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

<table>
<thead>
<tr>
<th>Academic discipline</th>
<th>Orthodontics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module № 1</td>
<td>Orthodontia. Diagnostic of dento-gnathic anomalies and deformations</td>
</tr>
<tr>
<td>The theme of the class № 16</td>
<td>The final diagnosis making. The role of classification in determining of the diagnosis.</td>
</tr>
<tr>
<td>Year</td>
<td>III</td>
</tr>
<tr>
<td>Faculty</td>
<td>Preparation of foreign students</td>
</tr>
</tbody>
</table>

Poltava 2020
1. **The relevance of the topic.** After conducting of the patient clinical examination in terms of one of the classifications a preliminary diagnosis formed. Carrying out of additional examination methods such as biometrics and diagnostic models of the jaws, anthropo- and photometry, radiological and functional examination, differential diagnosis, allows us to formulate the final diagnosis, according to which choose the method and plan of treatment, identify the most rational design of orthodontic appliance. Therefore knowledge of final orthodontic diagnosis composite, determination of the difficulty of orthodontic treatment degree is important in the preparation of the orthodontist.

2. **Specific objectives:**
To folded final orthodontic diagnosis;
To know the classifications of malocclusions;
To know the basic methods of the orthodontic patients’ clinical examination;
To know additional examination methods of orthodontic patients;
To know the composition of orthodontic diagnosis;
To know how determined measure of orthodontic treatment.

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

<table>
<thead>
<tr>
<th>Name of previous disciplines</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anatomy</td>
<td>To determine the period of the child development, the proportionality of body parts during this period of child development. Anatomical structure of maxillofacial area.</td>
</tr>
<tr>
<td>2. Orthopedic stomatology</td>
<td>Description of physiological bite.</td>
</tr>
<tr>
<td>3. Normal physiology</td>
<td>To determine the timing of muscle contractions, coordination of certain muscle groups work.</td>
</tr>
<tr>
<td>4. Radio-therapy</td>
<td>Reading of sciagrams.</td>
</tr>
<tr>
<td>6. Surgical stomatology</td>
<td>Determination of the TMJ state. Surgical methods of interference at orthodontic treatment/</td>
</tr>
<tr>
<td>7. Pedodonti</td>
<td>Terms of temporal and permanent teeth eruption. Features of the bite development in different age-old periods.</td>
</tr>
</tbody>
</table>

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. Diagnosis | Diagnosis is the identification of the nature and cause of a certain phenomenon. Diagnosis is used in many different disciplines with variations in the use of logic, analytics, and experience to determine "cause and effect".

2. Classification | (lat. classis – class, and facio – acting), the system of distribution of objects into classes according to certain characteristics.

3. Norm | (lat. norma – "rule") is a regulatory rule that specifies the boundaries of its application; corresponds to something typical or usual, that occurs in a natural way and does not cause health problems.

4. Anomaly | (gr. abnormality) abnormality, an aberration from the general pattern.

5. Deformation | (from lat. deformatio "distortion") – change the size and shape of a rigid body under the action of external forces or other effects.


4.2. Theoretical questions to the lesson:
1. The definition of diagnosis in orthodontics.
2. The definition of "norm" in orthodontics.
3. The definition of the terms "abnormality" and "deformity".
4. The definition of "classification".
5. Classifications of malocclusion.
6. Component parts of final orthodontic diagnosis.
7. Description of morphological part of final diagnosis.
8. Description of etiological part of final diagnosis.
9. Description of functional part of final diagnosis.
10. Description of aesthetic part of final diagnosis.

4.3. Practical works (task) which are executed at the lesson:
1. To make a final diagnosis of the existing malocclusion according to classification by Angle;
2. To make a final diagnosis of the existing malocclusion according to classification by Betel'man;
3. To make a final diagnosis of the existing malocclusion according to classification by Kalvelis;
4. To make a final diagnosis of the existing malocclusion according to classification by Grigorieva;
5. To make a final diagnosis of the existing malocclusion according to classification by WHO.
The content of the topic:

After conducting a clinical examination of orthodontic patient is determined by a preliminary diagnosis, which is formulated in terms of one of the malocclusion classifications: Angle, Kalvel's, Betel'man, Grigorieva, WHO etc.

However, in order to plan of treatment insufficient clinical examination. This study only allows to determining the morphological changes, without specifying the degree of their severity. For this purpose, conduct biometric, graphic and radiographic studies, which determine the severity of morphological violations. The next stage of orthodontic examination is the dynamic study, which includes the consistent application of clinical tests, and functional tests aimed at the characterization and study of the general condition of the patients. Functional impairment determines by inspection and study of the facial and internal oral characteristics by the method of clinical functional tests and laboratory examination methods (masticate, morphometric, electromyography and the like). The severity of aesthetic violations determination of the aesthetic treatment, it is determined by conducting anthropo- and photometric studies. After analysis of examination conducted to formulate a final orthodontic diagnosis, which contains the following composition:

- morphological part is expressed in terms of one of classifications. Contains the characteristics of malocclusion supplemented with biometric, graphic or x-ray examination methods. For example: prognatic distal deep bite (by Grigoryeva classification); dento-alveolar form (based on the analysis of cephalometric examination); uniform narrowing of the upper jaw in lateral areas 2 mm, the elongation of the frontal part of the upper dental arch on 3 mm, retrusion and crowding of lower frontal teeth at 1 degree (based on biometrics);

- etiological part includes a description of the etiological factors that led to the development of malocclusion and act at the time of patient treatment to the doctor. The importance of determining the etiological diagnosis is made up of is that if the cause is not shifted, the possible recurrence of the disease. Determination of etiological factors is conducted with the patient interviews (anamnesis of a life) – clinical study. Due to the bad habit of mouth breathing (adenoid vegetation the presence of II-III degrees);

- functional part includes a description of disorders and degree of their severity on the basis of clinical or an additional examination methods. Functional disorders, as well as not shifted the etiological factors can later lead to relapse of disease, unfavorable aesthetic result, and so on for example: violation of respiratory function, reduced masticatory efficiency and the like.

- aesthetic part includes a description of the changes in facial features that are very important in the aesthetic prognosis of treatment. For example: short upper lip, a tight closing of the lips (symptom of "thimble"), deep lip-chin fold. If a short upper lip, the expansion of upper dental arch or medial shift of the mandible can lead to the appearance of "gummy smile", the formation of the "puzzled face" up on the closing of the lips and even greater strain muscles of the chin.

Malocclusions are variable for monsters, the severity of morphological,
functional and aesthetic violations, and therefore, prognosis of treatment. To select the method, the treatment plan and choice of the rational design of orthodontic appliance is not enough to diagnose and to classify the malocclusion. It is also necessary to determine the degree of severity of these disorders and the difficulty of their elimination. For this purpose, use the method of assessment on a five-point by Zibert-Maligin (1973). The essence of the method lies in the fact that evaluates the severity of morphological and functional disorders and the difficulty of their elimination.

A measure of the complexity treatment of each patient is the sum of the scores. Distinguish 4 degrees of orthodontic treatment difficulty for Zibert-Maligin: I degree – easy treatment (27 points); grade II – the treatment of medium difficulty (28-40 points); III degree – the heavy treatment (41-54 points); grade IV – very severe treatment (55 or more points).

<table>
<thead>
<tr>
<th>The amount of treatment measures</th>
<th>Score</th>
<th>The number of points</th>
<th>The degree of treatment difficulty in scores</th>
<th>Group the complexity of the treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Upper jaw</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower jaw</td>
<td></td>
</tr>
<tr>
<td>1. For correction of the shape of dentition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The number of teeth or groups of teeth that are to be moved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 -2 teeth</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 group of teeth</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All groups of teeth</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of movement in mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of tooth movement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With a favorable tilt</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corpus movement</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reciprocal</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stationary</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reactivity of the patient, taking into account the design, age, early or late treatment and its duration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very favorable</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adverse</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. To establish the lower jaw in a proper position</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The value of dentition in occlusion (in mm or in relation to the width of the premolar crowns):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>1</td>
<td>4-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>½ of the width of premolar crown</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From ½ to 1 of the width of premolar crown</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 1 of the width of premolar</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Localization:
- One side: 1
- Two sides: 3

### The direction in which to change the bite:
- Mesial: 1
- Lateral: 3
- Distal: 5

### Reactivity of the patient, taking into account the design, age, early or late treatment and its duration:
- Very favorable: 1
- Good: 3
- Adverse: 5

### For normalization of oral cavity functions
<table>
<thead>
<tr>
<th>Function</th>
<th>1-5</th>
<th>6-10</th>
<th>11-14</th>
<th>More than 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lips closing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastication</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breezing</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swallowing</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>28-40</td>
<td>41-54</td>
<td>&gt;55</td>
</tr>
</tbody>
</table>

In the table define the amount of therapeutic measures to normalize the shape of each dental arches, bite correction, normalization of functions. This method can be applied for the characterization of malocclusions.

### The duration and scope of orthodontic treatment depending on its complexity

<table>
<thead>
<tr>
<th>Points (to 27 points)</th>
<th>Months</th>
<th>Visits</th>
<th>Labor units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>13</td>
<td>8</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>14</td>
<td>8</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>15</td>
<td>9</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>16</td>
<td>9</td>
<td>21</td>
<td>29</td>
</tr>
<tr>
<td>17</td>
<td>10</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>18</td>
<td>11</td>
<td>24</td>
<td>32</td>
</tr>
<tr>
<td>19</td>
<td>11</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>20</td>
<td>12</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>21</td>
<td>12</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>22</td>
<td>13</td>
<td>28</td>
<td>36</td>
</tr>
<tr>
<td>23</td>
<td>13</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>24</td>
<td>14</td>
<td>30</td>
<td>38</td>
</tr>
<tr>
<td>25</td>
<td>14</td>
<td>31</td>
<td>39</td>
</tr>
<tr>
<td>26</td>
<td>15</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>27</td>
<td>15</td>
<td>33</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>I (28-40 points)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>28</td>
<td>16</td>
<td>34</td>
<td>42</td>
</tr>
<tr>
<td>29</td>
<td>16</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>30</td>
<td>17</td>
<td>35</td>
<td>44</td>
</tr>
<tr>
<td>31</td>
<td>18</td>
<td>36</td>
<td>45</td>
</tr>
<tr>
<td>32</td>
<td>18</td>
<td>37</td>
<td>46</td>
</tr>
<tr>
<td>33</td>
<td>19</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>34</td>
<td>19</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>35</td>
<td>20</td>
<td>39</td>
<td>48</td>
</tr>
<tr>
<td>36</td>
<td>20</td>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td>37</td>
<td>21</td>
<td>41</td>
<td>50</td>
</tr>
<tr>
<td>38</td>
<td>21</td>
<td>41</td>
<td>51</td>
</tr>
<tr>
<td>39</td>
<td>22</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>40</td>
<td>22</td>
<td>43</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>II (28-40 points)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>23</td>
<td>41</td>
<td>54</td>
</tr>
<tr>
<td>42</td>
<td>23</td>
<td>44</td>
<td>55</td>
</tr>
<tr>
<td>43</td>
<td>24</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>44</td>
<td>24</td>
<td>45</td>
<td>57</td>
</tr>
<tr>
<td>45</td>
<td>25</td>
<td>46</td>
<td>59</td>
</tr>
<tr>
<td>46</td>
<td>25</td>
<td>46</td>
<td>60</td>
</tr>
<tr>
<td>47</td>
<td>26</td>
<td>46</td>
<td>61</td>
</tr>
<tr>
<td>48</td>
<td>26</td>
<td>47</td>
<td>62</td>
</tr>
<tr>
<td>49</td>
<td>27</td>
<td>48</td>
<td>64</td>
</tr>
<tr>
<td>50</td>
<td>27</td>
<td>48</td>
<td>65</td>
</tr>
<tr>
<td>51</td>
<td>28</td>
<td>48</td>
<td>67</td>
</tr>
<tr>
<td>52</td>
<td>28</td>
<td>49</td>
<td>68</td>
</tr>
<tr>
<td>53</td>
<td>29</td>
<td>49</td>
<td>70</td>
</tr>
<tr>
<td>54</td>
<td>29</td>
<td>50</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>III (41-54 points)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>30</td>
<td>50</td>
<td>73</td>
</tr>
<tr>
<td>56</td>
<td>30</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>57</td>
<td>31</td>
<td>51</td>
<td>77</td>
</tr>
<tr>
<td>58</td>
<td>31</td>
<td>51</td>
<td>79</td>
</tr>
<tr>
<td>59</td>
<td>32</td>
<td>51</td>
<td>81</td>
</tr>
<tr>
<td>60</td>
<td>32</td>
<td>52</td>
<td>83</td>
</tr>
<tr>
<td>61</td>
<td>33</td>
<td>52</td>
<td>86</td>
</tr>
<tr>
<td>62</td>
<td>33</td>
<td>52</td>
<td>88</td>
</tr>
<tr>
<td>63</td>
<td>34</td>
<td>52</td>
<td>90</td>
</tr>
<tr>
<td>64</td>
<td>34</td>
<td>52</td>
<td>93</td>
</tr>
<tr>
<td>65</td>
<td>35</td>
<td>53</td>
<td>96</td>
</tr>
<tr>
<td>66</td>
<td>35</td>
<td>53</td>
<td>98</td>
</tr>
<tr>
<td>67</td>
<td>36</td>
<td>53</td>
<td>101</td>
</tr>
<tr>
<td>68</td>
<td>36</td>
<td>53</td>
<td>104</td>
</tr>
<tr>
<td>69</td>
<td>37</td>
<td>54</td>
<td>107</td>
</tr>
<tr>
<td>70</td>
<td>38</td>
<td>54</td>
<td>111</td>
</tr>
<tr>
<td>71</td>
<td>38</td>
<td>54</td>
<td>114</td>
</tr>
<tr>
<td>72</td>
<td>38</td>
<td>54</td>
<td>118</td>
</tr>
<tr>
<td>73</td>
<td>39</td>
<td>54</td>
<td>121</td>
</tr>
<tr>
<td>74</td>
<td>40</td>
<td>54</td>
<td>125</td>
</tr>
<tr>
<td>75</td>
<td>40</td>
<td>54</td>
<td>129</td>
</tr>
</tbody>
</table>

L. P. Zubkova (1998) suggested that in group 1 (correction of the upper and lower dental arches shapes), such measures as the elimination of dento-alveolar
elongation and shortening in the lateral and frontal parts of the jaws. Elimination of dento-alveolar shortening in frontal and lateral areas up to 2 mm is worth 3 points, more than 3 mm in 5 points, and the elimination of dento-alveolar elongation respectively 4 and 5 points.

Restoration of function by L. P. Zubkova is estimated as follows:
- Mastication – 1 point;
- Speaking – 2 points;
- Lips closing – 5 points;
- Breezing – 5 points;
- Swallowing – 5 scores.

To plan a treatment, you must also consider contact between doctor and patient. Depending on the treatment there are 4 types of patients:

Type 1 – adjusts well, independent. These patients are confident, poised, have a clear motivation for action. The appeal is independent, healthy. A patient will learn any design of orthodontic appliance and use it as recommended by the physician. Require only small control from the parents in the treatment period.

Type 2 – does not adapt, dependent, dependent by nature, irresponsible. Such a patient should not wait for self-use of orthodontic apparatus. Child refuses to treat, irregular visits to the doctor. For the treatment is better to use non-removable devices of mechanically acting.

3 type – adapts well, but not independent. Strict monitoring and control lead to treatment that adapts.

4 type – does not adapt, independent. These patients do not obey the doctor, stubborn, rebellious. We can recommend non-removable devices that are mechanical, widely used surgical connection apparatus and methods of treatment.

If in the determination of the severity of morphological and functional disorders and the difficulty of their elimination on the stages of treatment found to decrease the amount of points, then the patient is transferred to the group a less complex treatment. Through the allocation of 4 degrees of treatment difficulty can be more accurately determine its average duration and prognosis.

The application of this method contributes to the planning of orthodontic care issues of the organization.

Data the clinical examination the doctor fills in a medical card of dental patients. If necessary, writes out an outfit for performing of orthodontic design.

**Materials for self-control:**
A. Tasks for self-control (tables, diagrams, drawings, graphs):
1. To conduct clinical examination, formulate a preliminary diagnosis;
2. To conduct and analyze data of additional examinations;
3. To master the method of the final diagnosis making;
4. To master the method of the degree of orthodontic treatment difficulty determining;
5. To able a plan of orthodontic treatment and to choose a rational design of orthodontic appliance;
6. To draw the table by Zibert-Maligin.

B. Tasks for self-control:
1. Orthodontic diagnosis has the following number of compounds:
   four
   one
   two
   three
   five
2. The morphological part of the diagnosis does not depend on data:
   functional studies
   radiographic studies
   photometric studies
   biometric examination
   anthropometric studies
3. The functional part of the diagnosis is made on the basis of data:
   functional studies
   photometric studies
   biometric examination
   anthropometric studies
   X-ray studies
4. The aesthetic part of the diagnosis is made on the basis of data:
   clinical examination
   photometric studies
   biometric examination
   functional examination methods
   X-ray studies
5. The etiological part of the diagnosis is made on the basis of data:
   clinical examination
   radiographic studies
   photometric studies
   biometric examination
   anthropometric studies
6. A simple treatment for Zilbert-Malygin is:
   to 27 points
   to 10 points
   to 8 points
   to 20 points
   to 13 points
7. Treatment of medium complexity according to Zilbert-Malygin is:
   28-40 points
   21-23 points
   41-54 points
   18-21 points
25-30 points
8. Difficult treatment Zilbert-Malygin is:
41-54 points
28-40 points
25-30 points
30-40 points
25-40 points
9. Highly difficult treatment Zilbert-Malygin is:
55 points or more
60 points or more
50 points or more
40 points and more
70 points and more
10. Using the method of determining the degree of orthodontic treatment difficulty is possible:
to determine the average of an orthodontic treatment duration
to determine the prognosis of the retention period course
to solve the scale of orthodontic care organization
to determine the possibility of outpatient conditions treatment
to make recommendations about the optimal timing of treatment
11. The algorithm for determining the degree of orthodontic treatment difficulty according to Zilbert-Malygin has the following number of dento-alveolar anomalies groups, which are subject to elimination:
three
two
four
five
six
12. The first group of the algorithm for determining the degree of orthodontic treatment difficulty according to Zilbert-Malygin provides:
determination of the teeth number that are moving
determination of the ratio of dentition in occlusion
determination of the direction in which to change the bite
complexity of the functions of chewing and speech normalization
complexity of the functions of chewing and swallowing normalization
13. Depending on the behavior of the following quantity types of patients:
four
two
three
five
six
14. The first type of patients, depending on the behavior are as follows:
well adapted, independent; self-confident, balanced, have a clear motivation for action
do not adapt slavishly; forgetful, scattered, irresponsible
well adapted, dependent
do not adapt, but independent; such patients openly disobey the doctor, stubborn, rebellious
badly adapted, not independent, but balanced and have a clear motivation for action

15. The second type of patients, depending on the behavior as follows:
do not adapt slavishly; forgetful, scattered, irresponsible
well adapted, independent; self-confident, balanced, have a clear motivation for action
well adapted, dependent
do not adapt, but independent; such patients openly disobey the doctor, stubborn, rebellious
badly adapted, not independent, but balanced and have a clear motivation for action

16. The third type of patients depending on behavior as follows:
well adapted, dependent
well adapted, independent; self-confident, balanced, have a clear motivation for action
do not adapt slavishly; forgetful, scattered, irresponsible
do not adapt, but independent; such patients openly disobey the doctor, stubborn, rebellious
badly adapted, not independent, but balanced and have a clear motivation for action

17. The fourth type of patients depending on behavior as follows:
do not adapt, but independent; such patients openly disobey the doctor, stubborn, rebellious
well adapted, independent; self-confident, balanced, have a clear motivation for action
do not adapt slavishly; forgetful, scattered, irresponsible
well adapted, dependent
badly adapted, not independent, but balanced and have a clear motivation for action

18. The second group of algorithm for determining the degree of orthodontic treatment difficulty according to Zilbert-Malygin provides:
determination of the dentition in occlusion relation
determining the number of teeth that are moving
determination of individual or groups of teeth movement
normalization of dentition functions
determine the type of individual or groups of teeth movement

19. The third group of algorithm for determining the degree of orthodontic treatment difficulty according to Zilbert-Malygin provides:
normalization of dentition functions
determining the number of teeth that are moving
determination of individual or groups of teeth movement
determination of the dentition in occlusion relation
determination of individual or groups of teeth movement

20. For the treatment of the children first type depending on the behavior, most appropriate design of orthodontic appliances is:
the child will treating with any design of appliances
functionally active appliances
non-removable mechanically appliances
removable mechanical appliances
removable one jaw maxillary appliances

21. For the treatment of the second type children in dependence on the most acceptable the design of orthodontic appliances is:
non-removable mechanically operating
functionally active appliances
removable mechanical appliances
removable one jaw the maxillary apparatuses of the action
child will treating with any designed appliances

22. In child 5 years old, the occlusion of temporary teeth. Determined symptom of "thimble", vertical gap between the front teeth 2 mm, tremas and diastemas, symptom Zelinskiy is positive, infantile type of swallowing. Formulate aesthetic part of orthodontic diagnosis.
symptom of "thimble"
positive symptom of Zelinskiy
infantile type of swallowing
vertical gap between the teeth
open bite

23. In child 5 years old, the occlusion of temporary teeth. Determined symptom of "thimble", vertical gap between the front teeth 2 mm, tremas and diastemas, symptom Zelinskiy is positive, infantile type of swallowing. Formulate etiological diagnosis of the orthodontic.
positive symptom of Zelinskiy
symptom of "thimble"
infantile type of swallowing
vertical gap between the teeth
open bite

24. At 9 years old child as result of a bad habit of mouth breathing is adenoid type of the face formed. The front teeth of both jaws in a state of protrusion, the vertical gap 3 mm, the relation of first permanent molars is neutral. Formulate the functional part of orthodontic diagnosis.
bad habit of mouth breathing
the adenoid type of face
protrusion of the frontal teeth, the vertical gap
neutral relation of first permanent molars
maxillary protrusion
25. At 9 years old child as result of a bad habit of mouth breathing is adenoid type of the face formed. The front teeth of both jaws in a state of protrusion, the vertical gap 3 mm, the relation of first permanent molars is neutral. Formulate aesthetic part of orthodontic diagnosis.
the adenoid type of face
protrusion of the frontal teeth, the vertical gap
neutral relation of first permanent molars
bad habit of mouth breathing
infantile type of swallowing
26. Examination of the orthodontic patient includes:
general examination, determination of constitution; inspection of the face and mouth
inspection of the vestibule of the oral cavity, inspection of the face
general inspection, inspection of the oral cavity
examination of dentition and occlusion, the definition of the physique
general examination, x-rays, examination of the oral cavity
27. Gnathic form of malocclusion is:
pathology developed as a result of violations of the size of one or both jaws
pathology developed as a result of violations of the sizes of the teeth in the dentition
pathology developed as a result of violations of the first molars location
pathology developed as a result of violations of the dental arches sizes
pathology developed as a result of dentition defects
28. Classification E. Angle, for diagnosis cannot be used if:
permanent and mixed bite with extracted first permanent molars
lateral displacement of the lower jaw
absence of the first permanent molars and canines
presence of pathology in the transversal plane
presence of pathology in a vertical plane
29. In diagnosis, the term "infraocclusion" that characterizes the position of the teeth:
below the occlusal plane
above the occlusal plane
rotation around the axis
palatal position
buccal position
30. According to the classification of Kalvelis etiological diagnosis part of the "open bite" can have the following varieties:
rachitic and traumatic
frontal and lateral
symmetric and asymmetric
muscle and joint
distal and mesial
31. The diagnosis of "maxillary prognathia" provides a classification:
32. Diagnosis – the first class of malocclusion on Anglo is characterized by:
neutral relation of first permanent molars
distal relation of the first permanent molars
mesial relation of the first permanent molars
distal relation of the second permanent molars
mesial relation of the second permanent molars
33. Diagnosis of class II malocclusions by Angle is characterized by:
distal relation of the first permanent molars
distal relation of the first permanent molars
mesial relation first permanent molars
distal relation of the second permanent molars
mesial relation of the second permanent molars
34. Diagnosis – class II, subclass 1 malocclusions by Angle is characterized by:
distal relation of the first permanent molars and vestibular inclination of the upper anterior teeth
distal relation of the first permanent molars and lingual inclination of upper anterior teeth
mesial relation of the first permanent molars and vestibular inclination of the lower front teeth
distal relation of the second permanent molars and lingual inclination of upper anterior teeth
mesial relation of the second permanent molars and the vestibular inclination of the upper front teeth
35. Diagnosis – class II, subclass 2 malocclusions by Angle is characterized by:
distal relation of the first permanent molars and palatal inclination of upper anterior teeth
mesial relation of the first permanent molars and lingual inclination of upper anterior teeth
mesial relation of the first permanent molars and vestibular inclination of the lower front teeth
distal relation of the second permanent molars and vestibular inclination of upper anterior teeth
mesial relation of the second permanent molars and the vestibular slope of the upper front teeth
36. Diagnosis of class III malocclusions by Angle is characterized by:
mesial relation of the first permanent molars
distal relation of the first permanent molars
mesial disharmony of the first permanent molars
distal relation of the second permanent molars
mesial relation of the second permanent molars

References:

Basic:

Secondary literature:
7. Bjork A. The face in profile//Svenska Tandalak Tid : 1947:40
10. Cook P.A., Gravely J.F. Tracing error with Bjorks mandibular structure

The methodic recommendations have been compiled by Karasiunok A.