AAOM Clinical Practice Statement



Subject: Oral lichen planus and oral cancer

The American Academy of Oral Medicine (AAOM) affirms that patients with oral lichen planus have an increased risk of developing oral cancer and require careful management and monitoring by appropriately trained clinicians.

PURPOSE

The AAOM recognizes the important controversy concerning the risk of oral cancer developing in patients with oral lichen planus (OLP). The recent literature was reviewed to develop current recommendations and guidelines for clinicians.

METHODS

This statement is based on a detailed review of the literature as well as major past reviews frequently cited by these papers. A MEDLINE search was performed using the terms "oral lichen planus," "malignant transformation," "oral cancer," "oral dysplasia," and "oral squamous cell carcinoma."

BACKGROUND

OLP, the most common chronic dermatologic disease involving the oral mucosa, is divided into lichen planus of unknown etiology (idiopathic) and oral lichenoid lesions (OLL) caused by drug reactions, contact allergy, or graft-versus-host disease.

The important issue of the increased risk of oral cancer developing in patients with OLP has been a topic of controversy and debate among clinicians, pathologists, and researchers in the field for decades. 1-4 Particular debate centers on whether a specific benign lichenoid lesion transforms into a malignant lesion; whether patients with OLP have an increased risk of developing oral cancer because of the presence of dysplasia at the time of initial diagnosis of OLP; or whether patients with OLP have an elevated risk of oral cancer not related to a specific OLP lesion. 5-7 Some studies have suggested that patients with OLL and the ulcerative or erosive form of OLP have a greater risk of oral cancer than other forms of OLP; although many reports cited have incomplete documentation of clinical

This article is being publishing concurrently at the AAOM website. The articles are identical. Either citation can be used when citing this article.

©2016 Elsevier Inc. and the American Academy of Oral Medicine.

or pathologic features because of the retrospective nature of the data and inadequate sample size.

Although a definitive, large, long-term prospective study has not been conducted, the accumulated data from case series and systematic reviews suggests a rate of approximately 0.5% to 1% of oral cancer developing in patients with OLP, which is significantly above the oral cancer rate for the general population. 8-12 A recent carefully performed systematic review published in the *Journal of the American Dental Association* showed an overall rate of malignancy of 1.09%. The most common sites of oral cancer in OLP patients were cited to be the tongue, the buccal mucosa, and the gingiva. 7

POLICY STATEMENT

After review of the current literature, studies, reviews and systematic reviews published during the past decade, the AAOM recommends the following:

- Patients with a diagnosis of OLP or OLL should be periodically monitored by an experienced clinician for possible malignant and premalignant lesions and these suspicious areas biopsied.
- At the time of diagnosis of OLP and OLL, patients should be counselled about the low but potential increased risk of oral cancer so that they understand that periodic examinations are necessary even if the patients are asymptomatic or their symptoms are well controlled.
- 3. The AAOM strongly supports development of well-planned, multicentered, prospective studies of malignancy and OLP to further determine the risk of oral cancer developing in patients with OLP and OLL and subsets of these patients with the greatest risk of oral malignancy.

Martin S. Greenberg, DDS, FDS RCSEd

http://dx.doi.org/10.1016/j.oooo.2016.05.015

REFERENCES

- Krutchkoff DJ, Cutler I, Laskowski S. Oral lichen planus: the evidence regarding potential malignant transformation. *J Oral* Pathol. 1978;7:1-7.
- van der Waal I, Schepman KP, Smeele LE, et al. A review of the recent literature regarding malignant transformation of oral lichen planus. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 1999;88:307-310.

Volume 122, Number 4 Greenberg

- Duffey DC, Eversole LR, Abemayor E. Oral lichen planus and its association with squamous cell carcinoma: an update on pathogenesis and treatment implications. *Laryngoscope*. 1996;106: 357-362.
- Silverman S Jr, Gorsky M, Lozada Nur F. A prospective follow up study of 570 patients with oral lichen planus: persistence, remission and malignant association. *Oral Surg Oral Med Oral Pathol.* 1985;60:30-34.
- Fulling HJ. Cancer development in oral lichen planus: a follow up study of 327 patients. Arch Dermatol. 1973;108:667-669.
- Gonzales-Moles MA, Scully C, Gil-Montoya JA. Oral lichen planus: controversies surrounding malignant transformation. *Oral Dis.* 2008;14:229-243.
- Fitzpatrick SG, Hirsh SA, Gordon SC. The malignant transformation of oral lichen planus and oral lichenoid lesion: a systematic review. *JADA*. 2014;145:45-56.

- Hsue SS, Wang WC, Chen CH, et al. Malignant transformation in 1458 patients with potentially malignant oral mucosal disorders. *J Oral Pathol Med*. 2007;36:25-29.
- Rodstrom PO, Jontell M, Mattson U, Holmberg E. Cancer and oral lichen planus in a Swedish population. *Oral Oncol*. 2004;40: 131-138.
- Shen ZY, Liu W, Zhu LK, et al. A retrospective clinicopathologic study on oral lichen planus and malignant transformation: analysis of 518 cases. Med Oral Patol Oral Cir Bucal. 2012;17:943-947.
- Shen ZY, Liu W, Feng JQ, Zhou HW, Zhou ZT. Squamous cell carcinoma development in previously diagnosed oral lichen planus: de novo or transformation? *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2011;112:592-596.
- Bombeccari GP, Guzzi G, Tettamenti M, et al. Oral lichen planus and malignant transformation: a longitudinal cohort study. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2011;112:328-334.