STEROID INDUCED INFLAMMATORY PAPILLARY HYPERPLASIA? – A NEW ENTITY IN A NON-DENTURE WEARING PATIENT

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Abstract

Inflammatory papillary hyperplasia (IPH) is a benign lesion of the palatal mucosa, usually found in denture wearers. This case history report describes an example of the dentate patients with no history of wearing maxillary prostheses and highlights the importance of professional awareness to diagnose IPH among non-denture-wearing patients.

Title page:

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Running Title : INFLAMMATORY PAPILLARY HYPERPLASIA IN A NON-DENTURE WEARING PATIENT

Key words: , Inflammatory papillary hyperplasia, Steroid induced, On denture

Key Clinical Message: Inflammatory papillary hyperplasia can be seen even in a non-denture wearer, probably because of topical steroid use.

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INTRODUCTION:

Inflammatory papillary hyperplasia is a lesion of the mucosa which usually involves the hard palate only, but which may occasionally extend to the mucosa of the residual ridges.[1] The lesion is a painless, firm, pink or red, nodular proliferation of the mucosa. Most patients are unaware of its presence.[1,2] In general, IPH is associated with the use of removable upper dentures although in rare instance it also has been found in dentulous patients with no history of a dental prosthesis.[3] It is more prevalent in males (20.5 %) than females (6.9 %), and usually located in anterior region of maxilla (79%).[4] Predisposing factors like, smoking, use of tobacco, alcohol consumption, Candidal infection, patients wearing a maxillary complete denture against a mandibular distal extension partial denture, sex of the patient and various systemic diseases like diabetes mellitus are considered to be responsible for IPH.[5] In the literature reviewed, we have found only three cases of IPH in non-denture-wearing patients till date. This case report describes IPH in a patient who has never worn a maxillary denture and identifies etiologic factors for this rare presentation.

CASE HISTORY/EXAMINATION:

A 75-year-old man reported to the department of oral medicine and radiology with the chief complaint of growth in the mid-palatal region (Figure 1) since 4 months. Patient had the significant history of bronchial asthma since 10 years and was on inhalational steroidal therapy. There was no other relevant medical history reported by the patient. Also, patient had no history of ever wearing a removable prosthesis. Clinical examination revealed a dentulous maxilla with a midpalatal lesion characterized by multiple papillary projections covering approximately about 1cm $\times$ 1 cm area of palate. The overlying mucosa appeared erythematous. There were neither the history of bleeding or pus discharge nor was it present on palpation. The provisional diagnosis of IPH was arrived on the basis the clinical appearance and examination. Patient was prescribed for topical application of antifungal gel , (clotrimazole 1 % w/v) QID for 2 weeks, followed by which patient have reported (telephonic communication) of decrease in size of the lesion. Patient have not visited our department amid Covid 19 situation.

DISCUSSION:

IPH is a clinical entity or a lesion which is most commonly associated with the patients of maxillary complete denture. Previous literature reviewed has reported most of the cases with the ill-fitting denture or long term usage /night wearers as the possible etiological factor. However, IPH can occur in non denture wearers too. IPH occurring in the non denture wearer is a rare entity, till now only 3 cases has been reported. The first case was in the year 1990, The patient presented in this case report [6] was a 10-year-old black girl without a history of a dental prosthesis. It is conjectured that poor oral hygiene and a habit of mouth breathing contributed to the occurrence of inflammatory papillary hyperplasia in this patient. The lesion was surgically removed, and the patient was followed up for a period of 18 months without recurrence of the lesion.[6]the second case was in a 60-year-old man with the hard palatal nodular lesion with the history of tobacco smoking and poor oral hygiene and had no history of ever wearing a removable prosthesis. diagnosis of IPH was made with a palatal mucosal biopsy, and the patient was advised to quit smoking. The topical application of miconazole 2%, three times a day for 3 weeks, was prescribed.[7] the third case was A 29 years old healthy woman In routine intraoral examination, a red pebbly plaque with irregular and poorly defined borders on palatal vault was inspected. Nystatin suspension was advised. Reexamination was done after one week and reduction in lesion size and erythema was observed.[8] The case which has been reported here was 75 year old man with no history of denture had developed lesion in mid palatal region. Patient had the history of usage of inhalational steroids, hence it can be hypothesized that this would have led to the development of the lesion. Yet further research is required in this regard about the etiopathogenesis of IPH in such cases.

CONCLUSION

To conclude, This case emphasizes the awareness among the oral diagnostician about the IPH in non-denture patients, and other possible etiological factors.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interests regarding the publication of this paper.

AUTHORSHIP LIST:

Author Contributions:

Author 1: Clinical Diagnosis and selection of case. Literature Search done, Edited and reviewed the manuscript.

Author 2: Clinical Diagnosis and selection of case. Edited and reviewed the manuscript

Author 3: Written the manuscript at initial phase. Edited and reviewed the manuscript.

ETHICAL APPROVAL

Written Consent was taken from the patient

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DATA AVAILABILITY

The data is available with the correspondence author and can be availed on request.

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List of figure captions/legends

Figure 1 : Showing the multiple papillary projection wrt mid palatal region