crown of 22 teeth is dirty pink. On the roentgenogram: the root canal of the 22 tooth is filled with a filling material for 1/2 of the root length, in the area of the root apex there is a focus of bone tissue destruction with clear contours, 0.3x0.3 cm in size. What is the most probable diagnosis?

Chronic granulomatous periodontitis

Chronic granulating periodontitis

residual pulpitis

Chronic fibrous periodontitis

Radicular cyst

Solution algorithm:

1. Pay attention to the complaints - the presence of a carious cavity in tooth 22 (typical for non-carious lesions, caries and its complications).
2. Pay attention to the anamnesis - the filling fell out 2 months ago. The tooth was previously treated for pulpitis.
3. Pay attention to the data of objective examination - in the 22nd tooth on the medial surface there is a deep carious cavity, partially filled with a filling. The crown of 22 teeth is dirty pink. (Typical for periodontitis, as a tooth with necrotic pulp changes color).

4. Pay attention to the data of X-ray examination - the root canal 22 is filled with filling material for 1/2 of the root length, in the area of the root apex there is a focus of bone tissue destruction with clear contours, 0.3x0.3 cm in size. (Typical for chronic granulomatous periodontitis).

Topic 52 *Exacerbation of chronic apical periodontitis: etiology, pathomorphological changes, clinic, diagnostics, differential diagnostics. Complication of periodontitis by periostitis.*

1. A 16-year-old girl complains of constant aching pain in the mandibular tooth, which is aggravated by biting. Objectively: in 46 teeth there is a carious cavity, which connects with the tooth cavity. Comparative percussion is very painful. Reaction to thermal stimuli, percussion is painless. The mucous membrane of the gums in the area of 46 teeth is hyperemic, swollen, painful on palpation. On the X-ray image there is a the focus of destruction of bone tissue of irregular shape, with blurred boundaries. Diagnose:

Exacerbation of chronic granulating periodontitis

Acute serous periodontitis

Exacerbation of chronic fibrous periodontitis

Exacerbation of chronic granulomatous periodontitis

Acute purulent periodontitis

Solution algorithm:

1. Pay attention to the patient's complaints: constant aching pain, which is exacerbated by biting is characteristic of the acute stage or stage of exacerbation of the disease.

2. Pay attention to the data of objective examination: percussion is sharply painful, hyperemic, swollen, painful on palpation mucous membrane in the area of the causative tooth indicates a reaction of the periodontium, thus the disease belongs to the group of periodontitis.

3. Pay attention to the data of X-ray examination: destruction of bone tissue of irregular shape, with blurred boundaries is characteristic of chronic granulating periapical inflammation.

2. A 25-year-old patient complains of aching constant pain at 45, which occurred 2 days ago. The pain is exacerbated by biting the tooth. Objectively: lymph nodes are not palpable. Oral mucous membrane without changes. On the medial surface of 45 tooth there is a carious cavity that connects with a pulp cavity, percussion is

painless, reaction to temperature stimuli is absent. On the X-ray periodontal fissure has no changes. What is the most likely diagnosis?

Exacerbation of chronic fibrous periodontitis

Exacerbation of chronic granulating periodontitis

Acute serous periodontitis

Acute purulent periodontitis

Exacerbation of chronic granulomatous periodontitis

Solution algorithm:

1. Pay attention to the patient's complaints: constant aching pain, which is exacerbated by biting is characteristic of the acute stage or stage of exacerbation of the disease.

2. Pay attention to the data of objective examination: exposed pulp cavity, painless probing, absence of temperature reaction indicates necrosis of the pulp, thus, the disease belongs to the group of periodontitis.

3. Pay attention to the data of X-ray examination: fibrotic inflammation is characterized by deformation of the periodontal fissure or has no X-ray changes. In the second case you need to focus on the patient's complaints and anamnesis.

3. A 27-year-old patient complains on acute pain in the area of 34, which is exacerbated by biting. Radiographically in the periapical area of the root 34 there is a zone of destruction of bone tissue with lacerated edges. What is the most likely diagnosis?

Exacerbation of chronic granulating periodontitis

Exacerbation of chronic granulomatous periodontitis

Acute purulent pulpitis is complicated by periodontitis

Exacerbation of chronic pulpitis

Acute serous periodontitis

Solution algorithm:

1. Pay attention to the patient's complaints: pain, which is exacerbated by biting is characteristic of the acute stage or stage of exacerbation of the disease.

2. Pay attention to the data of X-ray examination: the focus of destruction of bone tissue of irregular shape, with blurred boundaries is characteristic of chronic granulating periapical inflammation.

Topic 53 *X-ray diagnostic of periodontitis. Concept of an osteosclerosis, osteoporosis, destruction, deformation, hypercementosis. Analysis of computer tomography of the maxillofacial area.*

1. On the radiograph in the projection of the apex of the root 27th there is destruction of round bone with clear smooth edges with diameter 0.7x0.7 cm. What is the most likely diagnosis?
Cystic granuloma
Cyst
Osteoma
Odontoma
Granuloma

Solution algorithm:
1. Pay attention to the data of X-ray examination, namely the size of the lesion: the focus of bone destruction in the size of 0.5 to 0.8 cm is characteristic of cystogranulomas.

2. Pay attention to the data of X-ray examination, namely the form of the lesion:: the focus of bone destruction with clear, smooth edges is characteristic of cystogranulomas.

2. The patient complains of the presence of a carious cavity in 11th tooth. The restoration from this tooth fell out a week ago. The crown of the tooth is dark, at the bottom of the carious cavity remnants of filling material. Vertical percussion is painless. On the radiograph - resorption of bone tissue of oval shape, with clear contours, size 0.4x0.3 cm. The root canal is sealed for 2/3 of the length. What is the most likely diagnosis?
Chronic granulomatous periodontitis
Radicular cyst
Chronic granulating periodontitis
Exacerbation of chronic periodontitis
Chronic fibrous periodontitis

Solution algorithm:

1. Pay attention to the data of objective examination: the presence of a carious cavity with remnants of the old restoration may indicate a chronic disease. Changes tooth crown color may indicate a necrosis of the pulp, thus, the disease can be attributed to the group of periodontitis.

2. Pay attention to the data of X-ray examination: bone destruction with clear smooth edges up to 0.5 cm is characteristic of chronic granulomatous periodontitis

3. A 30-year-old man complains on a carious cavity. Objectively: color of 16th tooth is changed, deep carious cavity connected with the pulp cavity. Probing and percussion are painless. EOD 100 μA. On the X-ray: enlargement of the periodontal gap. What is the most likely diagnosis?

Chronic fibrous periodontitis

Chronic gangrenous pulpitis

Chronic granulating periodontitis

Chronic granulomatous periodontitis

Chronic deep caries

Solution algorithm:

1. Pay attention to the data of objective examination: the presence of a deep carious cavity connected to the tooth cavity may indicate a long course of the disease. A change in the color of the crown of the tooth may indicate necrosis of the pulp, thus, the disease can be attributed to the group of periodontitis.

2. Pay attention to the data of additional methods of examination: the expansion of the periodontal gap is characteristic of chronic fibrous inflammation. EOD data starting from 100 μA indicates a periodontal response.

54. Treatment of acute serous and purulent apical periodontitis of infectious and non-infectious (drug and traumatic) origin. Urgent care. The sequence and features of the stages of treatment. Antidote therapy. Modern technologies and instruments for the treatment of root canals. Features of filling.

1. A 27-year-old woman was treated for pulpitis by the method of devital extirpation. Arsenic paste was applied to tooth 15. The patient came to the second appointment only on the fourth day. There was a toxic periodontitis. What medicine should be used for root canal treatment?

unitiol

trypsin

hydrocortisone emulsion

eugenol

cresophene

1. Please note, the treatment of pulpitis was carried out by the method of devital extirpation using arsenous paste.

2. Please note that the patient came to the second appointment not on the second, but only on the fourth day, which caused the occurrence of toxic periodontitis.

3. Please note that in the treatment of toxic periodontitis it is necessary to use the antidodes of arsenous paste: 5% unitiol solution, 1% iodinol solution.

2. A man complains of acute pain in tooth 26, which increases when biting on the tooth. 4 days ago, an arsenic paste was applied to the tooth, at the appointed time the person did not appear at the reception. Objectively: the dressing is preserved in tooth 26. Percussion is painful. On the roentgenogram: there are no changes in the periapical tissues. After mechanical and medical treatment of root canals, the turundas are moist and not stained. What medicinal substance must be left in the root canals to achieve maximum clinical effect?

unitiol

hydrogen peroxide

trypsin

chloramine

chlorhexidine

1. Please note, the treatment of pulpitis was carried out by the method of devital extirpation using arsenous paste.

2. Please note that the patient appeared not on the second, but only on the fourth day, which caused the onset of toxic periodontitis.

3. Please note that in the treatment of toxic periodontitis, in order to achieve the maximum clinical effect, it is necessary to use antidodes of arsenous paste: 5% unithiol solution, 1% iodinol solution.

3. The patient is shown endodontic treatment of 21 teeth. Instrumental processing of the canal is carried out with hand-held endodontic instruments. What is the name of an endodontic instrument made by spiral conical cutting (turning) of round steel wire (milling)?

H-file

spreader

K-Reamer

K-file

plugger

1. Please note that endodontic treatment of 21 teeth provides for instrumental treatment of the root canal with endodontic instruments.

2. Please note that an endodontic instrument made by spiral conical cutting (turning) of round steel wire is called an H-file.

55. Treatment of chronic forms of apical periodontitis of single-rooted and multi-rooted teeth: principle, sequence and features of the stages. Methods for influencing the transapical focus of infection. Plastic non-hardening therapeutic pastes for temporary obturation of root canals: groups, composition, properties. The effectiveness of the treatment. Treatment of apical periodontitis in a short time.

1. A dentist conducts endodontic treatment of the 12th tooth for chronic periodontitis. Radiographically: in the area of the root apex 12, the destruction focus is determined with a size of 0.3x0.4 cm without clear contours. Select the optimal material for use as a sealer in this clinical situation:

With calcium hydroxide content

Based on resorcinol-formalin resin

Based on epoxy resins

Glass ionomer cement

Zinc oxide eugenol cement

1. Please note that endodontic treatment of 12 tooth of the destructive form of chronic periodontitis is carried out: X-ray: in the area of the root apex of tooth 12, a focus of destruction is determined in size - 0.3x0.4 cm without clear contours.

2. Please note that in order to influence osteoclasts in order to stop bone resorption, to influence the activity of osteoblasts, to stimulate the formation of bone tissue, it is necessary to use a paste based on calcium hydroxide.

3. A 20-year-old patient complained of darkening of crowns 11 and 21. About a year ago, the patient received a sports injury. Objectively: the crowns of the 11th and 21st teeth are dark gray, intact, painless when percussed. The mucous membrane of the alveolar process is not changed. On the roentgenogram, in the area of the root tops, a zone of destruction of bone tissue of a rounded shape, 0.5 mm in diameter, with clear boundaries is determined. What treatment should be prescribed?

root canal filling

electrophoresis with antiseptics

tooth extraction

antibiotic therapy

teeth whitening

1. Pay attention to the patient's complaints: darkening of the crowns 11 and 21 - the decay products of the pulp stain the dental crowns in a gray color of varying intensity.

2. Pay attention to the medical history: about a year ago, received a sports injury.

3. Pay attention to the X-ray data: in the area of the apex of the roots, a zone of destruction of bone tissue of a rounded shape, 0.5 mm in diameter, with clear boundaries is determined, which indicates the phenomena of chronic granulomatous periodontitis.

4. Please note that the treatment of chronic granulomatous periodontitis involves filling the root canals.

56. Errors in the diagnosis and treatment of periodontitis. Causes, remedies and prevention.

1. A 38-year-old patient complains of a discoloration of the crown 23. The crown is pink. From the anamnesis it was revealed that the root canal of this tooth is sealed. What filling material could cause this discoloration?

Foredent

Evgedent

Apexis

Endometasone

Phosphate cement

1. Pay attention to the patient's complaints: crown color change 23 - pink crown.

2. Pay attention to the medical history: the root canal of the tooth is sealed.

3. Please note that discoloration of the crown of the tooth occurs as a result of an incorrectly selected filling material for the root filling - materials based on resorcinol-formalin resin - Forfenan, Foredent.

2. A dentist carries out the expansion of the root canal of a 32 tooth in a 45-year-old man, using the StepBack technique. The apical part of the canal is enlarged to 30 file sizes. To align the walls of the root canal, the doctor used the rotational movements of the H-file size 25. In the process of work, the tool broke off. What mistake was made by the doctor in the process of work?

The technique of working with the tool was not followed

Incorrectly selected size of the file

This stage involves working with the H-file

With this technique, the H-file is not used.

Incorrectly selected canal tooling method

1. Please note that for the expansion of the root canal of tooth 32, the "StepBack" technique was used, which provides for the expansion of the root canal from the apical foramen to the orifice.

2. Note that the apical part of the canal is expanded to file size 30 (should be expanded to at least size 25).

3. Please note that to align the walls of the root canal, an H-file of size 25 is used, which is used for rotational movements, however, the technique of working with this instrument involves the use of reciprocating movements. Rotational movements when working with the H-file are unacceptable and lead to breaking off of the tool.

3. A patient consulted a doctor about pain in the 47th tooth. During X-ray examination, fragments of endodontic instruments are determined in the canals of the medial and distal roots. In the area of the root apex, there are foci of bone destruction with clear contours. Choose the most appropriate treatment method:

removal of a tooth

conservative treatment

operation of root apex resection

operation of tooth replantation

hemisection of a tooth

1. Pay attention to the patient's complaints: pain in the 47th tooth.

2. Pay attention to the results of X-ray examination: fragments of endodontic instruments are detected in the canals of the medial and distal roots, in addition, in the area of the apex of the roots there are foci of bone destruction with clear contours.

3. Please note that destructive changes in bone tissue occurred in the region of the medial and distal roots, but it is impossible to influence this process, due to the impossibility of removing the fragments of endodontic instruments from the root canals, which justifies the extraction of tooth 47.

57. The use of physical factors in the complex therapy of pulpitis and periodontitis (UHF therapy, diathermocoagulation, intracanal electrophoresis, d'Arsonval currents, fluctuating, diadynamic currents, ozone, laser therapy).

1. A dentist conducts treatment of the tooth 36 in a 52-year-old man with chronic periodontitis. Radiographically: the medial root canals are curved, in the region of the apex of the medial root is determined a focus of bone tissue destruction with irregular contours measuring 0.2x0.2 cm. Which of the following drugs is optimal for intracanal electrophoresis?

10% solution potassium iodide

0.1% solution trypsin

1% solution of novocaine

1% solution of decamethoxin

3% solution of copper sulfate

1. Pay attention to the patency of the root canals of tooth 36: the medial root canals are curved.

2. Pay attention to the data of X-ray examination: in the region of the apex of the medial root, a focus of destruction of bone tissue with irregular contours measuring 0.2x0.2 cm is determined.

3. Please note that when treating periodontitis with difficult root canals, it is advisable to use intracanal electrophoresis.

4. Please note that iodine ions in combination with a direct current stimulate reparative processes in the periodontium, inhibit the growth of granulation tissue, and have a bactericidal effect.

2. A 56-year-old patient treated pulpitis 47 in order to devitalize the pulp using arsenic paste. At the appointed time, the patient did not appear to continue treatment. Developed toxic "arsenic" periodontitis. Which of the following physiotherapeutic methods is advisable to use to eliminate the complication that has arisen?

potassium iodide electrophoresis

galvanization

UHF - therapy

currents d'Arsonval

fluctuating

1. Pay attention to the medical history: in the treatment of pulpitis 47, an arsenic paste was used. At the appointed time, the patient did not appear to continue treatment. Developed toxic "arsenic" periodontitis.

2. Please note that in the treatment of toxic periodontitis it is necessary to use the antidodes of arsenous paste: 5% unitiol solution, 1% iodinol solution. district of potassium iodide.

3. Please note that to create a depot of a drug (potassium iodide), which provides a longer effect on the peri-apical tissues, a direct current is used for the introduction of drug ions.

3. A dentist treats tooth 11 in a 43-year-old man for chronic periodontitis. X-ray: the root canal is sealed, the filling material is removed beyond the apical opening by 1 mm. What therapeutic measures should be applied in this case?

assign currents d'Arsonval

prescribe potassium iodide electrophoresis

unseal the root canal

prescribe antibiotics

make an incision along the transitional fold

1. Please note that the filling material has been extended beyond the apex opening by 1 mm, but the filling material must be brought up to the apex opening.

2. Pay attention, if the filling material gets behind the apical opening, pain may appear. To reduce the sensitivity of nerve endings, reduce pain, d'Arsonval currents, UHF therapy are used.