Case Report
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Tuberculous Epididymo-Orchitis Masquerading as Paratesticular Sarcoma in Childhood- A Case Report

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Abstract

Testicular involvement is a rare complication of tuberculosis. Among children the disease is often misdiagnosed and confused with paratesticular sarcoma.

A six-year old boy presented with painful testicular mass. The histology showed a granulomatous inflammation and acid fast bacilli consistent with tuberculosis. Tuberculous epididymo-orchitis should be considered in the differential diagnosis of any testicular enlargement in children living in tuberculosis endemic areas.

Keywords: Tuberculosis; testis; histology; childhood

Introduction

Tuberculosis is endemic in Nigeria and control measures have been largely unsuccessful in the country[1]. The disease has unique histologic features irrespective of its site for which it be identified on light microscopy. However, when it presents as a primary manifestation in childhood, tuberculous epidiymo-orchitis can be misdiagnosed. Involvement of the scrotal contents in children by tuberculosis had been rarely described[2]. We report a case of tuberculous epididymo-orchitis in a child to highlight its uniqueness and essential clinico-pathological characteristics.

Case Report

A 6-year old boy presented with painful testicular swelling of eight months duration at the Sokoto Specialist Hospital, in northern Nigeria. He had no previous history of tuberculosis. Local examination revealed an enlarged, hard and slightly tender right testicle. A diffusely enlarged hypoechoic testis was demonstrated by ultrasonography. On the basis of these features a working diagnosis of paratesticular sarcoma was entertained and an orchidectomy was done by inguinal route.

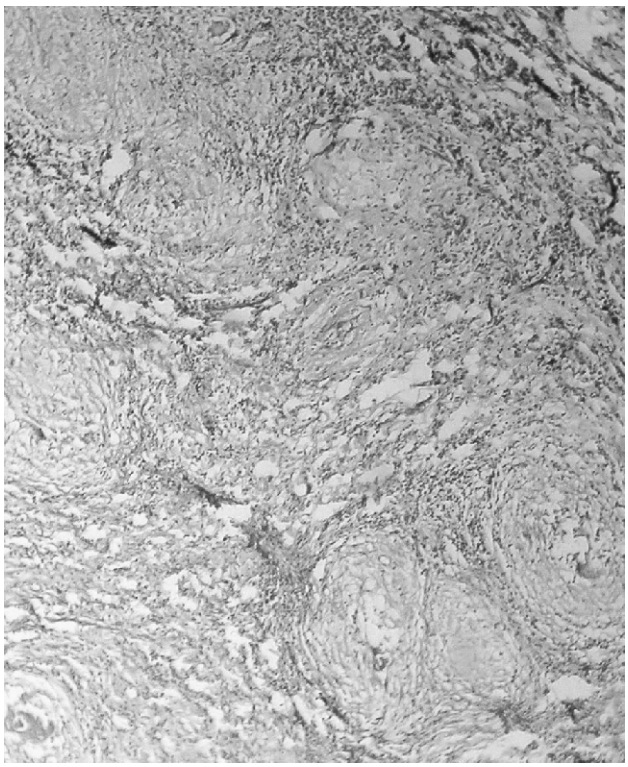


Figure1. Histologic Section showed extensive destruction of testicular tissues by a granulomatous reaction exhibiting numerous giant cells and fibrosis (H & E X 80)

Representative sections derived from paraffin-embedded formalin-fixed tissue were processed for histology and routinely stained with haematoxylin and eosin (H & E). Microscopic examination revealed extensive destruction of the testicular tissues by a

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granulomatous inflammatory reaction composed of epithelioid cells, multinucleate giant cells, lymphocytes and fibroblasts (Figure 1). Further tests for acid fast bacilli by Ziehl-Neelsen method showed rod shaped bacilli consistent with a diagnosis of tuberculosis. The patient had grade IV Heaf test (greater than 15 cm Mantoux induration) reaction. No active site of genitourinary tuberculosis could be demonstrated by intravenous urography.

Discussion

Tuberculous epididymo-orchitis is uncommon in the modern era and rarer still in paediatric patients. It is often secondary to pre-existing tuberculosis of the urinary tract which may be confirmed by culture of early morning urine specimens[3]. However, unusual presentations due to new drug-resistant tuberculosis are being seen with increasing frequency in the developing countries[4,5]. Systemic and pulmonary features are often absent in these cases, and sterile pyuria may be the only sign of the disease[6].

It is difficult to differentiate this inflammatory condition from enlargement of the scrotum due to testicular malignancy[7,8]. Ultrasononography is helpful in their differential diagnosis but pathological examination is the "gold standard" for the definitive diagnosis[9]. Prompt diagnosis of this rare manifestation of tuberculosis in children living in endemic areas or among young immigrants from those regions is especially important for appropriate management. Early recognition of tuberculous epididymo-orchitis in childhood would prevent complications in later life. Tuberculous epididymo-

L'épididymo-orchite tuberculeuse déguisée en sarcome paratesticulaire dans l'enfance : un rapport de cas

Résumé

La participation testiculaire est une complication rare de la tuberculose. Parmi les enfants, la maladie est souvent mal diagnostiquée et confondue avec le sarcome paratesticulaire. Un garçon de six ans s'est présenté avec une masse testiculaire douloureuse. L'histologie a révélé une inflammation granulomateuse et des bacilles résistants à l'acide, identiques aux traits de la tuberculose. L'épididymo-orchite tuberculeuse devrait être prise en compte dans le diagnostic différentiel de tout agrandissement testiculaire chez les enfants vivant dans des régions atteintes d'une tuberculose endémique. ***Mots-clés:*** Tuberculose; testicules; histologie; enfance.

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