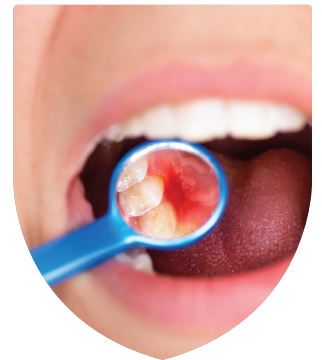


Plasma cell gingivitis



Plasma cell gingivitis (PCG) is an uncommon benign inflammatory condition of gingiva characterised by diffuse, friable, erythematous and oedematous enlargement of the gingiva, and may extend from the free marginal gingivae on to the attached gingiva.¹ PCG was first reported in the early 1970s and other terminologies previously used for this condition were plasmocytosis of the gingiva, idiopathic gingivostomatitis, plasma cell gingivostomatitis, atypical gingivostomatitis and allergic gingivostomatitis.²⁻⁵

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Aetiology

Young female patients are mostly reported in the literature. There was no known geographic incidence. Although the aetiological origin of PCG is still not clearly understood, it is suggested a hypersensitive reaction to allergens such as the components of toothpaste (cinnamonaldehyde and cinnamon), chewing gum, oral product, Colocasia (arbi) leaves, khat leaves (*Cafta edulis*), and other foreign substances.⁶⁻¹⁰

Clinical features

PCG is usually asymptomatic. It is characterised by erythematous and oedematous gingiva commonly extending into the mucogingival junction (Figure 1). In contrast to PCG, plaque induced gingivitis normally affect the marginal gingiva alone, but not the entire attached gingiva. PCG usually occurs in the anterior gingiva, most frequently in the maxilla.¹⁰



Figure 1: Flaming-red and swollen gingiva (Photos by Oral Medicine Department, Faculty of Dentistry, University of Otago)



Differential diagnoses may include pyogenic granuloma, peripheral giant cell granuloma, desquamative gingivitis, granulomatous gingivitis, drug-related gingival hyperplasia, discoid lupus erythematosus, acute leukaemia, plasma cell myeloma, plasmacytoma and granulomatosis with polyangiitis.

Diagnosis

The diagnosis requires clinical and histopathological examination. The oral manifestation of several conditions such as leukaemia, lupus erythematosus and granulomatosis with polyangiitis may mimic PCG, hence routine haematological screening may be needed. Histopathology may reveal surface epithelium with dense chronic inflammatory infiltrate consisting predominantly of plasma cells and some neutrophils (Figure 2).¹

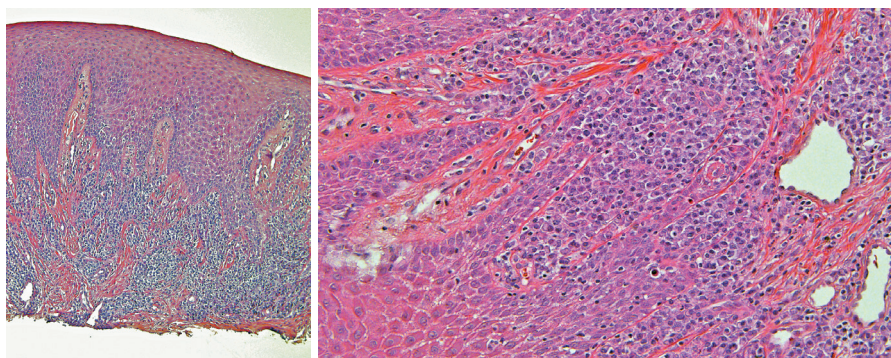


Figure 2: Histopathology of the biopsy specimen revealed dense infiltration of plasma cells in the gingival connective tissue. (10X, 80X Photos by Oral Pathology Centre, Faculty of Dentistry, University of Otago)

Management

Patient's thorough dietary history with records of any health-related products used into the mouth, foods, pets and plants should be taken to rule out any of probable causative factors. PCG may be managed by both medical and surgical approaches. Standard professional oral hygiene and non-surgical periodontal interventions can serve as a first-line therapy.¹¹ Topical (betamethasone rinses, fluocinonide gel, triamcinolone paste) and systemic corticosteroids/immunosuppressive medications have been used with variable results.¹ Treatment may also include excision by laser, scalpel, electrosurgery. However, no treatment clearly stands out as consistently effective.

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