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內文：

■ Introduction

- OLP is a chronic immunological inflammatory mucocutaneous disease
- affects 0.1% to about 4% of the population
- Common in middle-aged person and women
- Buccal mucosa, tongue and gingiva are commonly affected
- Often bilateral. Presentation with reticular, papular, plaque-like, atrophic and ulcerative.
- Immunologically hypersensitivity reaction. Intense band-like T-cell infiltrate in the epithelium–connective tissue
- Viruses (such as HPV HHV) found play a role in the pathogenesis of OLP. Viruses alter host cell function by the expression of cellular proteins.
- Aim of the present study
- Prevalence of OLP& HPV-16 and to evaluate whether any clinical features correlate with this virus.

■ Materials and methods

- The research was approved by Maharashtra University of Health Sciences (MUHS)
- retrospective study performed on lesional and normal tissue embedded in preserved wax block
- 30 patients with OLP (with minimum age 21 years and maximum age 58 years)
- The patients were classified according to age, gender and localisation of the lesion
- All cases of OLP were of the reticular form and patients had no history of smoking, alcohol consumption or betel-nut chewing habit
- Thirty normal oral mucosal tissue specimens, free of inflammation and necrosis (from subjects with a minimum age of 18 years and a maximum age of 52 years)
- Biopsy samples were processed using the poly-HRP method

(Deparaffinisation and rehydration -3% hydrogen peroxide for 5 minutes.
Antigen-retrieval solution (citrate buffer, pH 6.0) in a microwave for 15 minutes.
Incubated with HPV-16 primary antibody at room temperature for 30 min.
Then slides were incubated with poly-HRP secondary antibody for 30 minutes.
Incubated with DAB HRP substrate)

- brown nuclear staining was accepted as positive staining for HPV-16 antibody.
- Statistical analyses were performed using Fisher's exact test.

■ Results

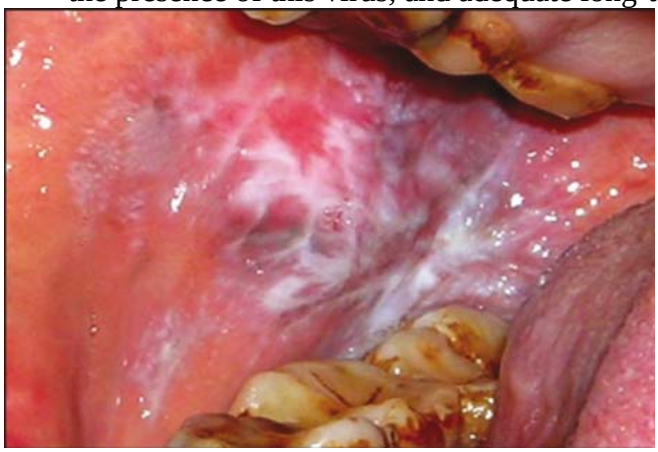
- Twenty-one (70%) of 30 subjects with OLP were HPV-16 positive, all subjects in the control group were negative for HPV-16
- The P value obtained from Fisher's exact test showed a significant relationship (P = 0.0001) between HPV-16 infection and OLP
- no statistically significant correlations between age, gender, localisation of the lesion and HPV-16 positivity

■ Discussion

- OLP is a chronic inflammatory disease which involves cell-mediated immune dysregulation.
- Potentially malignant lesion of the oral mucosa about 0-6.25%
- HPV in premalignant lesions has also been studied, infection upper respiratory tract may play a role in the head and neck tumor
- HPV-16, associated with potentially malignant lesions and with oral squamous cell carcinoma.
- High-risk HPV-16 produces two oncoproteins, E6, E7.
- E6 protein diminishing the ability of the cell to undergo apoptosis.
- HPV E7 protein binds the retinoblastoma protein (pRb), resulting in loss of cell-cycle control.
- Keratinised tissue is more resistant to HPV infection
- HPV-16 was found in 85% of nonkeratinised tissues and in 15% of keratinised tissues.
- P-value of Fisher's exact test showed a statistically significant relationship between PV-16 positivity and non-keratinised tissue.

■ Conclusion

- HPV infections may play an important role in the pathogenesis of OLP
- Due to oncogenic potential of HPV-16, patients with OLP should be screened for the presence of this virus, and adequate long-term follow-up should be done



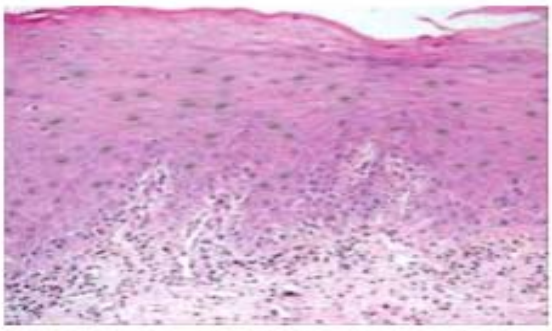


Figure 1. Photomicrograph showing immunohistochemical staining of the human papilloma virus 16 (HPV-16) in oral lichen planus (magnification ×45).

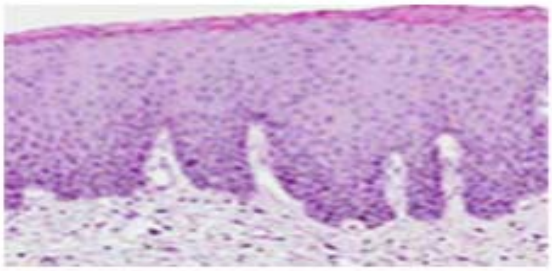


Figure 2. Photomicrograph showing no immunohistochemical expression of human papilloma virus 16 (HPV-16) in normal oral mucosa (magnification ×45).

Table 1 Prevalence of human papilloma virus 16 (HPV-16) in the group of patients with oral lichen planus (OLP) and in the control group (no OLP)

Group	HPV-16 status		Total no. of subjects in group	*P* value
	Positive(*n*)	Negative(*n*)		
Patients	21	9	30	0.0001 (significant)
Controls	0	30	30	
All	21	39	60	

Table 2 Prevalence of human papilloma virus 16 (HPV-16) according to gender

Gender	HPV-16 status		Total no.of subjectsin group	*P*
	Positive	Negative		
Male	9	16	25	0.944 (non-significant)
Female	12	23	35	
Overall	21	39	60	

Table 3 Relative prevalence of cases based on the localisation of lesion

Site	Case	Control	All	*P* value
Mucosa of floor of mouth	2 (6.67)	0 (0)	2 (3.33)	0.199 (non-significant)
Buccal mucosa	18 (60)	24 (80)	42 (70)	
Lip mucosa	5 (16.67)	2 (6.67)	7 (11.67)	
Tongue	3 (10)	1 (3.33)	4 (6.67)	
Gingiva	2 (6.67)	3 (10)	5 (8.33)	
All	30 (100)	30 (100)	60 (100)	

Values are given as *n* (%).