

**Терапія, 4 курс, Мова: Англійська, 2013-05-19**

**1.** Pathological root resorption more often is observed in teeth with:

- A. Chronic pulp inflammation
- B. Chronic periapical inflammation
- C. Chronic gangrenous pulpitis
- D. In intact teeth with vital pulp
- E. In teeth with carious lesion

**2.** A 7-year-old patient complains of pain during mastication in tooth #36.

Objectively: deep carious cavity in tooth #36, the cavity of the tooth is closed, but the probing of the bottom of the carious cavity is sharply painful. The pain is short-lasting and disappears after elimination of irritant. Percussion is painless.

Choose the paste for treatment in this clinical case.

- A. Paste with corticosteroids
- B. Paste containing calcium hydroxide
- C. Paste containing paraformaldehyde
- D. Resorcin-formalin paste

**3.** A 13-year-old girl complains of pain from the cold stimuli in #46. Half a year ago the tooth was treated because of caries, the filling full out and the tooth started to react to thermal stimuli. Objectively: there is a big caries cavity on occlusal surface of #46, which is fulfilled with softened dentine. The probing of the cavity bottom is painful, the reaction on cold stimuli is painful but short-lasting. Choose the most optimal therapeutic paste

- A. Zinc-oxide eugenol paste
- B. Paste with corticosteroids
- C. Iodoform
- D. Tymol
- E. Paste containing calcium hydroxide

**4.** A 6-year-old girl came to dental office for preventive examination.

Objectively: the oral hygiene is good, the teeth #16, #26, #36, #46 erupted three month ago are sound. What method of caries prevention is the most advisable in the case?

- A. Application with 10-% sol. of calcium gluconate
- B. Fluoride varnish application
- C. Fissure sealing
- D. Remedies containing fluoride
- E. Ionophoresis with 1% sol. NaF

**5.** A 11-year-old boy complains of pain in area of #24 during sweets and cold food intake. The pain has appeared for the first time three weekd ago.

Objectively: there is caries cavity on the occlusal surface of #24 fulfilled with softened, light dentine. The probing of enamel-dentinal junction of the carious

cavity is painful, the bottom is painless. Percussion of the tooth is painless. What filling material is the most advisable for permanent filling of the carious cavity in the tooth?

- A. Polycarboxylate cement
- B. Silicate cement
- C. Amalgam
- D. Glass ionomer cement
- E. Phosphate cement

6. During examination of a 7,5-year-old child, the carious cavity was revealed on the occlusal surface (distal part of fissure ) of #36. The cavity has very narrow entrance, the probe sticks in the softened dentine. Choose the modern therapeutic modality in this case.

- A. ART-method
- B. Preventive filling
- C. Impregnation with 45-sol. of silver nitrate
- D. Invasive fissure sealing
- E. Non-invasive fissure sealing

7. The 7,5 years old child's parents turned to the doctor for treatment.

Objectively: caries intensity index is 4 (DMF+df). Fissures of the first molars are intact, nonpigmented, V-shaped. What method of caries prevention is the most advisable for the child?

- A. Non-invasive fissure sealing
- B. Calcium hydroxide gel application
- C. Fluoride varnish using
- D. Antibiotics
- E. Invasive fissure sealing

8. Fifteen-year-old patient with cervical acute middle caries in #12 turned to the doctor, who decided to restore the carious cavity with compomer ( Dyrect AP). The child exhibits excessive salivation. What adhesive system should be used in this case?

- A. Dentine-enamel adhesive system of 3-th generation
- B. Dentine-enamel adhesive system of 6-th generation
- C. Enamel adhesive system
- D. Dentine-enamel adhesive system of 5-th generation
- E. Dentine-enamel adhesive system of 4-th generation

9. A 16-year-old patient turned to the dentist with complaints of crown fracture of frontal tooth caused by trauma. Objectively: defect of crown of #21, the tooth is shorter on one third, pulp chamber is closed, percussion is painless. What restorative material should be used for restoration of the defect?

- A. Composite "Evicrol"

- B. Hybrid Glass ionomer "Vitremer"
- C. Traditional glass ionomer "Ketac-molar"
- D. Totally filled composite "Estet X"
- E. Silicate cement

**10.** Seventeen-year-old patient was turned to the dentist with carious cavity on the distal proximal surface of the #36. Doctor decided to restore the tooth with using of "open sandwich" method. What level of glass-ionomer cement placement is advisable with this method of tooth restoration?

- A. Below the gingival margin
- B. Any level is suitable
- C. Below the contact point
- D. On the level of contact point
- E. Above the level of contact point

**11.** A 11-year-old girl complains of pain in upper jaw tooth during mastication, which quickly disappear soon after. Objectively: there is a big carious cavity within parapulpal dentin in tooth #46. The dentine in the carious cavity is softened, probing of the bottom is painful, percussion is painless. Choose the paste for cavity lining in this clinical case.

- A. Iodoform
- B. Zinc eugenol paste
- C. Tymol
- D. Paste containing calcium hydroxide
- E. Resorcin-formalin paste

**12.** A 8-year-old boy complains of an acute short-lasting pain from sweet and cold stimuli in #11. Objectively: a carious cavity within enamel-dentine junction fulfilled with softened, light dentin which can be easily removed with excavator. Probing of the carious cavity walls is painful. Choose the proper restorative material.

- A. Glass ionomer cement
- B. Phosphate cement
- C. Silver amalgam
- D. Resin-based composite
- E. Silicate cement

**13.** During examination of a 9-year-old girl, dentist revealed the chalky spots in the cervical area of #12, #11, #21, #22, which appeared two weeks ago. The spots lack brightness, stained with methylen blue. Choose the appropriate doctor's tactic.

- A. Grinding of defected area
- B. Dispensary observation
- C. Silver impregnation method
- D. Remineralizing therapy

**14.** A 17-year-old patient turned to the dentist with complaints of dark spot between upper frontal teeth. Objectively: there are carious cavities on the mesio-approximal surfaces of #11 and #21, integrity of frontal surface is not destroyed. Doctor decided to restore the teeth with composite "Spectrum". What surface should be first prepared?

- A. Cutting edge
- B. Doesn't matter
- C. Oral surface
- D. Vestibular surface
- E. Approximal surface

**15.** A 7-year-old boy complains of acute short-lasting pain from sweet and cold stimuli in #36. The dentist established the diagnosis: acute moderate caries of dentin. Choose the appropriate restorative material.

- A. resin-based composite
- B. Glass ionomer cement
- C. Phosphate cement
- D. Silicate cement
- E. Silver amalgam

**16.** A 9-year-old patient complains of pain during mastication in #46. Diagnosis: acute deep caries of #46. Choose the cavity liner for treatment.

- A. Paste containing calcium hydroxide
- B. Phosphate cement
- C. Resorcin-formalin paste
- D. Paste containing paraformaldehyde
- E. Paste with corticosteroids

**17.** Fissure sealing method is suggested for:

- A. There are no correct answer
- B. Treatment of caries
- C. Prevention and treatment of caries

- D. For esthetics
- E. Prevention of caries

**18.** The most effective and available method of diagnosis of local dental tissue demineralization is:

- A. Method of vital staining
- B. Biopsy
- C. X-ray
- D. Visual inspection
- E. All mentioned above

**19.** The most rational method of treatment of initial caries is:

- A. Application with remineralizing agents
- B. Preparation and restoration
- C. Professional oral hygiene
- D. Electrophoresis of Ca & F
- E. All mentioned above

**20.** A 7-year-old boy complains of stains on the cusps of first permanent molars. The stains are smooth, chalky and not stained with methylene blue. Anamnesis: the child suffered an acute infectious disease at the age of 3 months. Specify the diagnosis:

- A. Erosion of enamel
- B. Dental caries
- C. Enamel hypoplasia
- D. Fluorosis
- E. Hyperplasia of enamel

**21.** A 10-year-old patient complains on unaesthetic appearance of the #24 from the moment of its eruption. Objectively: enamel of the 24 tooth is partly absent, with dark yellowish colour. In anamnesis: the # 64 was treated because of periapical lesion for few times and was finally extracted in the age of 9 years old because of exacerbation of periapical inflammation. What is the most likely diagnosis in your opinion?

- A. Systemic hypoplasia
- B. Local hypoplasia
- C. Initial caries
- D. Enamel aplasia
- E. Fluorosis

**22.** During professional oral hygiene procedure, a 19-year-old patient was revealed to have two white spots in the precervical area of #11 and #2. After air drying for 5 seconds, the spots increased in size. What is the most likely diagnosis?

- A. Initial caries

- B. Enamel necrosis
- C. Amelogenesis imperfecta
- D. Local hypoplasia
- E. Fluorosis

**23.** . A girl of 13 years old lives in the area with 1,6 mg/l fluoride concentration in the drinking water. Dental examination of the girl revealed some chalk-like spots on the vestibular surfaces of all her teeth. The white coloration is more intense in the centre and less intense on the periphery of the spot. There is light-brown pigmentation in the are of the central incisors along the cutting edge. What is the most likely diagnosis?

- A. Stainton-Capdepont syndrom
- B. Acute initial caries
- C. Systemic enamel hypoplasia
- D. Dental fluorosis
- E. Amelogenesis imperfecta

**24.** A 15-year-old patient complains on the light spots presented on vestibular surface of frontal upper teeth. Objectively: there are white spots on the vestibular surface of #12,#11, #21, #22 with smooth surface. The teeth are nonresponsive to cold and probing. What is the most likely diagnosis?

- A. Acute initial caries
- B. Fluorosis
- C. Chronic superficial caries
- D. Chronic initial caries
- E. Local enamel hypoplasia

**25.** A 13-year-old patient complains of whitish spots on the molar teeth, hypersensitivity while eating acidic food. The spots appeared about 3 months ago. Objectively: the cervical region of the 46, 36, 27 teeth exhibits some chalk-like spots that can be easily stained with 2% methylene blue, probing reveals the surface roughness,the fluoride concentration in drinking water is at the rate of 2,0 mg/l. What is the most likely diagnosis?

- A. Enamel hypoplasia
- B. Chronic superficial caries
- C. Acute superficial caries
- D. Fluorosis
- E. Acute initial caries

**26.** A 16-year-old patient complains on a cosmetic defect in form of white spots in the area of the upper frontal teeth. The defects were revealed long time ago and didn't change with time. Objectively: white spots on the vestibular surfaces of the 11, 12, 21, 22 teeth close to the cutting edge and on the vestibular surfaces of the 16, 26, 36, 46 teeth close to the masticatory surface were revealed. The spots

surface are smooth, painless during probing; cold stimulation with no pain. The spots couldn't be stained with 2% solution of methylene blue. What is the most likely diagnosis?

- A. Local enamel hypoplasia
- B. Systemic enamel hypoplasia
- C. Acute initial caries
- D. Fluorosis in form of spots
- E. Erosion of dental hard tissues

**27.**A 14- year- old girl applied to a dental clinic and complained on hard tissue defects on her frontal and lateral teeth. Subjectively these defects don't cause any other inconvenience except of esthetic. Crown defects appeared long time ago. The girl was born and has been living in an area where fluoride concentration in the drinking water is 1,2 mg/l. Objectively: on the vestibular surfaces of incisors on both upper and lower jaws in the equator area there are hard tissue defects in form of light-brown grooves with smooth walls and bottom within deep layers of enamel. The defects are located parallel to the cutting edge. The same defects were revealed in the area of the first molar cusps What is the most probable diagnosis?

- A. Systemic hypoplasia
- B. Erosion of hard tissues of tooth
- C. Endemic fluorosis
- D. Local hypoplasia
- E. Focal odontodysplasia

**28.** A 9-year-old child complains on the pain in the 11 tooth caused by sour and sweet food. Objectively: chalky enamel defect with light bottom within dentino-enamel junction on the vestibular surface in the precervical area of the #11 tooth was revealed. Probing, percussion and cold stimulus caused no pain. What is the most likely diagnosis?

- A. Acute superficial caries
- B. Fluorosis
- B. Acute median caries
- C. Enamel hypoplasia
- D. Acute initial caries
- E. Acute superficial caries

**29.**A 15-year-old patient complains about a light brown spot in the upper frontal tooth. Objectively: the #23 has a single light brown spot in the cervical region. Probing shows smooth surface. The tooth is nonresponsive to cold and probing. What is the most likely diagnosis?

- A. Fluorosis
- B. Chronic initial caries
- C. Chronic superficial caries

D. Local enamel hypoplasia

E. Acute initial caries

30. The 15-year-old patient was diagnosed with chronic granulating periapical inflammation of tooth #26. Conservative root canal management was selected as method of treatment. What medication should be used for softening an inorganic matrix of the dentine?

- A. EDTA
- B. Chlorhexidine gluconate
- C. Sodium hypochlorite and hydrogen peroxide
- D. Hydrogen peroxide
- E. Sodium hypochlorite and chloramine

31. Signs of patency blockage in the root canal are the next:

- A. Impossibility to introduce of small size instruments to the entire working length and behind the apex
- B. Feeling of step formation on the close proximity to the working length
- C. free movement of the instruments behind the apex
- D. possibility of introducing a small sized instrument to the entire working length
- E. pain when endodontic instrument goes through the apex

32. The signs of hypodermic emphysema which may appear immediately after endodontic treatment include the following:

- A. An appearance of edema of soft tissues in the area of treated tooth, feeling which resembles the air bubbles during palpation of soft tissues around the treated tooth
- B. Difficulties with breathing, spontaneous pain
- C. frequent pulse rate
- D. Appearance of the edema of the soft tissues in the remote area from the treated tooth, pain during mastication
- E. Dizziness

33. Examination of a 5-year-old child revealed the presence of periapical inflammation in root of tooth #54. What irrigation solutions for root canal treatment will you choose in this case:

- A. Sodium hypochlorite, Chlorhexidine
- B. Aethonium solution
- C. Alcohol
- D. Formalin solution
- E. Saline, Distilled water



34. Preventive examination of a 4-year-old child revealed a deep carious lesion on the occlusal surface of tooth #54. The carious cavity has no communication with pulp chamber and is filled with dense dentine. Probing, percussion, thermal test of the tooth provoke no pain. The decay/filled index is 1, hygiene index is 1,9. What filling material is the most suitable for permanent restoration of the tooth?

- A. Self-curing glass-ionomer cement, Light-curing glass-ionomer cement
- B. Silicate cement
- C. Silicophosphate cement
- D. Calcium silicate cement
- E. Zinc Oxide Eugenol cement

35. A 9 years old boy complains of toothache while food intake. Objectively: there is a extensive carious decay with communication with pulp chamber on the approximal surface of tooth #55. Probing of the carious cavity is sharply painful, and bleeding is observed, percussion is painless. What treatment modality should be chosen in this case?

- A. Indirect pulp capping
- B. Non-vital pulpotomy
- C. Non-vital pulpectomy
- D. Vital pulpectomy
- E. Direct pulp capping

36. The parents of a 7.5-year-old child complain of pain while food intake in the area of the lower lateral tooth on the left side in their child. Chronic fibrous pulpitis of tooth # 74 was diagnosed. What method of treatment is recommended in this case?

- A. Vital pulpotomy
- B. Pulp capping with calcium hydroxide
- C. Vital pulpectomy
- D. Non-vital pulpectomy
- E. Tooth extraction

37. A 7 -year-old child complains of constant pain in the area of tooth # 85, which increases with mastication. Objectively: hyperemia and edema of mucous membrane of alveolar process in the area of lower lateral teeth is present. Tooth #85 is filled, vertical percussion of the tooth is sharply painful. No response to thermal stimuli. Anamnesis morbi: a week ago the tooth was treated due to chronic medium caries. What is the reason of complications appearance?

- A. Mistakes of restoration placement
- B. Incorrect diagnosis
- C. Incorrect preparation of carious cavity

- D. Incorrect choose of filling material
- E. Inaccuracy with using of medication for indirect pulp capping

38. A 6-year-old girl was brought to the dentist for completing of treatment of tooth # 75 because of chronic granulating periodontitis. The child has no complaints at the moment. Objectively: occlusive dressing on the 75 tooth remains intact, percussion is painless, mucous membrane in the area of # 75 tooth exhibits no pathological changes, and there is no pain on palpation. What material is the most appropriate for the root canal obturation in this case?

- A. ZOE-based sealer
- B. Any sealer with using of gutta-percha points
- C. Calcium Hydroxide based sealer
- D. Epoxy resin-based root-canal sealer
- E. Glass ionomer based sealer

39. Choose the most proper material for apical barrier formation in treatment of immature teeth with necrotic pulp:

- A. Mineral Trioxide Aggregate, Calcium Silicate cements
- B. Glass-ionomer cements
- C. Resin-based root canal sealer
- D. Resin-based composites
- E. ZOE-based sealers

40. In what cases the apexification method should be chosen as a method of treatment:

- A. Immature roots with necrotic pulp
- B. Immature roots with deep caries lesions
- C. Immature roots with pulp exposure due to extensive caries
- D. Immature roots with pulp exposure due to trauma
- E. Immature roots with signs of local pulp inflammation

41. What are the working length determination principles in case of immature roots treatment:

- A. X-ray with endodontic instrument in place for measurement of working length
- B. conventional working length determination with apex locator
- C. there is no need to determine the working length
- D. working length determination with using of tactile perception of the dentist
- E. working length should be determined after instrumentation of root canal

42. What symptoms are corresponded to the clinical picture of gangrenous pulpitis:

- A. Gnawing pain from hot stimuli, discoloration of tooth (greyish color of tooth crown)
- B. Pain from percussion
- C. Pain from cold stimuli and its releasing from hot
- D. Abrupt pain during food intake
- E. Edema and hyperemia of mucous membrane of alveolar process in projection of tooth apices

43. What symptoms are corresponded to the clinical picture of acute periapical inflammation:

- A. Intense pain from percussion, hyperemia of mucous membrane of alveolar process in projection of tooth apices
- B. Pain from cold stimuli that is short-lasting and releases immediately after stop of the stimuli
- C. Throbbing pain from hot stimuli
- D. Pain from cold stimuli and its releasing from hot
- E. Fistula tract formation on the mucous membrane of alveolar process in projection of tooth apices

44. What symptoms are corresponded to the clinical and radiographic picture of chronic periapical inflammation:

- A. Slight pain during percussion of the tooth, Area of radiolucency around the apex or/and in furcation area on X-ray, Fistula tract on the mucous membrane of alveolar process in projection of tooth apices might be present
- B. Throbbing pain from cold stimuli
- C. Throbbing pain from hot stimuli
- D. Pain increases at night, EOD – 20 mA
- E. No evident changes on X-ray

45. What diseases can be represented with an acute long-lasting pain from hot stimulation:

- A. Purulent pulpitis, Gangrenous pulpitis
- B. Acute periapical inflammation
- C. Chronic periapical inflammation
- D. Acute deep dental caries
- E. Acute periostitis of the jaw

46. What diseases can be represented with an acute short-lasting pain from cold stimulation:

- A. Pulp hyperemia, Acute deep caries
- B. Gangrenous pulpitis
- C. Purulent pulpitis

- D. Acute granulating periodontitis
- E. Medium dentine caries

47. What symptoms are corresponded to the clinical picture of purulent pulpitis:

- A. Throbbing pain from hot stimuli which releases from cold, Severe pain which becomes more pronounced at night
- B. Pain form percussion
- C. Pain from cold stimuli and its releasing from hot
- D. Abrupt pain during food intake
- E. Edema and hyperemia of mucous membrane of alveolar process in projection of tooth apices

48. Child of 12 years old experienced trauma of permanent incisor with enamel-dentine fracture without pulp exposure. After radiographic examination no fracture of the root was diagnosed. What treatment modality should be chosen by dentist in this case:

- A. Restoration of the tooth with resin-based composite, Clinical examination and X-ray control in 1, 3, 6 and 12 months
- B. Restoration of the tooth with temporary filling
- C. Pulpotomy for prevention of acute pulp inflammation
- D. Pulpectomy for prevention of acute pulp inflammation
- E. Observation of the tooth, treatment is necessary when symptoms appear

49. Child of 8 years old underwent trauma of central incisor 4 months ago. The treatment was not provided as soon as no signs of crown or root fracture was present after trauma. Few days ago parents noticed fistula tract formation on the mucous membrane of alveolar process above the tooth. On X-ray: radiolucency in the apical area of immature central incisor. What are the principles of root canal instrumentation and irrigation in this case:

- A. Gentle or no instrumentation with endodontic instruments as there is no necessity to enlarge space in the root canal, Usage of low concentrated sodium hypochlorite solutions (0,5-2%)
- B. Thorough instrumentation with enlargement of root canal space using of big-sized endodontic instruments
- C. Usage of high concentrated sodium hypochlorite solutions (3-5,25%)
- D. Over instrumentation of the root canal behind the apex
- E. Irrigation solutions should not be used not to damage the tissues behind the apex

50. Parents of 9 year old child complain of dark yellowish color of teeth in their child. Objectively: teeth are brownish in color with normal size. Enamel is translucent. In some arears enamel is absent with areas of dentine disclosure. Signs of enamel and dentine wearing is present. On X-ray examination: the pulp chamber

and root canals appear to be obliterated and the roots are shorter in length. What pathology can be suspected:

- A. Fluorosis
- B. Stainton-Capdepon syndrome
- C. Amelogenesis imperfecta
- D. Enamel hypoplasia
- E. Dentinogenesis imperfecta

51. What disadvantages does an apexification method of treatment of immature roots with using of calcium hydroxide demonstrate:

- A. Calcium hydroxide may decrease mechanical strength of the root
- B. Prolonged treatment is highly recommended as level of microorganisms might be dramatically reduced
- C. Calcium hydroxide may increase mechanical strength of the root
- D. High resistance for fracture in the treatment period
- E. High resistance for fracture in long-term observation period

52. What symptoms are corresponded to the picture of exacerbation of chronic granulating periodontitis:

- A. Fistula tract formation of the mucous membrane of alveolar process in projection of roots of involved tooth
- B. No change on radiograph
- C. Moderate pain or absence of pain during food intake
- D. Pain from cold stimuli which doesn't release after cessation of cold stimulation
- E. Throbbing pain from hot irritants

53. What materials can be used for indirect pulp capping in case of deep dental caries treatment:

- A. Calcium hydroxide, Calcium silicate cements, ZOE cement
- B. Iodoform paste
- C. Glass-ionomer cements
- D. Resin-based composites
- E. Paraformaldehyde paste

54. What materials can be used for direct pulp capping in case of accidental exposure of the pulp during dentine excavation:

- A. Calcium hydroxide pastes, Calcium silicate cements
- B. Glass-ionomer cements
- C. Resin-based composites
- D. Iodoform pastes
- E. Amalgam

55. The parents of a 6- year-old child complain of the presence of carious cavity in the lower right molars of their child. OBJECTIVELY: presence of carious lesion on occlusal surface of tooth 74 within parapulpal soft dentine. During cavity probing - sharp pain, bleeding and pulp exposure appeared. Percussion of # 74 is painless. What radiographic data is corresponded to this clinical picture?

- A. The radiolucency of triangular shape in the coronal part of the tooth, with bottom of the triangle turned toward the roof of pulp chamber, no radiographic changes in the periapical or furcation area
- B. Radiographic appearance of an oval shape radiolucency within the pulp chamber or the root canal.
- C. Round shaped radiolucency in the coronal part of the tooth with area of radiolucency around the apex of the roots without distinct borders
- D. Round shaped radiolucency in the coronal part of the tooth with area of radiolucency around the apex of the roots with distinct borders
- E. Slight thickening of periodontal ligament around the root apices visible on X-ray

56. During preventive examination of 9- year old child, dentist revealed a carious decay in tooth #75. After procedure of necroectomy, the connection within the pulp chamber have been appeared with painless probing of the root canal orifices. On radiograph: presence of radiolucency of bone tissue with unclear borders around the mesial root and in the bifurcation area of tooth 75. What type of root obturating material should be selected in this case?

- A. Zinc oxide eugenol paste, Iodoform paste
- B. Glassionomer cement
- C. Sealapex
- D. Resorcin-formalin paste
- E. Phosphate cement

57. A 14.5 year-old adolescent complains of intense throbbing pain in the upper right molar, which has been lasting for two days. The pain increases during mastication and touching of the tooth by tongue. OBJECTIVELY: there is carious decay in tooth # 16 with painless probing. There is no response to thermal stimuli. Vertical and horizontal percussion is sharply painful. The mucous membrane of the gums in the area of roots of #16 is swollen and hyperemic. What should the doctor's tactic be during the first appointment?

- A. Irrigation of root canals with copious amount of disinfecting solutions in combination with instrumentation of root canals, Interim dressing with disinfecting pastes after shaping and irrigation of the root canals
- B. Obturation of root canals with permanent fillings
- C. There is no need for root canal treatment, prescribing of antibiotics is enough

- D. Opening the pulp chamber, leaving the tooth open for drainage
- E. Abscess incision

58. The causes of apical root canal wall perforation are the next:

Select one or more answers, please:

- A. usage of endodontic instruments with an aggressive tip, previous blockage of apical part of the root with dentine chips
- B. Usage of small endodontic instruments
- C. Copious amount of irrigation solution between instruments
- D. Pre-bending of instruments before introducing into the root canal
- E. Gentle work with permanent ensuring of root canal patency

59. The periodontium is defined as those tissues supporting the tooth and consists of the next:

- A. cementum, periodontum ligament (PDL), that part of the gingiva facing the tooth. bone lining the alveolus (socket),
- B. Dental pulp
- C. Coronal part of the tooth
- D. Gingiva of alveolar process
- E. Medular part of the alveolar bone

60. Child of 11 years old underwent trauma of central incisor 24 hours ago. Line of fracture goes through the enamel and dentine with pulp exposure. On X-ray: there is no evidence of root involvement, the root is mature. Select the proper method of treatment and filling material:

- A. Pulpectomy, sealer with gutta-percha
- B. Pulpotomy, Glass-ionomer cement
- C. Extraction of the tooth
- D. Resin-based composite, partial pulpotomy
- E. Pulpotomy, ZOE paste

61. What methods of root canal obturation should not be used in endodontic treatment of primary teeth:

- A. Lateral compaction of gutta-percha, warm gutta-percha obturation
- B. Obturation with ZOE paste
- C. Iodoform paste obturation
- D. Calcium hydroxyde + iodoform paste obturation
- E Calcium hydroxide obturation

62. What diagnostic methods should be used to differentiate deep caries lesion from pulp or periapical disease:

- A. Probing if possible, percussion and cold test, Radiography
- B. Angiography, percussion
- C. Thermography

- D Visual inspection of hard tissues and soft tissues around the tooth
- E. Staining of hard tissues

63. Direct pulp capping procedure in immature permanent teeth might be successful in case of:

Select one or more answers, please:

- A. Small caries exposure, teeth with no history of swelling or spontaneous pain, no radiographic changes
- B. Pain at night for few days, small size of caries exposure
- C. Minor episodes of pain in history is acceptable
- D. Intense bleeding can be stopped with using of hemostatic remedies
- E. Positive percussion test

64. Indications for restoration of primary teeth with Glass-ionomer cements (GICs) are the next:

- A. Class I, class V
- B. Extensive cavities of class II
- C. GICs are strong enough to withstand any type of loading
- D. GICs are as strong as amalgam
- E. All answers are correct

65. Advantages of GICs when used in primary teeth:

Select one or more answers, please:

- A. Adhesive, fluoride leaching, withstand loading in small caries cavities
- B. Susceptible to erosion and wear
- C. Long setting time
- D. Brittle
- E. Often radiolucent

66. Disadvantages of GICs when used in primary teeth:

- A. Long setting time, brittle, susceptible to erosion and wear
- B. Adhesive
- C. Fluoride leaching
- D. Aesthetic
- E. Withstand loading in small caries cavities

67. What solutions can be used for vital staining of teeth:

Select one or more answers:

- A. 2% Methylene Blue, 0,1% Methylene Red
- B. Betadine
- C. 3% Hydrogen Peroxide
- D. 2% Sodium Hypochlorite
- E. Lugol's solution



68. Atraumatic restoration treatment provides:

Select one or more answers:

- A. Caries cavity preparation only by hand instruments (excavators, margin trimmers), filling of hand- prepared caries cavity
- B. Caries cavity preparation with rotary instruments
- C. Caries cavity preparation by hand and rotary instruments
- D. Caries cavity preparation by hand instruments with previous chemical solving of the carious tissues
- E. Caries cavity filling without cavity preparation, no polishing of filling

69. What filling material should be used for sealing of carious cavity ( II class by Black) in "open sandwich technique" in child of 11 years old?

- A. glass ionomer cement, nanohybrid composite
- B. amalgam, GIC
- C. phosphate cement, fissure sealant
- D. flowable composite, GIC
- E. nanohybrid composite

70. Child of 7-year-old was diagnosed with acute deep carious lesion with pulp exposure in tooth # 85 (occlusal surface). An acute pain and moderate bleeding has occurred during probing of communication, long-term pain after removal of cold stimuli. Tooth percussion is painless. Choose a treatment method.

- A. Vital pulp extirpation, non-vital pulp extirpation
- B. Vital pulpotomy
- C. Non-vital pulpotomy
- D. Direct pulp capping
- E. Indirect pulp capping

71. During root canal treatment of immature root, the massive hemorrhage has happened. What remedy should be used for blood stop?

- A. Aminocaproic acid
- B. Furacilin solution 1:5000
- C. Chlorhexidine 2%
- D. Thymol paste
- E. Sodium hypochlorite 5,25%

72. A child of 8,5-year old was referred to pediatric dentist for treatment of tooth #65 with extensive carious lesion. It was revealed that reaction for cold stimuli is painful and pain lasts for 3-4 minutes after removal of cold. During excavation of necrotic dentine, connection between carious cavity and pulp chamber was revealed. Doctor decided to use method on non-vital pulpotomy for the tooth treatment. What remedy is indicated for pulp mummification?

- A. Resorcin-formalin paste
- B. Zinc-Oxide Eugenol paste with adding of antiseptics
- C. Ca(OH)<sub>2</sub> paste

- D. Temporary filling dentine paste
- E. Metrogyl-denta paste

73. A child of 6 year old was treated regarding chronic pulpitis of tooth #75. Tooth was treated by method of non-vital pulp extirpation. What sealer for root canal obturation should be used in the case?

- A. Zinc-oxide eugenol paste
- B. Thermoplastified gutta-percha
- C. Calcium hydroxide-based root canal sealer (Acroseal and Sealapex)
- D. Phosphat cement
- E. Resorcin-formalin sealer

74. During examination of 4-year old child, the acute purulent pulpitis of tooth #65 was diagnosed. Treatment of root canals was provided with pulp extirpation method in spite of immature roots. What forms of pulpitis should be treated with method of pulp extirpation?

- A. Chronic gangrenous pulpitis
- B. Acute serous pulpitis
- C. Acute traumatic pulpitis
- D. Exacerbation of chronic pulpitis
- E. Pulp hyperemia

75. Patient of 16 year old complains of acute pain in tooth # 36, which increases during mastication. Five days ago the tooth was treated with using of arsenic paste. Patient did not come to doctor in time. What remedy should be used to reduce side effect?

- A. Unithiol
- B. Sodium hypochlorite
- C. Furacilin
- D. Hydrogen peroxide
- E. Sodium thiosulphate

76. A 12-year old child was diagnosed with caries lesion on the tooth # 11, IV Class by Black. What factors should be taken into account while choosing the sealing material?

- A. Mechanical strength of the material, esthetic properties of the material
- B. Viscosity of the material
- C. Age and gender of the patient
- D. Occlusion ratios specificity
- E. Number of sealed teeth

77. The girl of 9 year old was recalled for a dental control examination of tooth # 36 which was treated with using of pulp capping method few months ago. What criteria affirm an effectiveness of provided treatment?

- A. No pain and negative percussion in treated tooth, no changes in periapical tissues on X-ray examination
- B. Absence of filling weariness
- C. Discoloration of the filling
- D. Positive Schiller-Pisarev test
- E. Tight sealing of permanent filling

78. During the treatment of tooth #16 in 8-year old child because of extensive caries, exposure of pulp chamber has occurred. It was decided to use the pulp capping method in this clinical situation. What mistakes can lead to ineffectiveness of chosen method of treatment?

- A. Non-hermetic restoration of the tooth
- B. Violation in root canal instrumentation
- C. Violation in root canal obturation methods
- D. Root canal perforation
- E. Incomplete pulp extirpation

79. After thorough examination and diagnosis of the child, doctor decided to treat tooth # 75 with method of non-vital pulpotomy. What manipulations should doctor perform in first appointment?

- A. Devitalizing paste placement
- B.  $\text{Ca}(\text{OH})_2$  isolation lining placement
- C. Root canal obturation
- D. Root canal instrumentation
- E. Permanent restoration of the tooth

80. Adolescent of 16 year old was diagnosed with fibrous pulpitis of tooth 16. Method of vital pulpectomy was chosen for treatment of the tooth in the case. During instrumentation and irrigation of mesio-buccal root, extensive hemorrhage has happened. What are the probable reasons of this complication appearance?

- A. Trauma of apical periodontal tissues by endodontic instruments (over instrumentation), extrusion of irrigation solutions beyond the apex
- B. Blood clot formation disorders
- C. Improper choice of irrigation solution
- D. Ineffective analgesia
- E. Improper opening of pulp chamber

81. Patient of 14 year old complains of permanent gnawing pain in tooth #36 which increases during mastication. Five days ago tooth was treated with using of arsenic paste. Child didn't appear to the dentist in time. Objectively: temporary restoration is preserved, percussion is slightly painful, mobility of I degree. What treatment modality is the most effective during first appointment?

- A. Remove arsenic paste after analgesia, use paper points with unithiol and leave it inside the canal
- B. Place temporary restoration for 24 hours
- C. Determine hygienic status of the patient
- D. Provide instrumentation of the root canal and use  $\text{Ca}(\text{OH})_2$  paste
- E. Use physiotherapeutic treatment

82. Child of 9 year old had trauma of central upper incisor two hours ago. Pulp is painful and exposed in one point. Percussion is painful. It was decided to treat the tooth with pulp capping method. What other factors are important for successful treatment with pulp capping method?

- A. Compensated caries course, keeping of aseptic and antiseptic rules
- B. Gender
- C. Localization of caries cavity on the occlusal surface (by I Class)
- D. Restoration exclusively with composite
- E. Decompensated caries course

83. What age parents should visit dentist with preventive examination of the child for the first time?

- A. Immediately after first tooth eruption
- B. After eruption of all deciduous teeth
- C. After primary molars eruption
- D. In case of decay
- E. In case of child's complaints

84. Child of 10 year old complains of acute pain in left lower jaw area from cold stimuli which lasts for approx. 20 minutes after removal of cold water. Cold test of tooth #36 is positive. Anamnesis: tooth #36 was treated due to acute deep caries lesion one month ago. What are the probable reasons of acute pulp inflammation in the case?

- A. Overheating of dentine during preparation of caries cavity
- B. Using of glass-ionomer cement for permanent restoration
- C. Using of resin-based composite for permanent restoration
- D. Using of calcium hydroxide lining under the permanent restoration
- E. Using of calcium silicate cement for indirect pulp capping

85. During objective examination of 8-year old child, on the occlusal surface of tooth #16 carious cavity was revealed. Lesion is with narrow entrance within parapulpal dentine. Probing of the lesion's bottom is painful, dentine is softened. What type of lining should be used in this case.

- A. Calcium hydroxide paste, calcium silicate cement
- B. Thymol paste
- C. Resorcin-formalin paste

- D. Paraformaldehyde paste
- E. Resin-based composite

86. It is known that the teeth affected by hypoplasia are much more susceptible to caries than those which are not affected. What preventive measures should be provided by dentist before caries management in hypoplasia affected teeth.

- A. Remineralizing therapy with using of different types of fluoride during one month, using of fluoride containing restorative materials (GICs, compomers) as semi-permanent restoration
- B. Restoration of caries cavity by resin-composite materials
- C. Using ZOE cements for permanent restoration
- D. Using amalgam for restoration
- E. Excessive removal of the hard tissues

87. A 14-year-old patient complains about the astringent sensation in the upper jaw incisors which appeared 1,5 years ago. Objectively: the most convex part of the vestibular surfaces of the 12, 11, 21, 22 crowns has roundish defects with smooth, shiny, dense surface, that reach dentine in depth. The depth of defects is gradually decreasing from the centre to the periphery. What is the most likely diagnosis?

- A. Chronic median caries
- B. Enamel erosion
- C. Systemic hypoplasia
- D. Destructive form of fluorosis
- E. Wedge-shaped defect

88. A 10-year-old patient complains about unaesthetic look of the 24 tooth from the moment of its eruption. Objectively: enamel of the 24 tooth is partly absent, the dentine is yellow. The 64 tooth was treated more than once during a childhood because of frequent exacerbations, edemas and gingival fistula. # 64 was extracted when patient was 9 years old. What is the most likely diagnosis?

- A. Fluorosis
- B. Initial caries
- C. Enamel aplasia
- D. Localised hypoplasia
- E. Systemic hypoplasia

89. A patient complains of pain attacks in teeth of the lower jaw on the left. Pain irradiates into the ear, and increases during of taking cold and hot food. Objectively: there is a deep carious cavity on the medial contact surface in tooth 36. Probing is painful on the entire bottom and causes a pain attack. What is the most probable diagnosis?

- A. Chronic fibrous pulpitis
- B. Acute diffuse pulpitis

- C. Acute focal pulpitis
- D. Acute purulent pulpitis
- E. Acute deep caries

90. A patient came for a dental examination with a bottle of cold water which reduces toothache. What is the most probable diagnosis?

- A. Acute purulent pulpitis
- B. Acute serous periapical inflammation
- C. Exacerbation of chronic periapical inflammation
- D. Acute diffuse pulpitis
- E. Acute focal pulpitis

91. An 8,5-year old child complains of pain during chewing in a lower right molar. On the masticatory surface of the 46 tooth a carious cavity has been detected which is within the parapulpal dentine and is fulfilled with softened dentine of light brown color. There is a pulp exposure on the projection of mesiobuccal horn of the pulp, the probing is accompanied by acute pain and bleeding. The reaction to thermal stimuli is painful and long-lasting. Percussion of the tooth is also painful. Define provisional diagnosis.

- A. Chronic fibrous pulpitis
- B. Chronic hypertrophic pulpitis
- C. Acute diffuse pulpitis
- D. Chronic gangrenous pulpitis
- E. Acute focal pulpitis

92. A 12-year old boy feels continuous pain in the area of the 36 tooth while eating hot meal. Objectively: the crown of the 36 tooth is grey; there is a deep carious cavity, fulfilled with the softened dentine. The pulp exposure is also present. Deep probing is painful. A thermal irritant causes pain which goes off slowly. Percussion of the 36 tooth is painless. What is the most probable diagnosis?

- A. Chronic granulating periapical inflammation
- B. Chronic gangrenous pulpitis
- C. Chronic hypertrophic pulpitis
- D. Chronic fibrous pulpitis
- E. Chronic deep caries

93. A patient complains of the persistent attacks of toothache in the teeth of the lower jaw on the left. The pain irradiates in the ear, back of the head and increases when eating cold and hot meal. Objectively: there is a deep carious cavity on the medial surface in the 36 tooth. Probing is painful on the entire bottom and causes an attack of pain. What is the most probable diagnosis?

- A. Acute local pulpitis
- B. Acute deep caries
- C. Chronic concrementous pulpitis
- D. Acute diffuse pulpitis
- E. Acute purulent pulpitis

94. A 19-year old patient complains of the crown fracture of the 21 tooth that happened yesterday because of trauma. Objectively: the medial corner of the 21 tooth is absent. Under the line of the fracture pulp is translucent in one point. Probing of this point is painful, percussion is painless. EOD = 25 mkA. What is the most probable diagnosis?

- A. Acute traumatic pulpitis
- B. Acute limited pulpitis
- C. Chronic fibrous pulpitis
- D. Hyperemia of pulp
- E. Acute deep caries

95. A 10-year old girl complains of acute toothache in the upper right molar during the night. Objectively: there is a carious cavity on the masticatory surface of the 16 tooth within the parapulpal dentine. Probing is severely painful on the bottom of carious cavity. The reaction of the tooth to cold water is severely painful; percussion of the tooth is slightly painful. What is the most probable diagnosis?

- A. Acute diffuse pulpitis
- B. Acute focal pulpitis
- C. Acute purulent pulpitis
- D. Acute serous periapical inflammation
- E. Acute purulent periapical inflammation

96. A patient had an attacks of pain during the last night on the right half of the face. The pain was pulsating, severe, almost permanent, did not calm down, but the intensity diminished little. The pain severely increased from the warm rinse. Objectively: there is a composite filling in the precervical area of the 17 tooth. The pain calm down after the cold water rinse. Percussion of the tooth is painfull. What is the most probable diagnosis?

- A. Exacerbation of the chronic pulpitis
- B. Acute serous periapical inflammation
- C. Acute diffuse pulpitis
- D. Acute right-side maxillary sinusitis
- E. Acute purulent pulpitis

97. A 13-year old girl complains of attacks of toothache in the 36 tooth after hot food. From anamnesis: The 36 tooth had intensive night pain attacks a year ago; the tooth was not treated before. Objectively: there ia a deep carious cavity on the masticatory surface of the 36 tooth. The cavity is exposed. During a deep probing the unplesant smell appeared. What is the most probable diagnosis?

- A. Chronic deep caries
- B. Chronic fibrous pulpitis
- C. Chronic hypertrophic pulpitis

- D. Chronic gangrenous pulpitis
- E. Chronic calculous pulpitis

98. A 14.5-year old child complains of intense self-willed, paroxysmal pain in the lower left tooth, which appeared at night. During the examination the doctor revealed the cavity filled with light softened dentin on the medial-contact surface of the 36 tooth. The carious cavity is not connected with the pulp chamber. Probing the bottom of the cavity is painful at one point. Cold water cause a prolonged pain attacks. Percussion of the tooth is not painful. What is the preliminary diagnosis?

- A. Acute serouse localized pulpitis
- B. Acute serouse perapical inflammation
- C. Acute purulent pulpitis
- D. Acute diffuse pulpitis
- E. Aggravation of the chronic pulpitis

99. A 13-year old child complains of pain and bleeding from the tooth while eating. Objectively: there is a carious cavity on the distal-contact surface 16. This cavity is filled with a red tissue, which is painfully to probing and accompanied with bleeding. Percussion of the 16 tooth is painless. Radiographic changes in periapical tissue is absent. Choose the diagnosis.

- A. Acute diffuse pulpitis
- B. Acute periapical inflammation
- C. Chronic fibrous pulpitis
- D. Chronic gangrenous pulpitis
- E. Chronic hypertrophic pulpitis

100. A 12-year old patient complains of pain in the tooth on the upper left jaw which increases at night and from the irritants. The pain irradiates in the left temple and eye. Similar attacks were three months ago but the treatment wasn't conducted. Objectively: there is a deep carious decay in #22, which is connected with the pulp chamber. Probing of the point of connection is sharply painful, vertical percussion is slightly painful, horizontal - painless. Mucosa in the projection of the root apex of tooth 22 is unchanged, palpation is painless. EOD -60 mkA. Roentgenologically - minor expansion of periodontal ligament at the apex of the 22 tooth. What is the most probable diagnosis?

- A. Acute localized pulpitis
- B. Acute purulent pulpitis
- C. Pulpitis complicated with periodontitis
- D. Acute diffuse pulpitis
- E. Chronic fibrous pulpitis