



Case Report

Tuberculous epididymo-orchitis and papulonecrotic tuberculids of the glans penis

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ABSTRACT

A 25-year-old male presented with an asymptomatic papulo-pustular eruption over the glans penis. The clinical features and investigations were suggestive of papulonecrotic tuberculids of the glans penis. He had an underlying bilateral active tuberculous epididymo-orchitis and a healed focus of pulmonary tuberculosis.

KEY WORDS: Genital tuberculosis, Tuberculids, Penile tuberculids

INTRODUCTION

Tuberculosis is still a major cause of morbidity in developing countries like India. Cutaneous tuberculosis is also not uncommon in our country. Tuberculids represent a cutaneous hypersensitive response to an underlying focus of tuberculosis. Papulonecrotic tuberculids over the glans penis is a rare occurrence. We report papulonecrotic tuberculids of the glans penis manifesting secondary to bilateral tuberculous epididymo-orchitis.

CASE REPORT

A 25-year-old male presented with recurrent crops of multiple asymptomatic papulo-pustules over the glans penis of 3 months' duration. These used to resolve spontaneously in a few days with scarring. He had an asymptomatic, right sided scrotal swelling of the same duration. He was treated with injection benzathine

pencillin, systemic antibiotics and various topical applications before referral. There was no history of trauma, drug intake, fever, cough and constitutional symptoms. There was no personal or family history of tuberculosis. The patient denied exposure to sexually transmitted diseases. He had not been vaccinated with BCG.

Examination revealed a few erythematous, nontender, papules, pustules, and confluent pitted scars over the glans penis (Figure 1). There was right sided hydrocele with a firm, indurated, mildly tender epididymis and a thickened vas with orchitis. There was thickening of the epididymis and vas with a beaded appearance on the left side. There was no significant inguinal lymphadenopathy. Muco-cutaneous, appendageal and systemic examinations were normal.

The following are results of relevant investigations: neutrophilia (73%) absolute eosinophil count 150, ESR

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Figure 1: Lesions involving glans penis

(Westergren's method) 70 mm/hr, blood VDRL non-reactive, HIV-1 and-2 (ELISA) negative, and Mantoux test strongly positive (25 x 20 mm induration). The chest X-ray showed evidence of healed tuberculosis. X-ray and ultrasound KUB were normal. Ultrasound examination of the scrotum showed evidence of hydrocele, and patchy calcifications of the epididymis, vas, and seminal vesicles on both sides. Urine culture for bacteria/AFB growth was negative. Pus from a pustule showed no organisms on Grams and Ziehl-Neelsen staining and culture. The patient refused semen analysis. Fine needle aspiration from a nodule of the vas showed features consistent with tuberculosis. Histopathology from a papule over the glans was consistent with papulonecrotic tuberculids.

He was put on antituberculo treatment (ATT) for six months. Two weeks after the initiation of therapy, the existing lesions over the glans had healed. Further follow-up showed improvement in the condition and no recurrence.

DISCUSSION

The concept of tuberculids was introduced by Darier in 1896. Tuberculids are symmetric eruptions in response to an internal focus of tuberculosis in an individual with a moderate or high degree of immunity. Papulonecrotic tuberculids are asymptomatic, symmetrical, dusky red papules which heal with scarring. The sites of predilection are the elbows, knees, legs, hands, feet, but the ears, face, buttocks and penis

can be affected.¹ Involvement of the glans penis was first described by Hellerstrom and later by Bafverstedt and Hageman and Granroth.² The occurrence is commoner in Japan and has been termed as penis tuberculids.³ A few reports have been documented from other parts of the world from India.^{2,4,8}

The basic diagnostic criteria for papulonecrotic tuberculids are: a strongly positive Mantoux test, typical clinical features, a tuberculoid histology with endarteritis and thrombosis of the dermal vessels, and response to ATT.² The histological findings may be sometimes inconclusive, showing a non-specific or tuberculoid picture.⁴ The spectrum of histological findings ranges from acute leukocytoclastic vasculitis in early lesions to mature granuloma formation in older ones. The proof of diagnosis rests on the unequivocal response to ATT.⁵

An analysis of 91 cases of papulonecrotic tuberculids showed a deep focus in about one-third of the cases (38%). Involvement of lymph glands was the commonest and a urogenital focus the least common.⁹ The majority of cases of papulonecrotic tuberculids of glans penis reported^{2-4,6,8} earlier lacked an underlying tuberculous focus, but our case had an active focus.

Our case was unique in that there was an association of healed pulmonary focus, bilateral active tuberculous epididymo-orchitis with involvement of the seminal vesicles and papulonecrotic tuberculids of the glans penis, which to the best of our knowledge has not been reported earlier. Kashima et al reviewed 26 cases of penile tuberculids reported for the last 13 years, who found co-existing tuberculosis elsewhere in four cases only.¹⁰

Although tuberculosis is common, tuberculids of the penis are rarely reported even in endemic countries like India. Diagnosis is possible by awareness of the condition, strong suspicion and relevant investigations. An underlying active or healed focus of tuberculosis should be thoroughly searched for.

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Murthy SC, et al: Tuberculous epididymo-orchitis and papulonecrotic tuberculids of the glans penis

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Announcement

Asian Society for Pigment Cell Research (ASPCR)

This is to announce the formation of Asian Society for Pigment Cell Research (ASPCR) under the umbrella of International Federation of Pigment Cell Societies (IFPCS). The parent body (IFPCS) is an organization composed of regional or national societies which are specifically dedicated to the study of and investigations on pigment cells and pigmentation.

The purpose of this Society will be to promote research on pigment cells and pigmentary disorders in a broad sense and the exchange of information among its members, as well as members of the international community. This Society will provide the forum for interactive discussions by bringing together clinicians (dermatologists and other physician with broad interest in pigmentation) and basic researchers from various disciplines, including developmental biology, biochemistry, cell and molecular biology, immunology, pharmacology and toxicology, chemistry and physics. The other benefits of joining this society are: subsidized subscription to the journal 'Pigment Cell Research' (the official publication of the International Federation of Pigment Cell Societies), eligibility for travel awards to attend annual meeting as well as International Pigment cell Conferences (International Pigment cell Conferences are the world assemblies held once in 3 years), IFPCS Visiting Scientist Award (The IFPCS has set up a fund to support investigators in pigment research who wish to take a short international sabbatical trip to further their research).

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