

What Is Your Diagnosis?



An 11-year-old girl presented with a slowly enlarging, 14×15-mm, erythematous, pedunculated papule on the right side of the scapula of 6 to 8 weeks' duration. The lesion was tender and bled easily. The lesion was biopsied followed by electrodesiccation of the base. The patient presented 8 weeks later with a 7-cm erythematous plaque composed of a central 1-cm fungating nodule surrounded by more than fifty 1- to 2-mm erythematous papules.

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The authors report no conflict of interest.

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The Diagnosis: Recurrent Lobular Capillary Hemangioma With Satellitosis (Warner and Wilson-Jones Syndrome)

Although it is more commonly recognized, the term *pyogenic granuloma* is a misnomer in the case of our patient because the lesion was neither pyogenic nor granulomatous. Rather, it was composed of a proliferation of benign blood vessels separated into lobules by a fibrotic stroma; hence, the more accurate diagnosis is lobular capillary hemangioma (LCH) (Figures 1 and 2). Lobular capillary hemangiomas are common vascular lesions that can arise anywhere on the skin or mucosa. They can occur at any age and have a slight male predilection, though mucosal lesions are more common in pregnant women.^{1,2} Approximately one-third of lesions occur in the head and neck region or upper distal extremities, and 15% occur on the trunk.¹ Lesions can be associated with history of prior trauma, use of certain medications (eg, isotretinoin, indinavir, erythropoietin, 5-fluorouracil, capecitabine, mitoxantrone, docetaxel, epidermal growth factor receptor inhibitors, oral contraceptives), or pregnancy.³ Common treatment modalities include cryotherapy, laser therapy, simple shave excision with electrodesiccation and curettage, and complete surgical excision with direct closure.^{1,2} Recurrence of LCHs after treatment is not uncommon and varies depending on the location of the lesion and mode of treatment.^{1,3} One retrospective study of 408 cases of LCH showed a 3.6% recurrence for surgical excision and closure compared to 10% for shave excision and/or curettage and cautery.²

Lobular capillary hemangiomas may recur as isolated lesions or may be accompanied by multiple satellite lesions (Warner and Wilson-Jones syndrome). Satellitosis is a rare but well-described phenomenon.³ Most cases have been reported in patients younger than 20 years and have presented on the back in the scapular region.⁴ Satellite lesions typically develop 1 to 4 weeks after initial treatment around the site of the primary lesion, with or without recurrence of the original lesion.^{4,5} The satellite lesions tend to be painless, bright red papulonodules varying in size from 1 mm to 1 cm, with the largest lesion usually seen at the site of the previously treated primary lesion.^{5,6} Histologically, the satellite lesions tend to resemble the primary lesion.

Although the precise etiopathogenesis of this phenomenon is unclear, an elevation in vascular endothelial growth factor following the trauma from the initial treatment of the lesion has been proposed.³

Multiple therapeutic options have been described in the treatment of recurrent LCHs, including clinical observation only, as spontaneous involution has been reported to occur within 6 to 12 months in many cases.^{4,6} Other treatment modalities include



Figure 1. An erythematous plaque with a central 1-cm fungating nodule surrounded by more than fifty 1- to 2-mm erythematous papules.

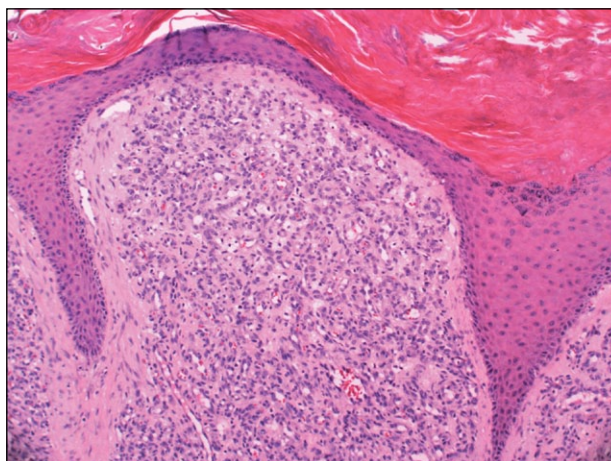


Figure 2. A punch biopsy showed an attenuated epidermis overlying a proliferation of blood vessels within the dermis separated into lobules by fibrotic stroma (H&E, original magnification $\times 20$).



Figure 3. The lesion showed substantial improvement after 4 monthly treatments with a laser utilizing 532- and 1064-nm wavelengths.

surgical excision, curettage and electrodesiccation, CO₂ laser removal, compression, systemic steroids, intense pulsed light therapy, and topical imiquimod.^{3,4,7} The patient underwent 4 monthly treatments with a laser utilizing 532- and 1064-nm wavelengths, which showed substantial improvement (Figure 3).

In conclusion, it is important for dermatologists to be aware of the clinical features of this benign phenomenon, as LCH's may inadvertently be misdiagnosed as a cutaneous malignancy or metastasis.

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