

PERFORATING SYPHILITIC CHANCRE

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A middle aged person had perforating syphilitic chancre of the shaft of the penis. The underlying corpus cavernosum remained unaffected and could be seen through the perforation. There was no evidence of secondary bacterial infection or other concomitant venereal disease. Extreme necrosis of the ulcer due to obliterative endarteritis and impairment of healing due to antifibroblastic activity of topical corticosteroid are suggested as possible factors in the development of perforation of the ulcer.

Key words : Perforating chancre, Syphilis.

The primary syphilitic chancre is typically a rounded, superficially ulcerated, deeply indurated and slightly raised lesion. The sites commonly involved in men, are the prepuce, coronal sulcus, glans and frenum.¹ Long incubation period, indolence, slow course and satellite adenopathy are its outstanding features. But typical chancres of Hunterian description are seldom seen now-a-days. The size and conspicuousness of chancre depends on the virulence of the organism, the resistance of the tissue, the site and mode of inoculation, the degree of secondary infection and the intensity of local reaction.² Many variations of syphilitic chancres described include dwarf or giant chancres, papulo-erosive, papyraceous (covered with papery scab), penetrating, phagedenic and mixed chancres (syphilis and chancroid).¹ Sometimes syphilis may begin with an erosive balanitis known as Follman's balanitis. Marked solid oedema that accompany the chancres of prepuce or glans is called oedema indurativum. Chancre redux (monorecidive) is the name given to the relapsing lesion of primary syphilis at the same site of previous chancre.³ If it is a gummatous recurrence it is called pseudochancre redux. Here we report a case of primary syphilitic ulcer that penetrated the skin of the shaft of the penis, from outside, exposing the underlying corpus cavernosum.

Case Report

A 40-year-old male was seen for a painless ulcer of 3 weeks duration on the penis. He had extra-marital hetero-sexual exposure one month prior to the development of the genital ulcer. He did not get any specific treatment but had been applying a skin ointment containing triamcinolone acetonide, neomycin, gramicidin and nystatin for ten days, after which the ulcer increased in size and depth. There was no history of associated phimosis or subprepuccial discharge.

Examination revealed a well-defined, circular, painless and slightly indurated ulcer of 2 cm diameter on the skin of shaft of the penis (Fig. 1). The base of the ulcer at its periphery showed dull-red granulation tissue while there was a perforation of 7 mm diameter at its centre through which the corpus cavernosum could be seen which was free from any ulceration. When a probe was passed through the perforation it was found communicating with the prepuccial sac. The prepuce could be retracted fully over the glans penis and there was no subprepuccial or urethral discharge. Superficial inguinal glands on both sides were enlarged, discrete, firm and non-tender. There were no skin or mucous membrane lesions elsewhere.

Routine laboratory tests on blood, urine and stools were normal. Dark-field microscopic examination of the serum taken from the ulcer showed many *Treponema pallida*. There were

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Fig. 1. A perforating chancre on the shaft of the penis. Corpus cavernosum is seen through the perforated chancre.

no Vincent's spirochaetes. Gram staining of the smear did not show any bacteria. Tissue smear was negative for Donovan bodies. Urine 2 glass test showed no abnormality. Blood VDRL test was reactive 1 : 32 on two occasions.

The patient was treated with benzathine penicillin 2.4 mega units intramuscular as a single dose. There was a febrile Herxheimer reaction 6 hours after the injection. Wife of the patient was also treated simultaneously in a similar way even though there was no clinical or serological evidence of syphilis in her. Follow up of the patient three weeks after treatment revealed healing of the ulcer, though the perforation of the skin of shaft of penis showed no tendency for closure. There was a gradual fall in the reaginic titre to non-reactivity at the end of 3 months after treatment.

Comments

Development of a single, well-defined, painless and indurated ulcer after an incubation period of 3 weeks, in our patient suggested a clinical diagnosis of syphilitic chancre. On the

skin of the penis, chancre is usually large and characteristically stands out sharply defined against a background of the normal-looking skin.⁴ These features were quite evident in our case also. Demonstration of *Treponema pallidum* by dark-field microscopy, reactive blood VDRL test and febrile Herxheimer reaction and prompt healing of the ulcer after specific treatment further strengthen the diagnosis. It is not uncommon to see perforation of subprepuccial ulcers due to associated fusospirochaetosis. The exact mechanism of perforation of chancre in our case is not understood. There was no clinical or laboratory evidence of secondary bacterial infection of the ulcer. Extreme necrosis and sloughing of the tissue may occur due to syphilitic obliterative endarteritis.² These changes if occur in thin penile skin, may lead to perforation of the ulcer. The corpus spongiosum is relatively resistant to fusospirochaetal invasion.² In spite of its close proximity to the syphilitic chancre, the underlying corpus cavernosum remained unaffected in our patient. Systemic corticosteroids are well known to cause exacerbation and silent perforation of peptic ulcers.⁵ Corticoids may interfere with the healing of ulcers due to its antifibroblastic activity. In the late stage of chancre, histopathological studies show fibroblastic proliferation and the ulcer heals with a thin atrophic scar. The possibility of interference of healing of the ulcer by triamcinolone, applied by the patient, leading to its perforation cannot be completely excluded in our patient.

References

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