Malignant Transformation in Oral Lichen Planus and Lichenoid Reactions in Southern Thai Population

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Abstract

Objectives: This study aimed to determine the prevalence of malignant transformation (MT) and the incidence rate of oral squamous cell carcinoma (OSCC) in oral lichen planus (OLP) and oral lichenoid reaction (OLR) patients from southern Thailand.

Methods: This hospital-based retrospective cohort study comprised OLP/OLR patients who were treated between January 2016 and December 2022. Data on the general characteristics, clinical manifestations and laboratory investigations were obtained from the hospital records and analyzed. Descriptive and analytical statistics were performed to assess the demographic data, clinical profiles of the patients and the prevalence and incidence rate of MT.

Results: A total of 117 patients were included in the study; 103 (88%) were diagnosed with OLP, and 14 (12%) were diagnosed with OLR. The median follow-up time was 15.6 months (interquartile range; 6.1-46.0). The overall prevalence of MT in OLP/OLR was 1.71% (2/117 patients); specifically, MT in OLP was 1.94% (2/103 patients). The overall annual incidence rate of MT into OSCC was 0.0060 (95% confidence interval, 0.0015-0.0240).

Conclusions: These findings suggest that OLP is a potentially malignant disorder with an MT incidence of 1.94% in the southern Thai population. OLP patients must be regularly followed-up and advised about the risk of MT.

Keywords: lichen planus, lichenoid reactions, oral squamous cell carcinoma, Southeast Asian people