

46. MORPHOLOGICAL CHARACTERISTICS OF TEMPOROMANDIBULAR JOINT HEADS ACCORDING ORTHOPANTOMOGRAMS



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Introduction. One important problem in the dental system is TMJ pain caused by joint deformation. Numerous articles discuss TMJ pathologies like arthrosis and arthritis, but information on the relationship between joint shape/size and tooth loss is lacking

Aim of study. Collection and analysis of literature on the topic of the study, as well as a comparative study of the morphological characteristics of the articular heads in various adentia on digital orthopantomograms.

Methods and materials. 35 articles from the electronic database (<https://cyberleninka.ru/>) were used along with existing literature for analysis. The study involved 56 adult patients who underwent visual assessment of articular heads' shape and size using digital orthopantomograms. Among the patients, 5 had intact dentitions while the remaining 51 had partial adentia of I-III classes according to Kennedy.

Results. OPTG showed round articular heads of medium and large size in patients without dental defects. In OPTG of patients with adentia, flat articular heads accounted for 39.2% and round articular heads accounted for 60.8%. In terms of size, the distribution was: small - 37.2%, medium - 33.33%, large - 29.4%. OPTGs with flattened articular heads were more common in patients with extensive adentia of I-II class according to Kennedy, likely due to cartilage surface abrasion. Narrow articular heads in the lower jaw are more prevalent in extensive adentia with severe alveolar process atrophy.

Conclusion. The morphology and pathology of the jaw joint heads are linked to dentition condition and adentia type. More extensive adentia often leads to flattened joint heads and greater atrophy of alveolar processes, resulting in narrower joint heads.