

## Case Report

### A Case Report of Palatal Papillary Hyperplasia

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#### ABSTRACT:

Palatal papillary hyperplasia (PPH) is a benign mucosal condition characterized by multiple small, nodular, erythematous projections on the hard palate. It is most commonly associated with ill-fitting dentures and poor oral hygiene. However, PPH can also occur in non-denture wearers, particularly in individuals exposed to chronic irritation or habits such as smoking. Early diagnosis and elimination of the causative irritant are crucial for effective management and prevention of recurrence. This case underscores the importance of recognizing non-denture-related etiologies of PPH and addressing modifiable risk factors such as tobacco use. It presents a case of PPH in a long-term beedi smoker, highlighting the etiological role of chronic heat and chemical irritation from tobacco products.

**Keywords:** Palatal Papillary Hyperplasia, Beedi Smoking, Reactive lesion, Tobacco-related Oral Lesion, Non-Denture Mucosal Lesion

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#### INTRODUCTION

Palatal papillary hyperplasia (PPH), also known as inflammatory papillary hyperplasia, is a reactive lesion of the palatal mucosa, primarily associated with chronic irritation. While it is most commonly seen in denture wearers due to mechanical trauma and poor oral hygiene, non-denture wearers may also develop PPH due to other irritants, such as smoking. In particular, chronic use of beedis, which burn at higher temperatures and release more tar and nicotine than conventional cigarettes, poses a significant risk due to continuous thermal and chemical insult to the palatal mucosa.<sup>[1,4]</sup> Beedis are hand-rolled cigarettes consisting of tobacco flakes wrapped in tendu or temburni leaves and are known to produce higher concentrations of harmful substances compared to conventional cigarettes. The chronic thermal and chemical insult caused by beedi smoking can lead to persistent irritation of the palatal mucosa, promoting reactive hyperplastic changes even in the absence of prosthetic appliances.<sup>[1,3,4]</sup> This report presents a case of palatal papillary hyperplasia in a patient with a chronic 48-year history of beedi smoking, without any

history of denture use. The case emphasizes the need to consider long-term tobacco use as a significant risk factor in the pathogenesis of palatal hyperplastic lesions and underscores the importance of early recognition and management.<sup>[3,4]</sup>

#### CASE REPORT

A 48 – Year old male patient reported to the Department of Oral medicine & Radiology, St. Joseph Dental College & hospital Duggirala, Eluru with a chief complaint of pain in left lower back teeth region since 2 months. Patient gives h/o smoking Beedisince5 years 6 Beedis per day. On Intra oral examination On Inspection A Diffuse Greyish Discolouration seen involving hard palate. A Small pin point lesions seen on the hard palate extending Anterposteriorly from palatine rugae to hard & soft palate junction. Erythematous lesion seen involving soft & hard palate junction is seen. On palpation, Allinspectory findings are confirmed. The Lesion is non-tender, soft in consistency, smooth in texture. Based on history and clinical findings this case is diagnosed as Smokers palate with palatal Papillary

Hyperplasia. Differential Diagnosis Given as Inflammatory Squamous papilloma, HPV- Associated papillary lesion. As We Advised Blood Investigations patient was not willing. Final diagnosis given as Smokers palate with palatal papillary hyperplasia. Patient was advised to quit the habit of smoking (Beedi) and Advised to use Candid gum paint thrice daily for a week and multivitamin tablets (BEVON) once daily for 15 days. After 1 week of Follow up the lesion got subsided.



**Lesion Involving Hard Palate**



**Lesion After Follow up**

#### DISCUSSION

Palatal papillary hyperplasia (PPH) is a benign reactive lesion of the oral mucosa, most frequently observed in denture wearers due to chronic irritation and poor denture hygiene. However, its occurrence in non-denture-wearing individuals prompts investigation into other contributing factors such as tobacco use, especially the habitual smoking of beedis. Beedis are a traditional form of tobacco widely used in South Asia, and they are known to deliver higher concentrations of nicotine, tar, and

carbon monoxide compared to conventional cigarettes. The repetitive exposure of the palatal mucosa to thermal injury, irritants, and carcinogens in beedi smoke can lead to mucosal inflammation, epithelial hyperplasia, and the formation of papillary projections. In the present case, the patient had no history of prosthetic use, eliminating the most common cause of PPH. However, the individual had a 48-year history of beedi smoking, which likely acted as a chronic irritant contributing to the lesion's development. The absence of other risk factors reinforces the role of beedi-induced mucosal irritation in the pathogenesis of PPH. Histopathological examination in such cases typically reveals hyperplastic stratified squamous epithelium with acanthosis and papillary projections, supported by inflamed connective tissue—findings consistent with the diagnosis of PPH. The chronic nature of the lesion in smokers may also result in hyperkeratosis, which could further complicate the lesion's clinical appearance. Management of PPH involves removal of the etiologic factor, which in this case includes smoking cessation, in addition to surgical excision of the lesion. Patient education and regular follow-up are essential to prevent recurrence and monitor for any signs of dysplastic changes, especially given the known association of long-term tobacco use with malignant transformation. This case highlights the importance of recognizing non-denture-related causes of PPH. Patients should be aware of tobacco use—especially beedi smoking—as a significant contributing factor and Dentists incorporate thorough habit history-taking into routine clinical examinations.

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