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ASSESSMENT OF MORPHOMETRIC INDICATORS OF WISDOM TEETH

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ABOUT ARTICLE

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Abstract: Of the 200 examined wisdom teeth, 50% were buried. There are more wisdom teeth in the lower jaw than in the upper jaw. Wisdom teeth are located more medially in the lower jaw and more distally in the upper jaw. To prevent the development of inflammatory processes during the eruption of wisdom teeth, it is optimal to remove the molars of wisdom at the stage of crown formation, if at least one of the morphological parameters is discordant.

INTRODUCTION

As a result of the progressive development of medicine in recent decades, modern dentistry has achieved great success in the prevention and treatment of many diseases of the maxillofacial region. At the same time, there are still a number of areas of dentistry that require further research using modern diagnostic and therapeutic methods. One of these areas is the problem of the difficulty of eruption of wisdom teeth. Difficulty in eruption and eruption of wisdom teeth determines the occurrence of inflammatory processes in the lateral molar and adjacent anatomical spaces. According to many authors, in 56-75% of cases, eruption of the lower wisdom teeth is accompanied by various complications (for example, ulcerative gingivitis, perioral inflammation, acute purulent periostitis, periapical phlegm). This process must be prevented, as wisdom teeth can become a real nuisance from the very beginning. To prevent the development of inflammatory foci, it is possible to measure the main morphological parameters used for the primary diagnosis of wisdom tooth eruption at the stage of crown formation. If the indicators deviate from the norm, the molar wisdom tooth should be removed, thereby avoiding inflammation of the lateral molars [1, 2].S. Asnami and Y. Kasazaki (1993) developed a classification of the spatial position of wisdom teeth in the lower jaw, according to which the following

directions of eruption are distinguished: medial slope, vertical position, distal tilt, horizontal position, inversion, buccal tilt, lingual tilt, buccal position (buccoverion), lingual inversion (lingualversion). The main directions of eruption of mandibular wisdom teeth are medial (teeth are tilted forward and push other teeth laterally), distal (teeth are deflected in the distal direction), vertical (teeth are positioned at the right angle, but do not erupt) and horizontal (teeth are located in a plane vertical to other teeth in the jaw) [3]. The purpose of this study was to compare and evaluate the main morphological parameters of wisdom teeth.

MATERIALS AND METHODS

The study involved 50 patients (22 men and 28 women) aged 18 to 40 years who underwent orthopantomograms. Both normally erupted and retarded wisdom teeth were included in the study. To assess the position of wisdom teeth in the dentition, a "patient passport" was created, which assessed the position and nature of wisdom teeth eruption. The results of a retrospective analysis of orthopantomograms were entered into the passport and the values of the main morphological parameters were measured: the distance from point Xi to the distal surface of the second molar; the distance from point Xi to the distal surface of the second molar; the distance from point Xi to the distal surface of the second molar to the distal surface of the wisdom tooth. The angle of inclination of the wisdom tooth The general assessment of the position of the wisdom tooth was carried out according to the following parameters: fully erupted, medial, distal, horizontal, vertically held, absent, removed or located in the dental arch.

1. The medial-distal size of the tooth crown is the distance from the medial proximal to the distal surface of the crown;

2. The distance from the mandibular process to the distal surface of the second molar - measure the distance between the line drawn along the anterior edge of the mandibular process and the line parallel to it along the distal surface of the second molar;

3. The distance from point "Xi" to the distal surface of the second molar. Point "Xi" is the center of the mandibular process. To find the center of the mandibular process, it is necessary to draw two parallel vertical lines along the anterior and posterior edges of the mandibular process and two parallel horizontal lines along the notch and the lower edge of the mandibular process. The point of intersection of the two diagonals of the resulting rectangle is the point "Xi". Measure the distance from point "Xi" to the vertical line drawn along the distal surface of the second molar; 4. The angle of the wisdom tooth. The measurement is carried out in relation to the lower end of the mandibular process.

RESULTS AND DISCUSSION

The results of the survey showed that: - 7% of wisdom teeth are missing for one reason or another; - 33% of wisdom teeth have completely erupted, 90% of them are located in the bite, and 10% are associated with malocclusion; - 50% of wisdom teeth are retarded, 46% of them were medial, 29% distal, 12% horizontal and 11% vertical. There are more wisdom teeth in the lower jaw than in the upper one. Distal wisdom teeth (61%) and horizontal wisdom teeth (2%) were more common in the upper jaw. Medial wisdom teeth (67%) and distal wisdom teeth (2%) were more common in the lower jaw. The main morphological parameters of mandibular wisdom teeth varied and differed from those of normally erupted wisdom teeth; out of 200 wisdom teeth, 50% were erupted during the periodontium . There are more wisdom teeth in the lower jaw than in the upper jaw. More medial in the lower jaw and more distal in the upper jaw; 2. Normal eruption of mandibular wisdom teeth requires the following parameters: medial crown diameter 13.5-13.7 mm; distance from the mandibular branch to the distal surface of the second molar ≥ 14 mm; distance from point "Xi" to the distal surface of the second molar ≥ 35 mm (point "Xi" is the center of the mandibular branch); the angle of inclination is from 40° to 90°; 3. 3. To prevent inflammation during wisdom tooth eruption, it is optimal to remove the molar wisdom tooth at the stage of crown formation if at least one of the morphological parameters does not meet the requirements.

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