

PubMed

Display Settings: Abstract



Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2001 May;91(5):535-40.

Reliability of toluidine blue application in the detection of oral epithelial dysplasia and in situ and invasive squamous cell carcinomas.

Onofre MA, Sposto MR, Navarro CM.

Oral Medicine Service, Department of Diagnosis and Surgery, School of Dentistry Araraquara-UNESP, São Paulo, Brazil. maonofre@foar.unesp.br

Abstract

OBJECTIVE: The objective of this study was to evaluate the reliability of in vivo staining with toluidine blue in the detection of oral epithelial dysplasia, in situ carcinoma, and invasive squamous cell carcinomas in potentially malignant epithelial lesions (PMELs) and superficial oral ulcerations suggesting malignancy.

STUDY DESIGN: Fifty patients with PMELs and superficial oral ulcerations suggestive of malignancy were selected from those treated at the Oral Medicine Service, Faculty of Dentistry, Araraquara, Brazil. All lesions were submitted to staining with an aqueous solution of 1% toluidine blue, followed by biopsy and histologic analysis. The sensitivity, specificity, and positive and negative predictive values were calculated.

RESULTS: Histologic diagnosis revealed that 14% of the lesions analyzed were in situ carcinoma and invasive squamous cell carcinomas, 12% were epithelial dysplasias, 13% were keratosis, 40% were lichen planus, and 8% were other benign lesions. The sensitivity of the staining was 77%, the specificity 67%, and the positive and negative predictive values 43.5% and 88.9%, respectively.

CONCLUSIONS: Staining with toluidine blue was demonstrated to be highly reliable in the detection of in situ carcinoma and invasive squamous cell carcinoma, because false-negative results for the lesions did not occur. Toluidine blue staining is an adjunct to clinical judgment and not a substitute for either judgment or biopsy.

PMID:11346731[PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms, Substances

LinkOut - more resources