

## BRUXISM IN CHILDREN AND ADOLESCENTS WITH DOWN SYNDROME: A COMPREHENSIVE REVIEW

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**Aim:** the role of bruxism in children and adolescents with Down Syndrome (DS), the most often diagnosed congenital syndrome, is still unclear. This study aims to conduct a comprehensive review of the literature about bruxism in children and adolescents with Down syndrome to identify the prevalence, risk factors, and possible treatments of this disorder.

**Methods:** literature research was performed on the major electronic databases for studies published until 31st December 2020: PubMed, Scopus, Web of Science, and Google scholar databases.

**Results:** there were initially identified 11 studies on PubMed, 20 on Scopus, 6 on Web of Science, and 986 on Google scholar. Of these articles, 16 were assessed for eligibility. Four additional articles were retrieved from the bibliographic references.

Although an accurate estimate of its prevalence could not be inferred, it appears that bruxism is more prevalent in DS individuals rather than in the general pediatric population. No sex difference was observed, but a reduction in its prevalence was described with increasing age. The variability in the diagnostic techniques contributed to the heterogeneity of the literature data. Clinic-pathological features of DS, such as muscle spasticity, oral breathing, and predisposition to obstructive sleep apnea, may suggest the higher prevalence of bruxism in these patients.

**Conclusion:** given the paucity of studies on the management of bruxism in this population, it was not possible to outline a standard protocol for the non-invasive treatment of cases in which an observational approach is not sufficient.

## THE PROGNOSTIC ROLE OF LYMPHOVASCULAR INVASION IN ORAL SQUAMOUS CELL CARCINOMA

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**Aim:** oral squamous cell carcinoma (OSCC) is the most common head and neck malignancy, characterised by poor prognosis. Novel prognostic markers are needed to better stratify these patients. Lymphovascular invasion (LVI) has been included in the 8th edition of AJCC Cancer Staging Manual as an additional prognostic factor, but its influence on recurrence risk and lymph node metastasis is relatively understudied. This is a comprehensive review of literature regarding the clinical and prognostic role of LVI in OSCC.

**Methods:** a relevant search of PubMed, Scopus, Web of Science databases yielded 29 articles that satisfied the inclusion criteria.

**Results:** findings indicated that LVI is an independent negative prognostic factor in OSCC patients and appears associated to

cervical lymph-node metastases and locoregional recurrence. Notably, in oral tongue cancer survival outcomes progressively worsen when LVI is associated with others adverse pathological features, especially in early stages. Therefore, these patients could benefit from elective neck dissection and/or adjuvant therapy. The highly variability of LVI prevalence hindering the comparison of literature results.

**Conclusion:** several methodological limitations are present on the collected articles, such as the lack of a rigorous definition for LVI, the difficult detection in routine histological section, the presence of potential confounders, the retrospective nature and the inadequate sample size used in most studies. Therefore, it is necessary to conduct prognostic studies using standardized methods to define and quantify LVI.