THE DEPIGMENTED “WHITE BITE MARK” OBSERVED IN DARK-SKINNED INDIVIDUALS: TWO CASE STUDIES

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ABSTRACT
Depigmented bite marks observed in dark skinned individuals can be of value in forensic investigations. The ageing of bitemarks is controversial, and no universally acceptable guidelines are presently available which accurately predict this complex process. The presence of both a newly inflicted and a depigmented “white bite mark” in a victim indicates a time interval between the biting incidences. Skin is an organ of the human body capable of healing when injured. The repair process leaves tell-tale signs at both the macroscopic (visual) and microscopic (histologic, histochemical and biochemical) levels. The depigmented “white bite mark” clearly demonstrates a trauma-induced absence of melanocytes and an associated absence of melanin within the epithelium. This process is not unique to bite mark injuries but observed in general trauma, freeze burning and following application of skin lightening creams. Two cases will be discussed, showing visual images of the depigmented bite marks as well as the histological assessment of the affected tissue. The observation of a re-epithelialized depigmented bite mark indicates an interval of at least 5-days following injury.

KEYWORDS: Forensic Odontology, Bitemark, Depigmentation

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