

Concurrent Presentation Of Cutaneous And Oral Soft Tissue Vitiligo: A Case Report And Literature Review

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Abstract

A case of intra-oral vitiligo is reported. The possible differential diagnosis and the importance which detailed history, histology and knowledge of pathogenesis play in arriving at a definitive diagnosis are reviewed.

INTRODUCTION

Vitiligo has been defined as the partial or total loss of skin pigmentation, often in patches. It is also called leukopathia, piebaldism or leukoderma.¹ It has been classified into three types, generalized, localized and universal types. These are based on the distribution pattern. Localized type includes focal, mucosal and segmental. The generalized type includes acrofacial, vulgaris and mixed, while the universal is defined as complete or nearly complete depigmentation.^{2,3}

There is no age limit to the development of this lesion, but the general opinion is that its onset is usually between ages 10-30 years.^{2,3,4} The etiology is largely believed to be associated with autoimmune destruction of cutaneous melanocytes with total loss of melanocytes and melanin pigment in the skin of the affected area.

It affects approximately 1% of the general population and has no racial, sexual or regional differences. Most common sites of involvement are the face, neck and scalp.^{3,8} Mucosal involvement occurs rather frequently around body orifices such as the lips, genitals, gingiva, areola and nipples.³ Involvement of intra-oral mucosa (palate) is

presented. There is generally a paucity of published data on oral mucosal tissue depigmented lesions. Our experience with differential diagnosis is highlighted.

CASE REPORT

A 32 year-old African male presented to the Emergency Dental Clinic at Howard University College of Dentistry. His chief complaint was, "Pain of a lower right tooth." The medical history was unremarkable and not contributory to

the chief complaint. The patient reported seasonal allergies, but was otherwise in relative good health. The clinical examination revealed cutaneous areas noted for depleted pigmentation of the left wrist (Figure 1) and the left leg consistent with vitiligo. Head and neck examination revealed no regional lymphadenopathy and no cutaneous lesion. Upon intra-oral examination, the tissues of the hard palate was found to demonstrate a pattern of depleted pigmentation (Figure 2) consistent with vitiligo. Other intra-oral soft tissues were within normal limit. The mandibular right first molar demonstrated a carious lesion with no radiographic pulpal involvement. This was appropriately treated with caries removal and a sedative restoration.

Figure 1

Figure 1: The left wrist shows area of cutaneous melanin depigmentation.



Figure 2

Figure 2: Posterior Palate shows area of depleted Pigmentation.



DISCUSSION

Vitiligo of oral tissues are very rare and the review of the English literature (Medline) showed that 14 cases of oral cavity vitiligo or similar lesion has been reported to date.

Gingival involvement had earlier been reported in 1959 and 1998 respectively.^{7,9} Vitiligo generally is known to have no racial or sexual preference, but it is considered to be more troublesome in dark skinned people because of the marked contrast between normal and depigmented areas. The psychological problems that stems from this lesion has been well documented.^{9,11} The patient we are presenting however demonstrated no emotional disturbance, as he appears to be coping with his physical appearance very well.

In terms of classification, our patient falls under generalized (mixed) category, based on the fact that more than one general area of involvement was noted. There are involvements on the wrist, the ankle on the same side, and the intra-oral sites respectively. Seung Kyung Hann et al ³ believe that mucosal involvement in a patient with significant progression of vitiligo signifies a poor prognosis factor.

Detailed history along with clinical presentation are very essential in the differential diagnosis of oral tissue vitiligo and this is so because other hypo-pigmented lesions may mimic vitiligo which has been classified under patchy hypomelanosis. Other patchy hypomelanotic lesions will include piebaldism, sclerosis and chemical leukoderma. It has been reported that nevus depigmentosis is the most often encountered differential diagnosis in vitiligo clinics. This

particular lesion is a congenital and stable localized leukoderma that has discrete, regular, or often serrated appearance.³ Vitiligo on the other hand is acquired and characterized by well circumscribed milky white macules devoid of identifiable melanocytes.^{4,7} Other authors in their studies have linked the incidence of vitiligo with positive family history.^{3,12} This finding suggests that a genetic predisposition may in fact exist for vitiligo. Other differential diagnosis will include tinea versicolor, pityriasis alba, post inflammatory hypopigmentation and hypopigmented mycosis fungoides. However, these have not been reported to have oral mucosa presentation and the pathogenesis is at variance to that of vitiligo.

Histological examination might be the only way to come to a definitive diagnosis when confronted with lesions that clinically mimics vitiligo in mucosal tissues .^{7,13,14,15,16}

Lichen sclerosus et atrophicus is a classical example. Oral involvement of this lesion is equally rare, and is not usually accompanied by skin or genital lesion.¹³ This clinical feature clearly differentiate it from vitiligo. It has been reported that piebaldism without a white forelock can appear as white patches on the flexural parts of the legs and may be misdiagnosed as vitiligo. Normal skin islands in the white patch with a positive family history can give differential points from vitiligo.³

In conclusion, we believe that the key to differential diagnosis of oral tissue vitiligo in particular rests on a combination of factors which include clinical presentation, good understanding of disease pathogenesis, detailed medical history, and histology

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