



Does Vitiligo Affect the Gingiva?

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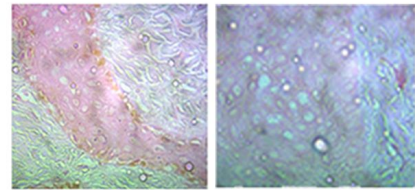


1 Introduction

- ▶ Vitiligo or leukoderma is a skin disease with a world-wide prevalence ranging from 0.5% to 4%
- ▶ Characterized by partial or complete loss of pigment-producing melanocytes within the epidermis or mucosa
- ▶ Clinical lesions are asymptomatic, flat, well-demarcated macules and patches of pigment loss; their size varies from few to several centimeters, which may or may not be surrounded by macroscopic hyperpigmentation
- ▶ Most noticeable in darkly pigmented individuals
- ▶ Vitiligo has been classified into three types, focal generalized, and segmental ¹

3 Histopathology

- ▶ Very mild or no pigmentation in the epithelium
- ▶ Epidermal vacuolization
- ▶ Loose fibrous connective tissue with no evidence of inflammatory cells
- ▶ Melanocytes did not show immunoreactivity for HMB-45 antibody ⁴



normal gingival tissue

epithelium with vitiligo

2 Etiopathogenesis

i. Genetics

Vitiligo is a typical polygenic multi factorial disorder, involving numerous different susceptibility genes (HLA)(PTPN22)(CTLA4)(TYR)(TGFB2)(UVRAG)(NLRP1) and (SLEV1) on chromosome 17p13 a linkage signal in systemic lupus erythematosus in generalized vitiligo ²

ii. Oxidative Stress

Vitiligo patients have an intrinsic defects that reduce the capacity of melanocytes to mitigate cellular stress ROS

iii. Environment

An exposure of phenolic and catecholic chemicals found in dyes, resins and leather may play a central role in disease onset

iv. Immunity

Tyrosine hydroxylase (TH) antibodies (MCHR1) antibodies, IgM and IgG, anti-thyroglobulin antibodies and anti-thyroid antibodies. Cytotoxic CD8+ T cells are responsible for the destruction of melanocytes ³

Gingival Vitiligo

- ▶ The incidence of vitiligo in the gingiva is rare
- ▶ It may occur only in the gingiva (Localized), or it may be an effect of generalized vitiligo
- ▶ Vitiligo of the gingiva could result in cosmetic debility- which can in turn affect the mental status of the patient ⁴



4 CONCLUSION

Vitiligo is a common pigmentary disorder, The melanocytes which produce melanin pigments become inactive as a result of genetic and environmental factors, oxidative stress, innate and adaptive immunity, Vitiligo can affect the gingiva and other oral mucosa

Reference

- ▶ Your Bibliography: Forschner, T., Buchholtz, S., & Stockfleth, E 2007 Current state of vitiligo therapy ? evidence-based analysis of the literature
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