

IDIOPATHIC PLASMACYTOSIS OF GINGIVA: - A DIAGNOSTIC DILEMMA

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INTRODUCTION: Idiopathic plasmacytosis (IP) is a rare benign inflammatory condition of gingiva of unknown etiology characterized by a massive infiltration of plasma cells into the sub-epithelial gingival tissue. It is regarded as a counterpart to Zoon's plasma cell balanitis, first described in 1952. The classical presentation of IP includes painless, erythematous and papillary lesion of the gingiva with a sharp demarcation along the mucogingival border.

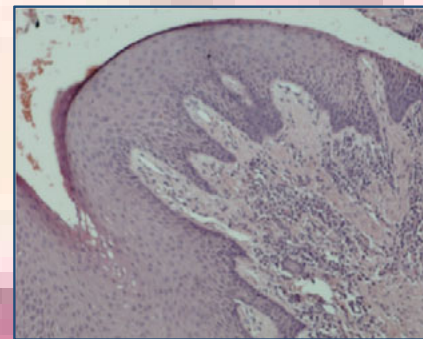
OBJECTIVES: To present a case of idiopathic plasmacytosis of gingiva as a rare differential diagnosis for oral lesions.

MATERIALS & METHODS: In 2009, an 18 year-old male presented complaining of painful gums and swollen lips for 4 months. Medical and dental history were non-contributory. Extra oral examination revealed a compressible, erythematous and diffuse swelling affecting the upper lip. The gingiva exhibited swelling and diffuse velvety erythema. Laboratory investigations were within normal limits. To rule out allergy, the patient was asked to avoid flavoured chewing gums, candies and refrain from dentifrice, but no significant improvement was observed. A biopsy was performed. Phase 1 therapy and an antihistamine (cetirizine 10 mg daily for 15 days) were provided. After 8 months, the patient reported with slight swelling in the upper lip and poor oral hygiene. The same treatment was continued for 15 days, and the biopsy was repeated. The patient reported again after 2 years with abundant plaque and painful, bright red inflamed gingiva. Oral prophylaxis was done, and systemic corticosteroid (prednisolone 10 mg OD x 1month) followed by antihistamines were prescribed.

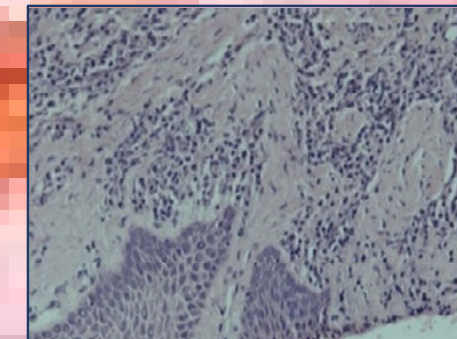
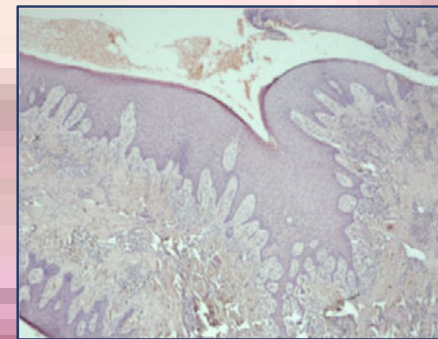
RESULTS: Histopathology displayed pseudoepitheliomatous hyperplasia of surface epithelium with diffuse plasma cell infiltration suggestive of idiopathic plasmacytosis. Steroid therapy and antihistamines caused stabilisation of the disease, but not complete resolution in this patient during a follow up period of 5 years.

DISCUSSION AND CONCLUSIONS:

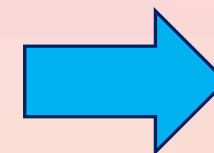
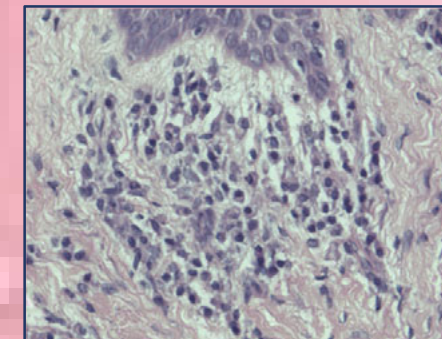
Idiopathic plasmacytosis is a diagnosis of exclusion, distinguished primarily by a histological finding of submucosal plasma cell infiltrate. It mimics clinical presentation of plasma cell myeloma, mucous membrane pemphigoid, pemphigus, erosive lichen planus, squamous cell carcinoma or allergic gingivostomatitis. Thus, diagnosis of idiopathic plasmacytosis depends on clinical pathological correlation.



Haematoxylin-eosin 40 x and 100x show pseudoepitheliomatous hyperplasia of surface stratified squamous epithelium with mononuclear infiltrate (plasma cells) without significant edema



A high power view shows a monomorphic population of mature plasma cells (Haematoxylin-eosin, 200x and 400x)



Pre-treatment clinical photographs

Post-treatment

Bibliography:

1. Zoon JJ. Balanoposthite chronique circonscrite begine a plasmocytes (contra erythropasie de Queyrat). *Dermatologica* 1952; 105: 1-7.
2. Lubow RM, Cooley RL, Hartman KS, McDaniel RK. Plasma cell gingivitis: Report of a case. *J Periodontol* 1984; 55: 235-241.
3. White JW Jr, Oslen KD, Banks PM. Plasma cell orificial mucositis: Report of a case and review of the literature. *Arch Dermatol* 1986; 122: 1321-1324.