Cutaneous Secondary Syphilis: “The Great Skin Mimicker”

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Clinical Image

A 37-year old man who has sex with men presented to the Infectious Diseases clinic for rash. The rash was symmetrical, diffuse and maculopapular (Figure 1A and 1B). It occurred 5 weeks after the development of multiple genital chancres. The polymorphous tender lesions vary between 0.5 cm to 2.0 cm in diameter. No condylomata lata or oral mucosal lesions were identified. Furthermore, the patient had no signs to suggest meningoencephalitis or optic neuritis. The picture was consistent with cutaneous secondary syphilis. Skin biopsy (Figure 1C and 1D) revealed typical spirochetes and rapid plasma regain came back reactive. HIV 4th generation test was non-reactive. Benzathine penicillin G given single dose IM resulted in complete resolution of the rash in 3 weeks. Concomitantly with the opioid crisis, syphilis has re-emerged as an important cause of rash. Timely diagnosis and treatment are pivotal to prevent ongoing transmission and the development of irreversible tissue damage.

Figure 1: The epidermis shows spongiosis and exocytosis. Within the dermis there is a superficial and deep perivascular lymphohistiocytic infiltrate which adopts a focal band-like distribution. Rare plasma cells are present (Hematoxylin and eosin, original magnification 20x). Numerous spirochetes are seen in the lower portion of the epidermis (Treponema pallidum stain, original magnification 40x).