

THE MINISTRY OF HEALTH OF UKRAINE
THE HIGHER STATE EDUCATIONAL INSTITUTION OF UKRAINE
"UKRAINIAN MEDICAL STOMATOLOGICAL ACADEMY"

Approved
at the meeting of orthodontics department
«_____»_____20____y.
protocol №____by _____
Head of department_____ L.V. Smaglyuk

METHODICAL RECOMMENDATION
for independent work of students during the preparation
to practical lessons and on the lessons

Academic discipline	Orthodontics
Module №1	Orthodontia. Diagnostic of dentognathic anomalies and deformations.
The theme of the lesson № 5	The control meaningful module №1
Course	III
Faculty	Preparation of foreign students

Poltava 2016

1. The relevance of the topic. Knowledge of the features and characteristics of the stages of the teeth-jaw apparatus development in age aspect (prenatal, postnatal) required students to determine the type of development of the bite, deviations from the correct structure of the bite that will help in the future, assign an appropriate set of preventive or therapeutic measures.

Background due to the need to know the morphological and functional features of the temporary occlusion structure.

Background due to the need to know the morphological and functional features of the structure replacement and permanent dentition.

Information about the patient obtained with the help of clinical and laboratory diagnostic techniques, objective source for obtaining and content but in form and subjective interpretation of a physician, establishing the diagnosis.

2. Specific objectives:

To know the classification of human ontogenetic development;

To know the structure of the skull (face and brain);

To know the phases of the prenatal and postnatal stages of human development;

To know the embryonic development of the face and jaws;

To know the pathogenesis of the formation of congenital malformations of the face;

To know anatomical and physiological peculiarities of the oral cavity of the newborn;

To know the anatomical and physiological characteristics of temporo-mandibular joint newborn;

To know the features of the temporary occlusion structure;

To know the features of the structure of the upper and lower jaws in temporary occlusion;

To know the features of the structure of bite in temporary occlusion;

To know the structural features of TMJ in temporary occlusion;

To know the three periods of temporary occlusion;

To know the times of formation and occlusion by Zubkova, Horoshylkina;

To know the symptoms by Tsylinisky;

To know the final plane by Schwarz.

To know the structural features of the face, upper and lower jaws, bite and TMJ in 2 periods of mixed bite;

To know the periods of mixed bite;

To know structural features of the face, jaw and bite in and the 1 period of mixed bite;

To know structural features of the face, jaw and bite in and the 2 period of mixed bite;

To know the stages of physiological increasing of the bite height;

To know the stages of the sagittal and transversal occlusal curves forming;

To know the terms of permanent teeth eruption;

To know the differences between the temporary and permanent teeth;
 To know the factors of jaws growth during mixed bite;
 To know the features of the upper and lower jaw structure, TMJ and structural features of the oral cavity at a permanent bite;
 To know the morphological features of permanent bite 3 periods.
 To know the definition of "normal", "optimal individual norm" in orthodontics.
 To analyze the periods of child development and bite.
 To classify the types of physiological pathology that bites.
 To explain the outside and intraoral signs of physiological occlusion.
 To explain the keys of occlusion by Angle and E. Andrews.
 To be able to identify the keys to occlusion of the KDM.
 To be able to determine the dental evidence for KDM.
 To write a dental formula of the patient.

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

Name of previous disciplines	Skills
1. Anatomy	to determine the structure of the cerebral and facial departments of skull; to determine the structure of the temporo-mandibular joint; to determine the anatomical characteristics of different groups of temporary and permanent teeth.
2. Histology	to determine the periods of development of the embryo and fetus; to determine the embryonic development of the maxillofacial region; to determine the periods of development of temporary and permanent teeth, to be able to describe them; to determine the histological structure of hard tissues temporary and permanent teeth.
3. Propaedeutic of therapeutic stomatology	The structural characteristics of temporary teeth. The differences between the temporary and permanent teeth. Features of permanent teeth structure.
4. Prevention of dental disease	To know the terms of the sequence and order of eruption of the temporary and permanent teeth.
5. Histology	To know the periods of temporary and permanent teeth, the histological structure of the fabric of time and permanent teeth.

4. Tasks for independent work during preparation to the lesson and on the lesson

4.1.A list of the main terms, parameters, characteristics that need to learn by the student during the preparation to the lesson:

Terms	Definition
1. The embryo	the period of prenatal development prior to 7 weeks of pregnancy
2. The fetus	the period of prenatal development from 3 months
3. Germinal period	in fact, the embryonic period
4. The philtrum	the middle part of the upper lip
5. Primary palate	the middle part of the upper lip and incisor bone which develop from frontal process
6. Neoplasene period	when the placenta is formed
7. The Bish lumps	the fat pads of the cheeks
8. The Pfaundler-Liushke's cushions	transverse striations of the lip
9. Physiological infantile retrogeny	distal position of the lower jaw relative to the upper
10. The Roben-Mazhito's fold	double fold of mucous membrane in the anterior upper and lower jaws region
11. Temporary (deciduous, primary) occlusion	The period of dentition, when in the oral cavity there are only temporary teeth.
12. Rules of teeth eruption	Twoness, the timing, sequence and order.
13. Symptoms by Tsylinisky	Estimate the relation of the distal surfaces of second temporary molars.
14. Mixed occlusion	The period of dentition, when in the mouth there are temporary and permanent teeth simultaneously.
15. Rules of teeth eruption	Pairing, timing, sequence and order.
16. Permanent occlusion	The period of dentition, when in the mouth there are only permanent teeth.
17. "The optimal individual norm"	state guaranteed enough time morphological, functional and aesthetic balance in the dentition and facial skeleton as a whole, to strive for during orthodontic treatment
18. The E. Engle key	fissure-cusps contacts between the first permanent molars upper and lower jaw with the right inclination of longitudinal axes of these teeth to the occlusal plane

19. Abnormal bite	Occlusion, which indicated anomalous position of individual teeth, deformation of the dental arches and abnormal ratio (a shift in the sagittal, vertical or transversal direction), is an abnormal or pathological.
-------------------	--

4.2. Theoretical questions to the lesson:

1. Classification of human ontogenetic development.
2. The structure of the skull (face and brain).
3. Phases prenatal stage of human development.
4. The stages of development of the teeth-jaw apparatus in utero.
5. Embryonic development of the face and jaws.
6. Anatomical-physiological features of the oral cavity of the newborn.
7. Anatomical and physiological characteristics of temporo-mandibular joint newborn.
8. The characteristic of temporary occlusion periods.
9. Patterns of temporary teeth eruption.
10. The first physiological increase of a bite.
11. Features of temporary occlusion' stable period.
12. Classification of temporary teeth abrasion.
13. Prediction of the of bite development, depending on the relation of the second temporary molars.
14. Tsylin'sky' symptom and its importance in the formation of permanent occlusion.
15. Terminal planes by Schwarz.
16. The terms of permanent teeth eruption.
17. The periods of the permanent occlusion.
18. The periods of physiological height bite increasing.
19. The structural features of the face, jaw and bite in and the 1 period of mixed bite.
20. The structural features of the face, jaw and bite in and the 2 period of mixed bite.
21. The features of the sagittal and transversal occlusal curves forming.
22. The factors of jaws growth during the mixed bite.
23. The differences between the temporary and permanent teeth.
24. The features of the upper and lower jaw structure, TMJ and structural features of the oral cavity at a permanent bite.
25. The morphological features of permanent bite 3 periods.
26. The definition of "norm" in orthodontics.
27. Keys of occlusion by Engle and Andrews.
28. Bite characteristics in third planes.
29. Physiological and pathological types of malocclusion, their characteristics.

4.3. Practical works (task) which are executed at the lesson:

1. To draw a diagram of the ontogenetic development of the face, palate, alveolar

processes;

2. To assess KDM in patients with congenital malformations (the complete cleft defect of alveolar process, hard and soft palate);
3. To determine the age of the child, given the clinical history and photos;
4. To perform a photo of a patient with congenital malformations of the face;
5. To determine violations in the formation of the maxillofacial region.
6. To determine the child's age because of an anamnesis. To determine the period of the malocclusion formation by L.P. Zubkova and F.Y.Horoshylkia
7. Pay attention to the difference between temporary and permanent teeth (color, size, crowns, casps' abrasion).
8. To determine the period of the child development according to the age of patient and intra-oral signs of different periods of temporary bite.
9. To determine the relation of the second temporary molars.
10. To pay attention to the age of patient, and on relation of the canines.
11. To make a temporal bite' formula (clinical, by WHO, anatomical).
12. To pay attention to the age of patient and the affiliation of teeth to the temporary bite.
13. To determine the child's age because of an anamnesis. To determine the period of the malocclusion formation by L.P. Zubkova and F.Y.Horoshylkina.
14. Pay attention to the difference between temporary and permanent teeth (color, size, crowns, cusps' abrasion).
15. To determine the period of the mixed bite development.
16. To determine the period of the child development according to the age of patient and intra-oral signs of different periods of temporary bite.
17. To determine the age of the patient with using of formula $4n - 20$, when n – is a patient' age.
18. Pay attention to the age of patient, and on relation of the canines.
19. To make a temporal bite' formula (clinical, by WHO, anatomical).
20. Pay attention to the age of patient and the affiliation of teeth to the temporary bite.
21. To determine the period of the permanent bite development.
22. To determine type of the bite.
23. To determine the key occlusion by Engle.
24. To determine key occlusion by Andrews.
25. Writing a dental formula by CDM.

The content of the topic:

Methodical recommendation 1-4.

Materials for self-control:

A. Tasks for self-control (tables, diagrams, drawings, graphs):

1. To sketch skull with a description of the bones of the cranial and facial skull.
2. To sketch in the album the scheme of formation of the maxillofacial region.
3. To sketch the infantile retrogeny.
4. To record the table with terms of temporary and permanent teeth formation.

5. Write down the periods of temporary occlusion.
6. To draw in albums the sequence scheme of teeth eruption.
7. Write down the characteristics of temporary occlusion' stable period.
8. Write down the classification of temporary teeth abrasion.
9. To draw in albums the scheme of relation of first molars.
10. To draw in albums the terminal planes by Schwarz.
11. Write down the periods of mixed occlusion.
12. To draw in albums the sequence scheme of teeth eruption.
13. Write down the periods of physiological increasing of the bite.
14. To draw in albums the 4 variants of eruption and correct position in the bite of the first permanent molars.
15. Write down the factors, that influence on the grows and eruption of permanent teeth.
16. Write down the features of the permanent teeth structure, difference between permanent and temporary.
17. Write down the morphological features of permanent bite 3 periods.

B. Tasks for self-control:

1. How many processes limits the oral fosse at the end of the first month of fetal development:

- five
- two
- four
- three
- six

2. The upper part of the face is formed from:

- frontal process
- the maxillary processes
- the mandibular appendages
- the frontal and maxillary processes
- nasal bone

3. The middle part of the face is formed from:

- the frontal and maxillary processes
- the maxillary processes
- the mandibular processes
- frontal process
- the upper and mandibular processes

4. The lower part of the face is formed from:

- the mandibular processes
- the frontal and maxillary processes
- the maxillary processes
- frontal process

the upper and mandibular processes

5. The fusion processes which form the face ends within the following periods of the prenatal period:

by 7 weeks

at 4-5 weeks

6 weeks

at 3-4 weeks

for 8 weeks

6. The final development of the palate takes place in the following periods of the prenatal period:

on the second month

on the fifth month

on the third month

on the fourth month

on the first month

7. The first branchial arch has been called:

jaw

hyoid

thyroid

branchial

nasal

8. The development of the oral cavity associated with the development of:

nasal cavity

orbit

sinus cavity

primary palate

anterior cranial fossa

9. From the primary palate is formed by:

the middle part of the upper lip

cheeks

the wings of the nose

lateral areas of the upper lip

the nasal septum

10. The second branchial arch has been called:

hyoid

jaw

thyroid

branchial

nasal

11. In which terms is the formation of 5 processes in the head division of the embryo?

25-30 days

15-20 days

20-25 days

- 10-15 days
- 30-35 days
- 12. The tongue forms from:
 - the first three branchial arches
 - the second branchial arch
 - the first branchial arch
 - the third and fourth branchial arches
 - the first and second branchial arches
- 13. The critical period of the harmful factors action that leads to congenital anomalies correspond to the following terms:
 - 4-8 weeks of pregnancy
 - 4-6 weeks of pregnancy
 - 6-8 weeks of pregnancy
 - 2-4 weeks of pregnancy
 - 2-8 week of pregnancy
- 14. The formation of teeth starts as follows:
 - with 7th week
 - with 3th week
 - with 5th weeks
 - with 6th weeks
 - with 4th weeks
- 15. A characteristic feature of newborn sucking is:
 - at the same time breathing and swallowing
 - at the same time swallowing
 - simultaneously with the chewing
 - at the same time crying
 - simultaneously with the speaking
- 16. The follicles of the canines in the upper jaw of the newborn are:
 - almost under the orbit
 - near the maxillary tuberoses
 - in the palate
 - in the body of the jaw
 - in the ramus of the jaw
- 17. How many follicles deciduous teeth each jaw has a newborn:
 - 10
 - 8
 - 6
 - 5
 - 16
- 18. The number of permanent teeth follicles in the each newborn jaw is:
 - 8
 - 6
 - 4
 - 2

10

19. Physiological (newborn) retrogeny represents:

the distal location of the lower jaw

the medial location of the lower jaw

the neutral location of the lower jaw

the displacement of the lower jaw to the right

the displacement of the lower jaw to the left

20. Sagittal space at physiological (newborn) retrogeny is:

5-7 mm

6-8 mm

4-5 mm

3-4 mm

2-3 mm

21. The lower jaw angle size in newborn is:

135-140°

125-135°

115-125°

105-115°

95 - 105°

22. The frontal fontanel closed on the following date:

in the second year of life

in 2-3 months

in 5-6 months

in 10-12 months

in 6-8 months

23. The periodontal membrane of a newborn is called:

Roben-Mazhyito

Hawley-Herbst

Ziebert-Malygin

Ehsler-Bitner

Linder-Hart

24. The characteristics of the temporomandibular joint newborn structure not include:

expressed articular tubercle

the absence of the articular tubercle

the presence of articular cone

the nearly rounded shape of the articular head

flat articular fossa

25. From primary palate tissues forms:

the middle part of the upper lip and alveolar process of maxilla

the lower jaw

alveolar process of the lower jaw

the soft palate

the hard palate

26. Which of the following muscles is well developed in the newborn:
- m. digastricus
 - m. masseter
 - m. temporalis
 - m. medialis pterigoideus
 - m. lateralis pterigoideus
27. Which of the following muscles does not belong to mimic?
- m. pterigoideus lateralis
 - m. mentalis
 - m. platysma
 - m. risorius
 - m. orbicularis oris
28. Which of the following muscles does not belong to mimic?
- m. pterigoideus medialis
 - m. zygomaticus major
 - m. levator labii superior
 - m. incisivus labii inferioris
 - m. risorius
29. Which of the following muscles does belong to chewing?
- m. pterigoideus medialis
 - m. orbicularis oris
 - m. buccinator
 - m. zygomaticus
 - m. risorius
30. Which of the following muscles does belong to mimic?
- m. risorius
 - m. masseter
 - m. temporalis
 - m. pterigoideus medialis
 - m. pterigoideus lateralis
31. How many teeth follicles is in the alveolar arch of each newborn jaw?
- 18
 - 10
 - 6
 - 16
 - 12
32. Where are the follicles of the temporary and permanent teeth in the upper jaw of a newborn?
- at the bottom of the eye orbit
 - in the alveolar crest
 - in the palatal suture area
 - in the body of the jaw
 - near the maxillary sinus
33. How are the permanent teeth follicles position in the newborn mandible?

horizontally, crowns are distally
vertically
horizontally

horizontally, crowns are anterior
vertically, crowns are anterior

34. In what period of child's development the face and jaws anomalies arise?

1-3 months intrauterine life

5-6 months intrauterine life

3-4 months intrauterine life

3-5 months intrauterine life

6-9 months intrauterine life

35. The lower jaw develops from:

mandibular processes

maxillary processes

maxillary and frontal processes

membrana palatonasalis

processus glodularis

36. I period of temporary occlusion continues:

from 6 months to 2.5 years

from birth to 6 months

from 1 to 3 years

from 1.5 to 3.5 years

from 2 to 4 years

37. I period of temporary occlusion entitled:

formation period

aging period

stable period

abrasion period

early period

38. The main feature of the first period of temporary occlusion is:

the eruption of deciduous teeth

no diastem and thremas

abcence of occlusal curves

the presence of spaces between teeth

the signs of temporary molars abrasion

39. The 1st stage of the physiological height bite increasing corresponds
eruption of:

temporary molars

temporary central incisors

temporary canines

temporary central incisors

temporary lateral incisors

40. The physiological height bite increasing helps:

to increase the volume of the oral cavity

growth maxilla
growth of the mandible
growth maxillary sinus
growth of the nose

41. II period of temporary occlusion entitled:

stable period
formation period
aging period
abrasion period
late period

42. The upper dental arch in temporary occlusion has the form:

semicircle
parabola
trapezoid
v-shaped
semielipse

43. The lower dental arch in temporary occlusion has the form:

Semicircle
Parabola
Trapezoid
V-shaped
Semi ellipse

44. Distal surface of the second temporary molars in the first period of temporary occlusion are as follows:

located in the same vertical plane
have sagittal step
have a vertical step
have transversal step
without contact

45. The Tsylin'sky' symptom to predict the development of occlusion in this plane:

sagittal
vertical
orbital
transversal
frankfurt

46. The features of the second temporary molars contact in the first period of temporary occlusion depends on:

their size mesio-distal sizes
heredity
cusps abrasion
the presence of spaces between teeth
chewing efficiency

47. The II period temporary occlusion is characterized by:

dense approximal teeth contacts, 1/3 incisors covering, no signs of teeth abrasion, distal surfaces V / V in a one vertical plane

dense approximal teeth contacts

incisors covering is 1/3

no signs of teeth abrasion

a placement of distal surfaces v / v in one a vertical plane

48. III period of temporary occlusion is entitled:

aging or involution

formation

stable

early

late

49. The shape of the dental arches in temporary occlusion does not depend on:

teeth mineralization

the type of breathing

the number of teeth

the size and location of the tongue.

heredity

50. When does the start of infantile type to somatic type of swallowing transformation:

the eruption of temporary central incisors

with the eruption of lateral incisors

with the eruption of temporary molars

with the eruption of temporary canines

with the eruption all temporary teeth

51. The height of the bite in the period of temporary occlusion support:

temporary molars

temporary central incisors

the temporary lateral incisors

temporary teeth

temporary canines

52. The Tsylin'sky' symptom - is:

the sagittal step between the second temporary molars distal surfaces

the sagittal space between temporary incisors

the contact between temporary canines

the contact between the central incisors

the contact between the lateral incisors

53. Which symptom does not meet the third period of temporary occlusion:

physiological retrogeny

direct incisor contact

the tsylinsky' symptom

the presence of spaces between teeth

temporary teeth abrasion

54. How to evaluate the presence of spaces between the teeth in the third period of temporary occlusion:

- the favorable symptom
- inherited symptom
- the pathological symptom
- the forming protrusion symptom
- the forming retrusion symptom

55. Relation between the next teeth remains constant at all stages of temporary occlusion:

- canines
- canines and incisors
- canines and molars
- incisors and molars.
- incisors, canines and molars

56. If mezio-dystal sizes of lower second temporary molar more than the same upper in 2 mm, their distal surfaces create:

- direct lines
- mesial step
- distal step
- the vertical step
- vertical space

57. If mezio-dystal sizes lower second temporary molar are equal to the same upper, their distal surfaces create:

- mesial step
- direct lines
- distal step
- the vertical step
- vertical space

58. If mezio-dystal sizes of lower second temporary molar more than the same upper in 3 mm, their distal surfaces create:

- distal step
- mesial step
- direct lines
- the vertical step
- vertical space

59. Temporary bite consisting of:

- 20 temporary teeth
- 24 temporary teeth
- 28 temporary teeth
- 32 temporary teeth
- 22 temporary teeth

60. Which morphological features of temporary occlusion create conditions for the formation of physiological permanent occlusion?

the spaces between teeth, canines neutral relation, Tsylin'sky' symptom, edge to edge incisors contact

dental arches are semi oval

upper frontal teeth cover the same lower in a third of the crown height

the presence of distal step between the second molar

the absence of spaces between teeth

61. If the distal surface of the second temporary molars in 6 years old child are in the same plane, it can be considered as:

distal bite formed

the risk factor

the mesial bite formed

deep bite formed

cross-bite formed

62. The second temporary molar relation in norm depends on:

mesio-distal sizes

cusps abrasion

frontal spaces

hereditary

the functions of masticatory muscles

63. The III degree of temporary teeth cusps abrasion by Vladislavov is:

cusps abrasion all of teeth

cusps abrasion canines and incisors edge surfaces

cusps abrasion canines only

cusps abrasion incisors edge surfaces

cusps abrasion canines and molars

64. The II degree of temporary teeth cusps abrasion by Vladislavov is:

cusps abrasion canines and incisors edge surfaces

cusps abrasion all of teeth

cusps abrasion canines only

cusps abrasion incisors edge surfaces

cusps abrasion canines and molars

65. The I degree of temporary teeth cusps abrasion by Vladislavov is:

cusps abrasion incisors edge surfaces

cusps abrasion canines and incisors edge surfaces

cusps abrasion all of teeth

cusps abrasion canines only

cusps abrasion canines and molars

66. The most active period of the mandible growth is:

lactation period

6-8 years

3-5 years

mixed dentition period

the period of permanent occlusion

67. The features of the newborn oral cavity structure include:

the gingival membrane (Roben- Mazhyto) presence, flat hard palate, physiological retrogeny, big tongue

gingival rollers (Roben-Mazhyto), flat hard palate

big folds in the frontal area of the hard palate.

flat hard palate, big tongue, big lips

physiological retrogeny

68. The II period of temporary occlusion continues:

from 2.5 to 4 years

from birth to 6 months

from 6 months to 2.5 years

from 1 to 3 years

from 1.5 to 3.5 years

69. The III period of temporary occlusion continues:

from 4 to 6 years

from birth to 6 months

from 6 months to 2.5 years

from 1 to 3 years

from 1.5 to 3.5 years

70. What is primates spaces?

spaces between canines and first temporary molars

spaces between the central incisors

spaces between the central and lateral incisors

spaces between the incisor and canines

spaces between molars

71. The one of the normal temporary teeth features position in dental arches are:

position without any inclination for all of teeth group

position with vestibular inclination for upper incisors

position with oral inclination for lower incisors

position with vestibular inclination for upper canines and molars

position with oral inclination for lower canines and molars

72. Mixed bite characterized by:

the presence of temporary and permanent teeth

the presence of temporary teeth

the presence of permanent teeth

absence of all teeth

no premolars

73. Mixed bite divided into such number of periods:

2

4

3

5

1

74. In the first period of the mixed bite occurs:

the eruption of the first permanent molars and incisors
the eruption of the first permanent molars and canines
the eruption of the first permanent molars and premolars
the eruption of the first and second permanent molars
the eruption of premolars

75. In the second period of the mixed bite occurs:

the eruption of canines, premolars and second permanent molars
the eruption of incisors, canines, premolars
the eruption of incisors and first permanent molars
the eruption of premolars and canines
the eruption of canines and second permanent molars

76. To define physiological sequence of the upper permanent teeth eruption:

6, 1, 2, 4, 3, 5, 7

6, 1, 2, 3, 4, 5, 7

1, 2, 3, 4, 5, 6, 7

1, 2, 6, 3, 4, 5, 7

6, 1, 4, 3, 2, 5, 7

77. To define physiological sequence of the lower permanent teeth eruption:

6, 1, 2, 3, 4, 5, 7

6, 1, 2, 4, 3, 5, 7

1, 2, 3, 4, 5, 6, 7

1, 2, 6, 3, 4, 5, 7

6, 1, 4, 3, 2, 5, 7

78. The occlusion curve in the mixed dentition is modified in such planes:

sagittal and transversal

sagittal and vertical

vertical and transversal

orbital and vertical

orbital and transversal

79. The space for eruption of permanent molars in the upper jaw is formed
by:

alveolar bone growth in length and resorption in the maxillary hill region

medial displacement of the mandible

the presence of diastema and thremas

eruption of premolars

the difference between the mesio-distal sizes of temporary and permanent
teeth

80. "Optimal individual norm" by Y. M. Malygin is based on the feature:

3 signs of norm

4 signs of norm

5 signs of norm

2 signs of norm

6 signs of norm

81. Morphological characteristics of malocclusion are described in such

planes:

- in the sagittal, vertical and transversal planes

- in the sagittal and vertical planes

- in the sagittal and vertical planes

- in the sagittal, orbital and nasal planes

- in the sagittal, transversal and orbital planes

82. Orthognatic bite from orthogenic bite by relation in next plane differs:

- vertical

- sagittal

- transversal

- frankfurt

- nasal

83. Orthognatic bite from orthogenic bite by relation of such teeth group differs

- incisors

- canines

- premolars

- the first permanent molars

- lateral teeth

84. Sagital occlusal curve formed by:

- different height of teeth crowns (1 to 8)

- the presence of gaps between teeth

- different heights of posterior teeth cusps

- the teeth inclination

- the posterior teeth cusps abrasion

85. Transversal occlusal curve formed by:

- different side of the teeth inclination

- different widths of buccal and oral cusps of posterior teeth

- different heights of the posterior teeth crowns

- the posterior teeth cusps abrasion

- the presence of spaces between teeth

86. One antagonist has the following teeth:

- the lower central incisor and upper last molars

- the upper central incisor and lower last molar

- the lower lateral incisor and the lower “wisdom” tooth

- the upper lateral incisor and the upper “wisdom” tooth

- the upper canine and lower “wisdom” tooth

87. To determine the age of the child when there are teeth: 16, 55, 54, 53, 52, 11, 21, 62, 63, 64, 65, 26, 36, 75, 74, 73, 72, 31, 41, 82, 83, 84, 85, 46.

- 7 years

- 8 years

- 11 years

- 9 years

- 13 year

88. To determine the age of the child when there are teeth: 16, 55, 14, 13, 12, 11, 21, 22, 23, 24, 65, 26, 36, 75, 34, 33, 32, 31, 41, 42, 43, 44, 85, 46.

10 years

8 years

11 years

9 years

13 years

89. In normal permanent dentition incisors covering is:

1/3 of the height of the crown

to 2/3 the height of crown

on the whole height of the crowns

more than the whole height of the crowns

1/4 the height of the crowns

90. The anterior buccal cusp of upper first permanent molar in normal occlusion located is:

between the medial and distal buccal cusps of the same lower

over buccal cusp the same lower

between the cusps of the first lower molar and the second premolar.

between the cusps of the first and second lower molars.

over buccal cusp the lower second molar

91. The upper dental arch at the permanent orthognathic occlusion is:

semi-oval form

semi-circle form

parabola form

trapezoid form

triangular form

92. The lower dental arch at the permanent orthognathic occlusion is:

parabola form

semi-circle form

semi-oval form

trapezoid form

triangular form

93. Physiological types of occlusion in orthodontics believe:

orthognathic and ontogenic

orthognathic and prognathic

orthognathic and progenic

orthognathic and open

orthognathic and deep

94. Bite is:

The teeth relation in central occlusion

The teeth relation in the anterior occlusion

The teeth relation in lateral occlusion

The teeth relation in a constructive occlusion

The teeth relation in normal occlusion

95. Physiological permanent occlusion includes the following number of teeth:

28-32

24

20

30

16

96. The fourth stage of physiological height bite increasing occurs when erupted:

third permanent molars

the first permanent molars

second permanent molars

permanent canines

permanent incisors

97. In what periods of child development the grows jaws of frontal area mostly?

6-12 months 6-9 years

12-20 months and 9-10 years

in 2-2,5 years and 10-14 years

10-16 months and 8-10 years

1-2 years and 4-6 years

98. To determine the age of the child in the following dental formula: 16, 55, 14, 53, 12, 11, 21, 22, 63, 24, 65, 26, 46, 85, 44, 83, 42, 41, 31, 32, 73, 34, 75, 36.

9 years

6 years

7 years

8 years

11 years

99. To determine the age of the child when there are teeth: 16, 55, 14, 13, 12, 11, 21, 22, 23, 24, 65, 26, 36, 35, 34, 33, 32, 31, 41, 42, 43, 44, 85, 46.

11 years

7 years

8 years

9 years

13 years

100. The second period of physiological height bite increasing is?

permanent first molars eruption

temporary first molars eruption

temporary second molars eruption

permanent second molars eruption

permanent canines eruption

101. The third period of physiological height bite increasing is?

permanent second molars, canines and premolars eruption

temporary first molars eruption

temporary second molars eruption

permanent first molars eruption

permanent canines eruption

102. To determine the age of the child when there are teeth: 16, 55, 54, 53, 12, 11, 21, 22, 63, 64, 65, 26, 36, 75, 74, 73, 32, 31, 41, 42, 83, 84, 85, 46.

8 years

7 years

11 years

9 years

13 years

103. The first period of permanent bite lasts:

from 12 to 18 years

from 18 to 24 years

from 10 years to 16 years

from 14 to 17 years

from 12 to 18 years

104. The second period of permanent bite lasts:

From 18 to 24 years

From 12 to 18 years

From 10 years to 16 years

From 14 to 17 years

From 12 to 18 years

105. The third period of permanent bite begins after:

24 years

25 years

26 years

27 years

28 years

106. The morphological signs of bite are described in the followings planes:

sagittal, vertical and transversal

sagittal and vertical

sagittal and transversal

sagittal, orbital and nasal

sagittal, transversal and orbital

107. Which from the following muscles does not relate to the mimic?

m. pterigoioleus lateraris

m. platysma

m. risorius

m. orbicularis oris

m. mentalis

108. Which from the following muscles does not relate to the mimic?

m. pterigoideus medialis

m. levator labii superior

m. zygomaticus major

m. incisioi labii inferioris

m. risorius

109. Which of the following muscles belong to masseter?

m. pterygoideus medialis

m. buccinator

m. zygomaticus

m. orbicularis oris

m. risorius

110. Which from the following muscles relate to the mimic?

m. risorius

m. temporalis

m. masseter

m. pterigoideus medialis

m. lateralis pterigoideus

111. The rule of "Golden section" is associated with the name:

Leonardo da Vinci

Sandro Botticelli

Giorgione

Caravaggio

Titian

112. The relation between the size of the larger segment to the same lower size by the rule of "Golden section" is:

1,67

1, 57

1.37

1.47

1,27

113. Which from the following features does not characterize the correct first permanent molars relation?

small key of occlusion

big key of occlusion

correct relation

neutral relation

mesio-distal relation

114. Give the definition of "occlusion":

occlusal contact

occlusion when the mandible displacement to the right

dentitions closing in the anterior location of the mandible

occlusal contact in posterior location of the mandible

closing the teeth when the mandible displacement to the left

115. Give the definition of "bite":

occlusal contact in central occlusion

occlusion when the mandible displacement to the right

dentitions closing in the anterior location of the mandible

occlusal contact in posterior location of the mandible
closing the teeth when the mandible displacement to the left

116. Give the definition of "central occlusion"

dentitions closing in the maximum number of teeth-antagonists contact

occlusion when the mandibular displacement to the right

dentitions closing in the anterior location of the mandible

occlusal contact in posterior location of the mandible

dentitions closing when the mandibular displacement to the left

117. Physiological occlusion is:

the character of dental arches closing, which provides morphological, functional and aesthetic balance in the dentition

the character of dental arches closing, which ensures the optimal functioning of the dentition

the form of dental arches closing, in which the canines and the molars are in a neutral relation

the form of dental arches closing, in which the canines and the molars are in the same relation

the character of dental arches closing, in order to ensure that the individual functioning of the dental system

118. "Small key" of occlusion is:

canines relation

incisors relation the Ratio of the incisors

the Ratio of the first pre molars

the Ratio of the second premolars

the Ratio of the first molars

119. Orthognatic bite differs from orthogenic in such plane relation:

vertical

sagittal

transverzal

horizontal

nasal

120. The incisors covering at orthognatic permanent occlusion is:

from 1/3 to 1/2 crown height

from 1/2 to 2/3 crown height

all crown height

more than all crown height

edge to edge contact

121. The anterior buccal cusp the upper first permanent molar at a physiological permanent occlusion is located as follows:

between mesial and distal buccal cusp of the same lower

above the buccal cusp of the same lower

between the cusp of lower first molar and second premolar

between the first and second lower molars

above the buccal cusp of second lower molar

122. The maxilla has the biggest size of:

dental arc
intermolar arc
alveolar arc
apikal arc
intercanine arc

123. The maxilla has the smallest size of:

apikal arc
dental arc
inter molar arc
alveolar arc
inter canine arc

124. The mandible has the biggest size of:

apikal arc
dental arc
intermolar arc
alveolar arc
intercanine arc

125. The mandible has the most small size of:

dental arc
apikal arc
intermolar arc
alveolar arc
intercanine arc

126. Upper dental arc more than lower in transversal plane in following size:

size of buccal cusp
1 mm
size of buccal cusp and palatal cusp
2 mm
half of premolar crown

127. The I key by L.Andrews is:

correct cusp-fissure contact between the 6|6 teeth
correct angulation
correct torque
presence of dense contacts between teeth
concavity of Spee curve

128. The II key by L.Andrews is:

correct angulation
correct cusp-fissure contact between the 6|6 teeth
correct torque
presence of dense contacts between teeth
concavity of Spee curve

129. The III key by L.Andrews is:

correct torque
 correct angulation
 correct cusp-fissure contact between the 6|6 teeth
 presence of dense contacts between teeth
 concavity of Spee curve
 130. The IV key by L.Andrews is:
 absence of rotations
 correct cusp-fissure contact between the 6|6 teeth
 correct torque
 presence of dense contacts between teeth
 concavity of Shpee curve
 131. The V key by L.Andrews is:
 presence of dense contacts between teeth
 absence of rotations
 correct cusp-fissure contact between the 6|6 teeth
 correct torque
 concavity of Shpee curve
 132. The VI key by L.Andrews is:
 concavity of Spee curve
 absence of rotations
 correct cusp-fissure contact between the 6|6 teeth
 correct torque
 presence of dense contacts between teeth
 133. The angulation (mesio-distal inclination) of teeth characterizes:
 size of corner which appears at crossing of clinical crown axis of every tooth
 and perpendicular to the occlusal plane
 size of corner which appears at crossing of tangent to the surface of clinical
 crown vestibular surfaces and perpendicular to the occlusal plane
 size of corner which appears at crossing of axes of upper teeth and spinal
 plane
 size of corner which appears at crossing of axes lower teeth and mandibulr
 plane
 size of corner which appears at crossing of upper and lower teeth axes
 134. Correct torc (labio-oral inclination) teeth characterizes:
 size of corner which appears at crossing of tangent to the surface of clinical
 crown vestibular surfaces and perpendicular to the occlusal plane
 size of corner which appears at crossing of clinical crown axis of every tooth
 and perpendicular to the occlusal plane
 size of corner which appears at crossing of axes of upper teeth and spinal
 plane
 size of corner which appears at crossing of axes lower teeth and mandibulr
 plane
 size of corner which appears at crossing of upper and lower teeth axes
 135. The pathological types of occlusion include:

distal

orthognatic

orthogenic

permanent

mixed

136. The pathological types of occlusion include:

mesial

orthognatic

orthogenic

permanent

mixed

137. The pathological types of occlusion include:

open

orthognatic

orthogenic

permanent

mixed

138. The pathological types of occlusion include:

deep

orthognatic

orthogenic

permanent

mixed

139. The pathological types of occlusion include:

cross

orthognatic

orthogenic

permanent

mixed

140. The pathological types of occlusion include:

prognathic

orthognatic

orthogenic

permanent

mixed

141. The pathological types of occlusion include:

progenic

orthognatic

orthogenic

permanent

mixed

Literature

Main:

1. Fleece P.S. "Orthodontics". -Kyiv, MEDICINE, 2008, - 39-139 p.

2. Golovko N.V. et al. Orthodontics. Occlusion development, diagnostic of malocclusion, orthodontical diagnosis. Poltava,- 2008, - 95p.

Additional:

1. Pubmed. – Режим доступу: <http://www.ncbi.nlm.nih.gov/pubmed/>
2. Google Scholar – Режим доступу: <https://scholar.google.com.ua/>
3. BASE. – Режим доступу: <https://www.base-search.net/>
4. European Journal of Orthodontics. – Mode of access: <https://academic.oup.com/ejo>
5. Angle Orthodontist. – Mode of access: <http://www.angle.org/?code=angf-site>
6. Baumrind S, Frantz R.C The reliability of head film measurements.3. Tracing superimposition// A.J.O.: 1976 :70:617-629
7. <http://www.bracesguide.com/duringbraces/orthodontic-records.html>
8. <http://my.clevelandclinic.org/health/articles/types-of-dental-x-rays>
9. <https://www.slideshare.net/indiandentalacademy/radiographs-used-in-orthodontics-orthodontic-courses-in-india-17157600>
10. <http://www.bos.org.uk/Portals/0/Public/docs/General%20Guidance/Orthodontic%20Radiographs%202016%20-%20202.pdf>