

**CLINICAL SIGNIFICANCE OF MODERN DIAGNOSTIC METHODS
IN THE EARLY DETECTION OF MALIGNANT ORAL NEOPLASMS**

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Malignant neoplasms of the oral cavity remain a major challenge in modern oncology and oral and maxillofacial surgery because they are frequently diagnosed at advanced stages due to the absence of specific early clinical manifestations. The application of modern diagnostic techniques, including multislice computed tomography (MSCT), magnetic resonance imaging (MRI), positron emission tomography/computed tomography (PET/CT), and morphological verification, has significantly improved the accuracy of diagnosis, disease staging, and treatment planning.

Objective

To evaluate the clinical significance of modern diagnostic methods in the early detection of malignant oral neoplasms.

Materials and Methods

A review of contemporary national and international scientific publications and current clinical guidelines on the diagnosis of malignant oral neoplasms was performed. The diagnostic value of clinical examination, imaging techniques, endoscopic procedures, and morphological verification was analyzed, with particular attention to their role in early tumor detection and determination of appropriate treatment strategies.

Results

Analysis of the available evidence demonstrates that comprehensive application of modern diagnostic methods improves the detection of early malignant lesions, enables accurate assessment of tumor extent, and facilitates identification of regional lymph node involvement. Clinical examination remains the initial stage of evaluation, whereas imaging modalities such as MSCT, MRI, and PET/CT provide essential information regarding local tumor spread and disease staging. Histopathological examination, supplemented by immunohistochemical analysis when indicated, remains the gold standard for definitive diagnosis. The integration of these diagnostic approaches contributes to more accurate staging and supports individualized treatment planning.

Conclusion

The combined use of clinical examination, advanced imaging techniques, and morphological verification significantly improves the early diagnosis of malignant oral neoplasms. A multidisciplinary diagnostic approach enhances staging accuracy and provides the basis for selecting the most appropriate treatment strategy, thereby contributing to improved clinical outcomes.

Keywords

oral malignant neoplasms; early diagnosis; biopsy; immunohistochemistry; multislice computed tomography; magnetic resonance imaging; positron emission tomography/computed tomography.

