

Proliferative Verrucous Leukoplakia - A Perpetuating Ambiguity

MONICA MEHENDIRATTA¹, KANU JAIN²

Keywords: Hyperplasia, Histological, Malignant, Terminologies

Dear Editor,

Proliferative Verrucous Leukoplakia (PVL) has innumerable confusions in relation to its terminology, stages and mode of diagnosis. It has been defined variably as a progressive model beginning like a simple, solitary patch tending to recur and proliferate over a protracted course and ultimately resulting into an exophytic lesion [1].

Terminology Ambiguity: The term PVL appears to describe a type of leukoplakia spreading out from a smaller, almost flat primary lesion into a diffuse one with verrucal extensions. It fails to describe the enigmatic etiopathogenesis of multiple lesions of PVL which recur. Looking at the components of the term PVL; firstly the word "Verrucous" appears questionable as the initial lesions are generally not warty and the verrucous projections appear only later [2]. Secondly, calling it a PVL does not appear justifiable since 'verrucous Leukoplakia (VL)' is a clinical term without any established histopathology. Thirdly, considering it a type of 'Leukoplakia' when it is not similar to leukoplakia in many aspects seems incorrect.

Classification of PVL as a Subtype of Leukoplakia: It is inappropriate to consider PVL as a type of leukoplakia as it is different from conventional leukoplakia in its unknown etiology with questionable viral role, frequent involvement of keratinized mucosa, presence of widespread and multi-focal lesions, recurrent nature, resistance to therapy and high rate of field cancerization [3].

PVL: Potentially malignant or malignant?: Hansen's grading describes PVL as a ten stage histopathological continuum with homogenous leukoplakia at one end and a malignancy at the other [1]. The World Health Organization has further described PVL as a distinctive high-risk (with high potential for malignant transformation) leukoplakia [4]. Term 'Potentially malignant' only carries a potential to change into a cancer, whereas the spectrum of PVL includes malignancy. Hence, calling it as a potentially malignant leukoplakia and a malignancy at same time is inappropriate.

Discrepancies in Staging: The Hansen's staging with the differences being forwarded by Batsakis et al., perplex the situation

[1,5]. These inconsistencies have occurred firstly, because PVL is a multi-stage disease and the lesions in different evolutionary stages can be present at one point of time. Secondly, individual perception of the clinical lesions; leukoplakia, VL, Verrucous Hyperplasia (VH), Verrucous Carcinoma (VC) and carcinoma could refrain from compatible data. Thirdly, there are histological inconsistencies in the literature regarding the presence or absence of dysplasia, diagnosing it as VH or VC and inclusion of papillary squamous cell carcinoma as a component of PVL or not [1,5].

Diagnostic Dilemma: The bewildering stages of PVL and their clinical appearances bring along diagnostic difficulties. For example, PVL has not been well defined and entities like "VH" and "VC" may be clinically identical. Histological identification is made difficult often due to small specimen size, poor orientation, and failure to sample margins. Further, multiple biopsies including adjacent normal tissue for appropriate interpretation becomes necessary.

Retrospective clinical diagnosis, multiple biopsies over several years, late detection, enigmatic etiology, no successful treatment as yet and recurrence after treatment adds hay to fire. With so many uncertainties encompassing PVL, the authors feel a pronounced need for exploration in its present concepts.

REFERENCES

- [1] Hansen LS, Olson JA, Silverman S Jr. Proliferative verrucous leukoplakia. A long-term study of thirty patients. *Oral Surg Oral Med Oral Pathol.* 1985;60(3):285-98.
- [2] Aguirre-Urizar JM. Proliferative multifocal leukoplakia better name than proliferative verrucous leukoplakia. *World J Surg Oncol.* 2011;9:122.
- [3] Bagán JV, Murillo J, Poveda R, Gavaldá C, Jiménez Y, Scully C. Proliferative verrucous leukoplakia: Unusual locations of oral squamous cell carcinomas, and field cancerization as shown by the appearance of multiple OSCCs. *Oral Oncol.* 2004;40(4):440-43.
- [4] Barnes L, Evenson JW, Reichart P, Sidransky D. World health organization classification of tumors. Pathology and genetics of head and neck tumors. Lyon: IARC Press;2005:180.
- [5] Batsakis JG, Suarez P, el-Naggar AK. Proliferative verrucous leukoplakia and its related lesions. *Oral Oncol.* 1999;35(4):354-59.

PARTICULARS OF CONTRIBUTORS:

1. Reader, Department of Oral Pathology, ITS Dental College, Greater Noida, Uttar Pradesh, India.
2. Reader, Department of Oral Pathology, Maharaja Ganga Singh Dental College and Research Centre, Shri Ganganagar, Rajasthan, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Kanu Jain,
Department of Oral Pathology, Staff Quarters, Maharaja Ganga Singh Dental College and Research Centre,
11 L.N.P., Hanumangarh Road, Shri Ganganagar-335002, Rajasthan, India.
E-mail: kanu_priya99@rediffmail.com

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **May 24, 2016**
Date of Peer Review: **Jun 07, 2016**
Date of Acceptance: **Jun 28, 2016**
Date of Publishing: **Oct 01, 2016**