

FEATURES ARCHITECTONICS OF MOLARS CROWNS IN SEX ASPECT

Vorobec A.B., Hasiuk P.A.

SHEI «Ternopil State Medical University Ministry of Health of Ukraine»,
Ternopil

According to the literature, two types of molars odontoglyphics drawing are defined on the masticatory surface of molars: igrek (Y) and plus (+). Type of the pattern reflects mutual disposition of the major bumps in the center of the crown. Y-pattern stated in the case where the eocone and diacone are contacted. +-pattern means dotted contact between all four main bumps in the center of the crown. The pattern of crown's masticatory surface in combination with the number of bumps is considered the main morphological characteristics of molars. According to the theory of Dalberg the quantity of bumps on the masticatory surface of the molars is determined with the help of morphogenetic field of molarization. The concept of the morphogenetic field includes complex relationships of cellular enamel elements , dentin and pulp, which are defined as the general morphological characteristics of the teeth as well the individual features of one class (class specific). In the middle of the class there are areas, where the morphogenetic field has the most powerful action and morphological sign is the most distinct. According to A. Dalberg, the first molars of upper and lower jaws have the most powerful field of molarization and they are the «key» teeth. In the second and third molars the field of molarization is less significant, that is manifested in a decrease of the number of cusps and their height.

The result of the researches showed that the molars of citizens in Ternopil region are characterized by the presence of Y-five, Y-four, Y-three, +-five and +-four types of odontoglyphics drawing. Moreover it is found, that upper jaw molars are characterized by the permanent presence of Y pattern: the first and the second molars Y-4 type, third molar Y-3 type regardless of sex.

In 45% examined people we found the presence of tubercle Carabelli with the different level of expression of the first upper molar. Moreover this feature is typical for both men and women.

The first molars of the lower jaw are characterized with the presence of Y-five type of odontoglyphical drawing, and this is observed in both women's and men's teeth. In the second molars were observed the presence of plus-four and plus-five pattern of masticatory surface. Here we can see the sex differences. The men are characterized the presence of plus-five, and for women plus-four pattern of the second molars masticatory surface. This fact shows that the process of reduction is expressed strongly at women's molars due to disappearance of a fifth tubercle and decrease of the size of the crown.

To differentiate molars depending on sex, the indexes of the reduction of the second upper jaw molar represents valuable information. Reduced types of crowns of the second upper jaw molars, where hypocone is very small, or not available at all, is mostly found in women. We can make conclusion about the degree of the reduction, depending on the sex by analyzing percentage ratio of the first and second molar's crowns modules.

So, after analyzing the results, it can be argued that the indicators module crowns of the men molars increase over women.

Conclusion. To sum everything up, we can make the following conclusions:

- 1) According to the odontometrical indexes of the size of the molar crowns, processes of reduction are more reflected in women's molars.
- 2) Sex differences of the crown sizes are especially defined on the second upper jaw and second lower jaw molars.
- 3) The citizens of Ternopil and Ternopil region relate to the South Europeoid ethnic group.