Granulomatous Secondary Syphilis

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August 2, 2022

Abstract

The classic chancre of primary syphilis is painless and frequently neglected. We present a 20-year-old male complaining of red, tender, enlarging, skin lesions on the forehead, left nose, and left forearm for almost 2 months with systemic symptoms of secondary syphilis, granulomatous type.

Title: Granulomatous Secondary Syphilis

Article type : Image challenge

A 20-year-old male presented to our clinic with multiple red, tender, enlarging nodules on his forehead, nose, and forearm for six weeks, accompanied by severe headaches and photophobia. Prior to the eruption of the skin lesion, the patient had fatigue and enlarged cervical lymph nodes. Despite taking oral prednisone 20 mg daily for four days, he showed little improvement. Two well-defined erythematous nodules measuring 1cm x 0.5cm were found on the forehead, with numerous others on the upper arms (Figure 1). Nodules on the forehead were accompanied by lymphadenopathy in the cervical region. Punch biopsy of the lesion revealed a dense dermal granulomatous infiltrate with lymphocytes and numerous plasma cells. Immunohistochemical staining for *Treponema pallidum* identified numerous spirochetes, confirming a diagnosis of secondary syphilis. Treatment with benzathine penicillin G resulted in the complete resolution of symptoms.

Granulomatous inflammation, as seen in this case, is an atypical feature of secondary syphilis. Unlike typical secondary syphilis, granulomatous secondary syphilis usually presents with a papular or nodular rash at onset, sparing the palms and soles.[1] Most commonly, these lesions affect the head, neck, trunk, and extremities.[1] This unusual presentation further contributes to the difficulty in clinical diagnosis.[1] Secondary syphilis lesions may also exhibit a sporotrichoid pattern, which may be explained by lymphatic dissemination of *Treponema pallidum* .[2] As opposed to other sporothrichoid conditions, which involve the extremities with or without associated adenopathy, sporotrichoid secondary syphilis affects the lymph nodes of the postauricular, occipital, and posterior cervical regions.[2] Psoriasis, viral exanthem, cutaneous lymphoma, granuloma annulare, and sarcoidosis are among the differential diagnoses of secondary syphilis. Because of its wide range of clinical and histopathological features, syphilis is aptly termed the great mimicker. Histologically, plasma cell-rich dermal infiltrates are common, whereas granulomatous inflammation is rare. It is important to consider the diagnosis of secondary syphilis when these histopathologic findings are corroborated by patient history.[1]Serologic testing is the mainstay of screening and diagnosing syphilis.[1,2] Even though detection of *Treponema pallidum* by immunohistochemistry is widely available, it is expensive. Benzathine penicillin is the treatment of choice for all stages of syphilis.[1,2]

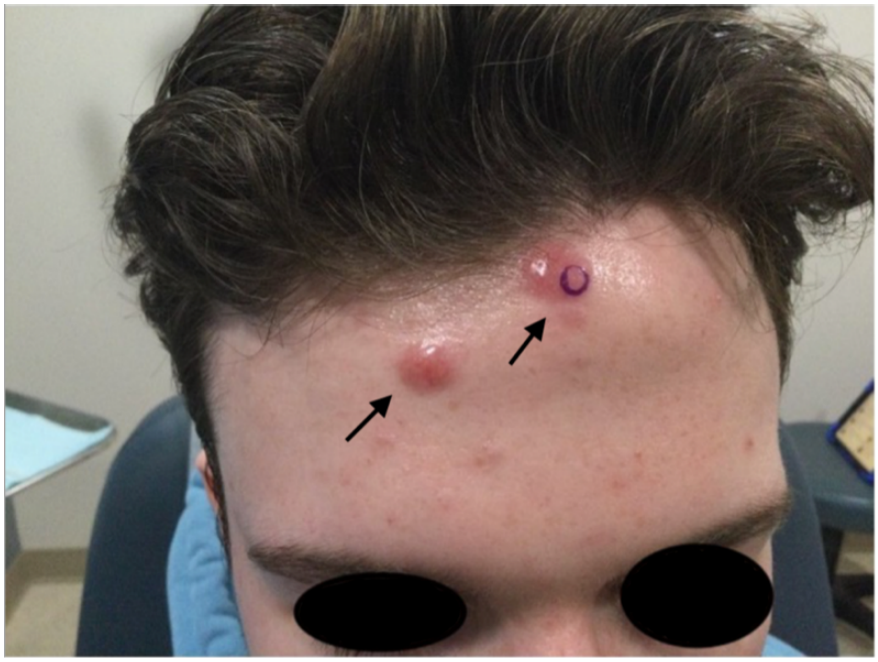

Figure 1: Multiple 1 cm erythematous nodules and subcutaneous mass on the forehead.

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