## FACIAL PSEUDOCHROMHIDROSIS INDUCED BY LEAD

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A young girl presented with dark blue black smoky pigmentation on her face which she presumed started after chloroquine therapy for malaria. Histology revealed a normal picture except some yellow brown granules in the superficial part of the stratum corneum. A strict vigilance on the patient after admission revealed that she had been applying lead pencil powder on her face to gain sympathy from her parents. An unusual presentation of pseudochromhidrosis is reported with relevant review of literature.

Key words: Chromhidrosis, Pseudochromhidrosis

#### Introduction

Apocrine chromhidrosis, a rare entity, refers to secretion of colored sweat. It may be of two clinical varities - facial and axillary. It is to be distinguished from eccrine chromhidrosis, which may be localised or generalised; and from false chromhidrosis in which either eccrine or apocrine sweat may be colored by exogenous materials or micro-organisms. We report such a case of false chromhidrosis due to application of lead pencil powder mimicking apocrine chromhidrosis.

## Case Report

A 16-year-old girl presented at the OPD, Skin Institute & School of Dermatology, New Delhi, with periorbital and malar dark blue-black smoky pigmentation of recent onset (Fig.1). She denied any history of pruritus or burning sensation but admitted history of malaria 2 months back and receiving a course of chloroquine. The fever subsided while chloroquine toxicity came into the picture in the form of giddiness and fainting on exposure to sun. Within the next two days, she noticed the black discoloration around her eyes and upper cheeks which could easily



Fig.1. Dark blue - black smoky pigmentation of periorbital and molar areas.

be wiped out by soap and water, and cleansing lotion only to reappear within few hours. It revealed bright blue fluorescense under Wood's lamp. In the OPD, the pigmentation was wiped off by rubbing vigorously with cleansing lotion. After waiting for an hour or so, her face become colored again. Therefore, we thought that she might be applying some colored

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agents over her face. Although a provisional clinical diagnosis of localised apocrine/eccrine chromhidrosis was made, we also thought of false chromhidrosis and admitted her for close watch.

Routine hemogram and other investigations were normal. Skin biopsy showed a normal histological pattern except some yellow-brown granules in the superficial aspect of stratum corneum. Special stains with Perl's stain, staining with neutral mucopolysaccharide and ferricyanide solution for Schmorl's reaction were negative. A strict vigilance on the patient after admission revealed that she had been applying lead pencil powder on her face to gain sympathy from her parents.

#### Discussion

Apocrine chromhidrosis was originally described by James Younge way back in 1709 and later on was highlighted by LeRoy de Mericourt (1863 & 1884). The colored sweat may be yellow, blue, green or black. Very little attention was then given to the condition until 1954 when Shelley and Hurley, described additional cases, identified facial apocrine glands as the source of colored secretions and suggested lipofuscin granules as the responsible pigment normally found in granular form in the apo-

crine gland. Eccrine chromhidrosis is further a rare entity and seen only on application of external agents.

Apocrine chromhidrosis is normally seen over face and axillae. The disorder, regardless of its location, is not noticed until adolescence or early adult life since the apocrine glands attain maturity after puberty. The secretion, often turbid, at times thick in consistency, dries quickly leaving a shiny residue and may be removed by soap and water but not by organic solvents. After an episode of colored sweating, the patients are generally symptomless for 2-3 days.

Our patient was an adolescent girl and at this age one might have apocrine chromohidrosis. The color could easily be removed by washing which was in favour of this rare entity. However, false or pseudochromhidrosis can mimic apocrine chromhidrosis; and one must have that clinical index of suspicion to diagnose such a rare disease keeping in mind the popular saying - "If you diagnose a rare disease, you will rarely be correct." It was evident in the present case that ultimately lead pencil powder was the inducing factor.

#### Reference

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# Contributors Please notes

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Color photos will be published if author bears expense for printing color photographs.

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