

# Penile Tuberculosis in an Infant: A case report and review of literature

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سجلت حالة لتدرن أولي لقضيب رضيع عقب عملية ختان ورافق ذلك جيباً درنياً في المنطقة الاربية اليمنى

**Summary:** A case of primary penile tuberculosis in an infant following circumcision, in which a right inguinal tuberculous sinus was associated, is reported.

**Résumé:** Un cas de tuberculose primaire du pénis est décrit chez un enfant après circonsion, avec association du sinus tuberculaire inguinal droit.

## Introduction

Tuberculosis of the penis is a rare clinical entity. At one time it was not uncommonly seen as a complication of ritual circumcision, when it was the practice of the operator to suck the circumcised penis to achieve haemostasis and many of the operators had open pulmonary tuberculosis.<sup>1</sup>

## Case report

A 7-month-old infant was seen in the outpatient clinic with a recurrent, discharging sinus in the right inguinal region of 5 months duration. He was circumcised at 4 weeks

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Figure 1. Nodular lesion seen on the distal penile skin.

of age by a villager practised in circumcision. He had no immediate complications following the circumcision but developed a right inguinal swelling approximately 4 weeks after the operation. The swelling subsequently discharged some pus and a chronic, non-healing sinus developed. He received various antibiotics from the local doctors without any effect. He had no history of coughing, weight loss, fever, urinary symptoms or other systemic manifestations. There was no history of tuberculosis in the family.

Examination revealed a healthy looking infant. On the right side of the penis there

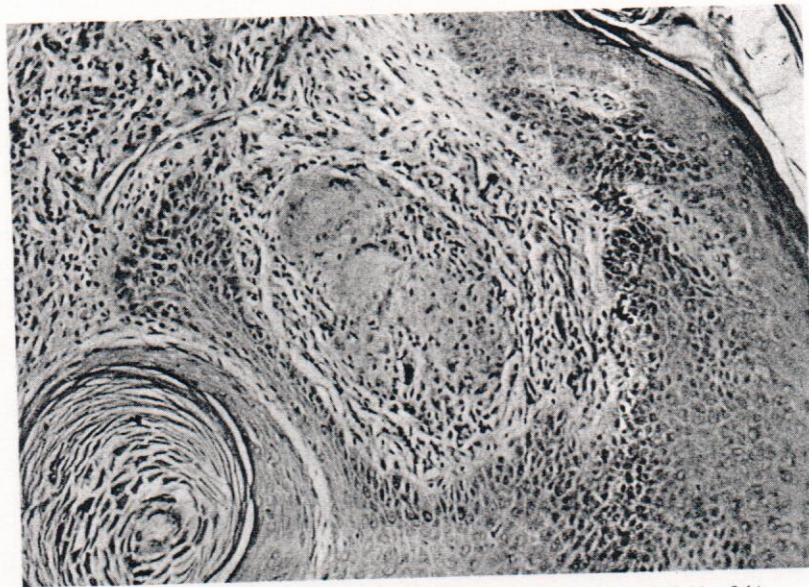


Figure 2. Histological slide showing tuberculous lesion (E & H x 16)

was a small, painless nodule (Fig. 1), of which the parents were not aware. There was a sinus in the right inguinal region with multiple enlarged lymph nodes. No other lymph nodes were palpable. The blood count was normal but the ESR was 45/h; X-ray of the chest was normal. The right inguinal sinus and lymph nodes, and the penile lesion were excised. The histology revealed a large number of tubercles comprising epitheloid follicles and Langhan's type giant cells with some caseation (Fig. 2). The Ziehl-Neelsen stain demonstrated acid-fast bacilli. The patient was treated with isoniazid and rifampicin (both 15 mg/kg/day), along with vitamin B-6, 30 mg/day. The patient was well and the penile lesion had disappeared 6 months after his initial illness.

## Discussion

Tuberculosis of the penis is a rare condition. The lesion is either primary or secondary in type. Up to 1971, 139 cases of tuberculosis of the penis<sup>2</sup> had been reported; a further 20 cases were added up to 1983,<sup>3-6</sup> all of them in adults. Primary lesions of the penis are thought to be uncommon, direct inoculation of the penis by tuberculosis material is a rarity. However, Lewis,<sup>1</sup> reviewing 110 cases, found 89 to be primary of which 72 followed circumcision.

Our case has a few interesting features. Firstly, it seems to be the first reported case in an Arab child, even though circumcision is the most commonly performed operation on males in the Middle East. The port of entry cannot be explained as it is not an acceptable practice to suck the penis after circumcision in this part of the world. However, covering the penis with unclean clothes after circumcising in dirty surroundings (in small villages) is known to occur. It is possible that the baby's penile wound could have been covered with infected fomites. Secondly, it was only the chronic discharging sinus which made the parents seek medical advice. Finally, since Lewis' review in 1946<sup>1</sup> this seems to be the only case reported in an infant.

Brunah, 1938 (cited by Lewis<sup>1</sup>) described 3 stages in the pathogenesis of penile tuberculosis: "A pustule without induration" as found in our case, "A ulcer with little or no induration" and finally "An ulcer with infiltration and indurated margins simulating carcinoma".

The diagnosis can be made by the finding of acid-fast bacilli in the surgical specimen and it is confirmed by the special cultures.

The treatment of this condition is simple with the use of recent tuberculostatic agents. The use of heat, ultraviolet, radiotherapy, chemicals and surgical excision alone have been unsatisfactory<sup>1</sup> and are of historical interest only.

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