

A Patient with Primary Syphilis of the Finger

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Sir,

Extragenital primary lesions account for 5–10% of syphilitic chancres (1–4). The head is the area most often involved, with possible localization on lips, tonsils, tongue, gums, nostrils, cheeks, eyelids, conjunctives. Lesions may also appear on the anus and perianal region, nipples, areolae, fingers, trunk, abdomen and extremities (1, 2, 4, 5).

Like genital primary lesions, extragenital chancres are accompanied by regional adenitis (5). We present a case of extragenital primary syphilis localized on a finger.

CASE REPORT

A 33-year-old man, a wood dealer and frequent traveller in Eastern Europe, referred to us for evaluation of an asymptomatic plaque located on the palmar surface of the second phalangeal bone of the left middle finger. The lesion started a few weeks prior to examination and failed to heal with topical antibiotics. He had had sexual contact with unknown women. He denied having had systemic symptoms, antecedent traumatic injuries or contact with animals. Physical examination revealed a 1.7-cm erythematous-squamous, infiltrated, indurated, eroded, firm plaque covered with scale crusts. The regular borders were slightly raised and sharply demarcated from normal skin (Fig. 1). The remainder of the mucocutaneous examination was unremarkable.

In the left axilla, enlarged, firm, movable, non-tender, painless lymph nodes were palpated. Routine laboratory tests and a chest radiograph were normal. No fungi were found by microscopic examination of lesion scales and crusts. No antibodies to human immunodeficiency virus were found. Detection of *Treponema pallidum* by dark-field microscopy from the finger lesion was repeatedly negative. The serological

results for syphilis were: VDRL 1:32, TPHA 1:1280, FTA-ABS (+) and IgM-ELISA test positive.

Incisional biopsy specimens were obtained from the cutaneous plaque. Routine histologic examination showed an ulcerated epidermis and a dermal dense infiltrate consisting of lymphocytes and plasma cells, with only a few histiocytes and neutrophils, accompanied by intimal proliferation and swelling in capillaries (Fig. 2). Histochemical stains for infectious organisms (mycobacteria, *Leishmania*, fungi) were negative.

The patient was treated with one intramuscular 2.4 million unit penicillin G benzathine injection (6) and the lesion cleared 2 weeks following treatment. After 3 months, the serological results showed VDRL 1:2, TPHA 1:1280, FTA-ABS + + + +. Six months later the serological results were VDRL negative, TPHA 1:640 and FTA-ABS + +.

DISCUSSION

On the basis of clinical, serologic and histologic features, the diagnosis was consistent with extragenital primary syphilis of the finger. There are at present few reports of extragenital primary syphilis, other than anorectal and oropharyngeal primary lesions. The percentage of chancres on the fingers used to range from 5% to 14% of extragenital chancres (7), but now they are rare (7–10).

These lesions may be acquired occupationally, by non-venereal contact or in sexual foreplay (5). The era before disposable gloves, primary lesions of the fingers occurred in physicians, dentists and nurses through direct contact with infectious ulcers in their patients (1, 2, 5). In most cases, there was only a single chancre; multiple chancres rarely involved one or more fingers (8). Bipolar chancres on the fingers and



Fig. 1. Extragenital chancre of the left middle finger. Regularly edged, indurated and eroded erythematous-squamous plaque.

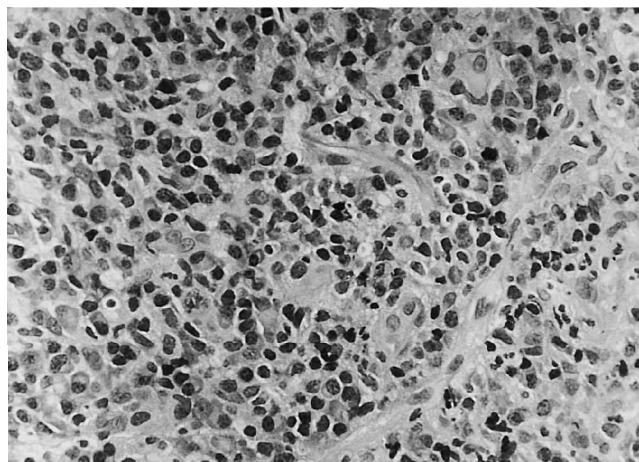


Fig. 2. Incisional biopsy stained with hematoxylin & eosin. At the dermis, dense infiltrate of lymphocytes and plasma cells, with intimal proliferation and swelling in capillaries.

genitals have been described as likely due to simultaneous transmission or autoinoculation (7).

In general, the morphology of extragenital chancres parallels those on the genitals, although variations occur (3). Cutaneous primary syphilitic lesions can be atypical, often widespread, deeply infiltrated, ulcerated or with impetiginoid or ectimoid features (1, 7–9). The clinical pattern of dactylitis, periungual paronychia and paronychia has been reported on the fingers (7, 10).

The unusual case of extragenital chancre and the variable clinical appearance of chancre on the fingers frequently result in incorrect or delayed diagnosis, because syphilis is rarely suspected in such cases.

Differential diagnosis includes, at first, both clinically and by laboratory procedures, primary complexes of primary cutaneous tuberculosis, cat-scratch disease, tularemia and sporotrichosis. However, primary syphilitic lesions of the fingers must also be distinguished from cutaneous leishmaniasis and atypical mycobacterial skin infections, which sometimes develop a primary complex, as well as staphylococcal lymphangitis and foreign body granulomas (2, 3, 5). Furthermore, viral diseases, lymphomas and cancers with nodal metastasis must also be excluded.

The patient's history may evoke suspicion. The presence of typical lymphadenopathy, as in our report, is helpful when considering the possibility of syphilis. In fact, a papuloulcerative lesion with regional lymphadenopathy should raise one's suspicion of primary syphilis. Where epitrochlear or axillary

adenitis are painless, serological tests for syphilis are indicated (5).

In conclusion, chancre of the fingers can be diagnosed only when the clinician maintains a high index of suspicion of syphilis, "the great simulator".

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Type 2 Segmental Cutaneous Leiomyomatosis

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Sir,

We read with interest the report on "zosteriform and disseminated lesions in cutaneous leiomyoma" by Agarwalla et al. (1). We would like to suggest categorizing this case as a type 2 segmental manifestation of cutaneous leiomyomatosis (2). Agarwalla et al. noted a few leiomyomas on their patient's back, and from the title of their report we conclude that these lesions were disseminated, reflecting heterozygosity for the gene of this autosomal dominant trait. By contrast, the agminated leiomyomas on the left side of the chest would reflect an area of skin in which the corresponding wild-type allele has been lost at an early developmental stage, which is why a pronounced involvement is superimposed on the ordinary non-segmental phenotype (3–5). Apparently, early loss of heterozygosity occurs rather frequently in cutaneous leiomyomatosis. At least 9 cases suggesting a type 2 segmental manifestation have previously been documented (2, 5, 6).

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Editors comment: Agarwalla et al. have been given the opportunity to respond to this letter.