Hemosiderotic dermatofibroma: A case of clinical, dermoscopic and histopathologic correlation

Gaurav Singh
University of Miami Miller School of Medicine, USA

A 6 year-old African-American woman with no significant past medical history presented with a raised lesion on the right lower leg. The lesion was characterized by progressive growth for 1.5 years. Bleeding from the lesion prompted medical attention. Dermatological exam revealed a firm, dome-shaped violaceous nodule with central ulceration and peripheral yellow-white scale, 3 cm in diameter. Dermoscopy revealed central hemorrhage with surrounding red homogenous areas and diffuse white scar-like structures. Peripheral pigment network was absent. Differential diagnosis included pyogenic granuloma, nodular melanoma, and keratoacanthoma; a wedge biopsy was performed.

Histopathological exam showed epidermal table-top induction with a dense fibrous and histiocytic infiltrate, prominent siderophages, and slit-like vessels. Peripherally, there was collagen trapping. Cell immunohistochemistry was positive for FXIIIa, but negative for CD34, S100 protein, HHV8, and CD31. Results were consistent with hemosiderotic dermatofibroma (DF). Primary excision was performed and cross-section showed red-brown hemorrhage, also consistent with the diagnosis.

Hemosiderotic DF, a rare variant, should be included in the differential diagnosis for a slow-growing tumor-like lesion on the lower extremities. This lesion lacked the typical dermoscopic features of a DF such as central white patch and fine pigmented network, necessitating pathologic confirmation. Standard histopathological views may appear like that of Kaposi Sarcoma, and dermatofibrosarcoma protuberans should be ruled out. Special stains may thereby be required. This diagnosis has peculiar clinical, dermoscopic, and histopathologic features in addition to a broad differential diagnosis, making it a formidable diagnostic challenge.

Biography

Gaurav Singh is a junior MD/MPH candidate at the University of Miami Miller School of Medicine. He has presented his research on psoriasis to international audiences, and also has numerous publications in the fields of schizophrenia and Inflammatory Bowel Disease.

GSingh@med.miami.edu

Notes: