



Early signs and symptoms of oral cancer: narrative review and educational poster

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ABSTRACT

Introduction: Oral cancer represents a significant public health issue, with a high associated morbidity rate. The survival rate is notably lower, ranging between 10–20%, when diagnosis occurs at advanced stages. In Portugal, oral cancer remains an important public health concern, with over 1,000 new cases diagnosed annually, according to the International Agency for Research on Cancer. Early detection of oral cancer signs and symptoms is critical in improving patient prognosis and reducing disease impact.

Objectives: The aim of this review is to synthesize existing scientific evidence regarding the early signs and symptoms of oral cancer and to develop an educational poster targeted at the community. This tool aims to promote the timely recognition of suspicious changes and encourage prompt clinical evaluation.

Methodology: A narrative literature review was conducted using scientific databases (PubMed) and peer-reviewed international sources in the fields of dentistry and oncology, including GLOBOCAN (International Agency for Research on Cancer) and the scientific literature on oral and oropharyngeal cancer epidemiology. Grey literature was excluded. The search was conducted between January and March 2025, covering publications from 2000 to 2025. Inclusion criteria comprised: (1) peer-reviewed articles in Portuguese or English; (2) studies addressing early signs, symptoms, or secondary prevention of oral cancer; and (3) publications available in full text. Exclusion criteria included: (1) studies focused exclusively on treatment or advanced-stage disease; (2) case reports and editorials; and (3) grey literature or non-peer-reviewed institutional materials. The extracted data were synthesized qualitatively and organized in accessible language for the

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creation of an educational poster. Key clinical signs and referral recommendations were identified, with the poster content focusing on clarity, readability, and educational impact.

Results: The review identified key early warning signs of oral cancer, including: persistent ulcers or sores lasting more than 2–3 weeks, white or red patches on the oral mucosa (leukoplakia and erythroplakia), paraesthesia, limited tongue or jaw movement, difficulty chewing or swallowing, and cervical lymphadenopathy. The continued presence of these signs necessitates clinical evaluation and, where appropriate, referral for diagnostic testing. The developed educational poster incorporates these signs with a secondary prevention message aimed at increasing community awareness. Tobacco use, alcohol consumption, Human Papillomavirus infection and chronic sun exposure were identified as the main risk factors, while the tongue, floor of the mouth and lower lip were the most frequently affected sites.

Conclusion: This review successfully identified the principal early signs and symptoms of oral cancer, emphasizing the importance of their timely recognition to reduce late diagnoses. The synthesized information facilitated the development of an educational poster that can promote health literacy and raise awareness within the community, encouraging early medical consultation upon identification of warning signs.
