

## Is oral lichen planus a potential malignant disorder?: A critical appraisal

Dear Editor,

“The difficulty lies not in new ideas, but in escaping old ones”

- John Keynes

Oral lichen planus (OLP) is a chronic inflammatory oral mucosal disease of unknown etiology.<sup>[1]</sup> One of the most controversial aspects of OLP is its potentially malignant nature.<sup>[2]</sup> Numerous studies on OLP have reported varying malignant transformation rates of OLP from very high to almost negligible giving rise to conflicting findings.<sup>[2,3]</sup> Recent studies have reported malignant transformation of OLP ranging between 0.44 and 2.28%.<sup>[4-6]</sup> In this letter, we would like to put forth our views regarding the malignant transformation of OLP and its inclusion in oral potential malignant disorders (OPMDs).

GLOBOCAN in 2018 reported the estimated average age-standardized rate of oral cancers worldwide as 4 per 100 000 (range between 0.4 and 20.4 per 100 000). So, based on the estimated worldwide prevalence of OLP, 5–20 OLP patients per 100 000 of the general population will develop oral cancer within 5 years. On comparing the global cancer prevalence rate with OLP, it shows that most oral squamous cell carcinoma (OSCC) cases have apparently developed from OLP, which seems questionable.<sup>[7]</sup>

In most of the systematic reviews and meta-analyses, after application of strict criteria to the clinical appearance of the affected site and transformed location, histopathological presentation, habits, comorbid conditions, age, and gender, it is evidenced that the malignant transformation rate of OLP is exaggerated due to insufficient diagnostic criteria, inaccurate follow-up and/or average quality of investigation.<sup>[8]</sup>

The diagnosis of OLP requires the presence of both clinical and histopathological features.<sup>[9]</sup> Unfortunately, many times diagnosis is solely based on clinical judgement without biopsy. It is quite possible that OSCC may clinically present as OLP and the clinician may institute topical/systemic steroid therapy without histopathological examination. Subsequent biopsy of those unresponsive lesions turns out to be OSCC, resulting in an inadvertent increase in the malignant transformation rate of OLP in studies.

Topical/systemic steroid treatment results in decreased local immunity, providing a potential cause for conversion to cancer that cannot be ignored.<sup>[3,10,11]</sup> Systemic condition like diabetes causes disturbances in cellular and humoral immune functions, reducing the immunity in OLP-affected patient which may lead to malignant transformation.<sup>[12]</sup> Association of tobacco and/or alcohol may also play a role in mucosal alteration at the microscopic level, increasing the likelihood of malignant transformation.<sup>[3]</sup>

Though the investigators have supported the potentially malignant nature of OLP, a small but significant number of OSCC occur in non-smokers and non-drinkers with a range of 3–24%. Even with this finding the overall malignant transformation rate of OLP remains lower compared to the occurrence of OSCC in non-smokers and non-drinkers (OLP—2.28% vs OSCC in non-smokers and non-drinkers 3–24%).<sup>[6,13-15]</sup> Based on the above observations, it is high time for us to rethink whether OLP should still be considered as an OPMD?

Once diagnosed with OLP, informing the patient about possible malignant transformation induces cancerophobia, causing stress and disturbing their emotional status further aggravating the signs and symptoms of OLP.<sup>[16]</sup> Until then, based on the literature reporting the potentially malignant nature of OLP, we suggest the need for psychological counseling for all OLP patients. This will definitely serve to alleviate their anxiety, thus making them more receptive to treatment.

We hope our letter will generate a healthy discussion among the readers to arrive at a common consensus by putting forth their views on this topic.

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### Conflicts of interest

There are no conflicts of interest.

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