

ANATOMY AND MORPHOLOGY OF THE RETROMOLAR TRIANGLE AND ITS PRACTICAL SIGNIFICANCE IN REMOVABLE PROSTHETICS

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Introduction According to Lugansky V. A. (2006) 76% of patients complain of poor fixation of removable dentures. Removable prosthetics on the mandible is complicated because of anatomical and functional features of the bone and soft tissues. The retromolar triangle and the mucous mandibular tubercle are permanent anatomical landmarks for the removable prostheses of edentulous distal areas.

Keywords anatomy, mandible, retromolar triangle, removable prosthetics.

Purpose To study the available scientific literature and structural features of the mandibular retromolar region in cases with terminal defects.



Fig. 1. Partially edentulous mandible I cl. Kennedy.



Fig. 2. Partially edentulous mandible III cl. Kennedy.



Fig. 3. Totally edentulous mandible.

Material and methods Were studied the literature data and features of the anatomy and morphology of the retromolar region on plaster models and 10 anatomical specimens with partially edentulous, subtotally or totally edentulous mandibles (fig. 1; 2; 3).

Results Retromolar triangle is a slight depression of a triangular shape, formed by the division of the temporal ridge of the mandible into buccal and lingual internal oblique line and limited mesially by the third molar. The base of the triangle is formed by compact bone resistant to atrophy (Naumovich S. A., 2012). Here lies mucous mandibular tubercle, formed by soft tissue containing glands. It is limited by the pterygomandibular fold and the buccal muscle. The tendon of the temporal muscle and the fibers of the superior constrictor of the pharynx, which lies deeper than the temporal muscle, are interwoven into the lingual part of the tubercle (Kalinina N. V., 1972; Iordanishvili A. K., 2015). The study showed that retromolar triangle often has no clear boundaries and shape, and its transverse dimensions vary from 5-6 mm to 8-9 mm on average, which depends on the structure of the anterior part of the temporal ridge, but not on the degree of atrophy of the alveolar process.

Bârsa Gh., Postolachi I. (1994) mention that depending on the prosthetic value of the retromolar (piriform) tubers the edges of the total removable prosthesis must cover them entirely or only 1/3 of their anterior surface and can be extended posteriorly to the insertion point of the pterygomandibular ligament, otherwise during function the prosthesis will detach from the prosthetic field.

Conclusions There are individual varieties of the retromolar triangle anatomy, as well as of the mucosal mandibular tubercle. The posterior margins of the total prosthesis must cover the base of the pterygomandibular fold entirely or only 1/3 of its anterior surface, providing the stability and functionality of the prosthesis.