

37. THE IMPORTANCE OF ULTRASONOGRAPHIC EXAM IN DENTISTRY

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Introduction. Ultrasonography is a fundamentally new, non-invasive diagnostic method in dentistry. It is an alternative technique to MRI, CT, or radiography when the patient's general condition does not allow their use. Advantages of USG are: being biologically inoffensive, safety, speed of obtaining information, absence of contraindications, wide availability and reduced cost. Ultrasonography is useful to confirm the clinical diagnosis in cervical lymphadenitis, sialadenitis, Sjögren's syndrome, post traumatic pathologies of blood vessels and extracranial nerves, tumours of soft tissues and temporo-mandibular joint disorders.

Aim of study. Studying the role of ultrasonography in dentistry and the anatomical-image features of the most common dental problems to increase the effectiveness of diagnosis and treatment.

Methods and materials. A search for articles on the usage of diagnostic ultrasound in dentistry was carried out within the BMC database.

Results. 182 articles corresponding to the selection criteria were screened for applications of echography in the oral-maxillo-facial region. It clearly shows that this method of imaging examination is not ignored and that it registered progress. We determined that echographic examination is effective in visualising the position of the articular disk, joint effusion and bone abnormalities in the evaluation of temporomandibular joint disorders. Some studies referring to the clinical usefulness of the ultrasound in the diagnosis of Sjögren's syndrome, sialadenitis, lymph node metastases, tongue carcinoma and periapical lesions.

Conclusion. The application of ultrasound in the oro-maxillo-facial region represents a radiation-free method of rapid preliminary diagnosis to exclude clinical suspicion. However, positive results should be confirmed by MRI. Ultrasound underestimates the extent of the disease, but can provide accurate information about the pathological nature of the lesions, which is important in predicting the treatment result.