

Example of proliferative verrucous leukoplakia dissertation chapter

[Health & Medicine](#), [Cancer](#)



CHAPTER

Definition: Proliferative verrucous leukoplakia (PVL) 2, 3 is a rare oral leukoplakia characterized primarily by chronic proliferation (4. 4-11. 6 years¹), exophytosis, confluence, refractoriness to treatment, and extremely high cancerization. It is referred to plainly as ‘oral leukoplakia’ (OL) before 2004¹. Thereafter, it is called PVL. The WHO classified it among the “potentially malignant disorders” 2. When multifocal^{1, 3}, it can be found in the buccal mucosa, gingiva, alveolar ridges, and tongue.

Epidemiology: Oral white lesions have a prevalence of 24. 8% with 0. 2 to 3. 6% of which constitutes leukoplakia². Over 86% of PVL becomes cancerous in 4. 73 to 6. 12 mean years (range: 1 to 20 years). It afflicts mostly females^{2, 1}, the elderly (mean age at diagnosis: over 60 years) ^{2, 1}, and non-smokers¹. It has a death rate (over 30%) 4.

Provenance: First described in 1985¹, PVL initially develops as a white hyperkeratotic plaque². Etiologically, it appears idiopathic, not associated with known cancer risks (e. g. tobacco, viruses, or fungi) 4, 5. Recurrences have been observed¹.

Clinical features: PVL lesions occur bilaterally². It has no distinct histological feature; no obvious growth from single to multiple foci; changing from simple epithelial hyperkeratosis (wart-like, erythroplakic) (Fig. 1) to verrucous hyperplasia or carcinoma or oral squamous cell cancer (OSCC). Genetic profile shows increased TGF- α ; deletion or mutation of p16INK4 α and P14ARF⁶. Trans-malignancy time is short (four months).

Prognosis: PVL is largely irreversible³; its prognosis poor². Surgical treatment is inadequate due to high recurrence rate^{1, 5}. Its trans-

malignancy rate (40-100%¹ and progression rate of 0. 13-17. 5%²) is predictive of oral cancer, particularly OSCC¹.

Figure 1 - PVL with Keratosis (wavy) and exophytic wart-like configurations (Source⁴)

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