

TESTICULAR TUBERCULOSIS: A CASE REPORT

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ABSTRACT

Objective: We report a patient with unilateral testicular tuberculosis, referred to Haji Adam Malik Hospital, Medan, Indonesia. In this report we stressed on the findings in the physical examination of the patient, so it can be applied for the other case of testis tuberculosis. **Case Presentation:** A 3-years old boy came to the Hospital with a painless unilateral right scrotal enlargement. Based on the data from anamnesis, physical examination and laboratory testing, a diagnosis of right testicular tumor was made and the patient was planned for a right radical orchidectomy. **Discussion:** He was underwent of right orchidectomy and the histological findings and diagnosis was specific tuberculosis. No specific symptom of tuberculosis was found. On the physical examination, general state was normal. The local state was difficult to differentiate with testicular tumor. In the absence of a histology finding, the diagnosis of TB testis may be impossible. Patients with testicular masses should be fully investigated preoperative and post-operative in order to increase the diagnostic index of this condition. However, unilateral or bilateral Testicular Tuberculosis is uncommon and the report said that there are two patients with unilateral testicular tuberculosis referred to Sina Hospital Tehran University of Medical Science (Hassan et al., 2009). **Conclusion:** TB infection diagnosis might be missed when clinical findings assume a tumor. Physical examination findings may include a non-tender or tender sensible nodule, dilation and thickening of the epididymis. Testicular involvement may be either unilateral or bilateral. The clinical history of patients such as contact with lung tuberculosis patient and immune deficiency condition are not always helpful in diagnosis. Although it is a very rare disease, the clinician should consider tuberculosis of the testis as a possible differential of a scrotal mass especially in endemic area like Indonesia. This will increase the possibility of early diagnosis, as well as proper and early management. And also have to remember that not testicular tuberculosis itself should be suspected, others kind of disease mimicking symptoms like hydrocele, spermatocele, epididymo-orchitis, non-hodgkin lymphoma, spleenogonadal fusion, and an adrenal rest or a second testis need to be considered.

Keywords: Genitourinary tuberculosis, testicular tuberculosis, physical examination.

ABSTRAK

Tujuan: Kami melaporkan seorang pasien dengan TB testis unilateral, yang dirujuk ke RS Haji Adam Malik, Medan, Indonesia. Pada laporan ini kami menekankan pada temuan dalam pemeriksaan fisik pasien, sehingga dapat digunakan pada kasus TB testis lain. **Presentasi Kasus:** Seorang anak laki-laki berusia 3 tahun datang ke rumah sakit dengan pembesaran unilateral scrotum kanan yang dirasakan tidak nyeri. Berdasarkan data yang didapatkan dari anamnesis, pemeriksaan fisik, dan pemeriksaan laboratorium, ditegakkan diagnosa suatu tumor testis dan pasien direncanakan untuk dilakukan suatu orchidectomi radikal kanan. **Diskusi:** Ia telah selesai menjalani orchidectomi kanan dan temuan histologis secara spesifik menunjukkan diagnosa tuberculosis. TB saluran kemih dilaporkan terjadi pada 20-73% dari seluruh kasus TB ekstra paru pada populasi umum, tetapi lebih langka lagi pada kelompok usia pediatrik, dan terhitung < 3% dari seluruh kasus TB (Chattopadhyay et al, 1997). Pasien adalah anak laki-laki berusia 3 tahun dan menunjukkan suatu kasus yang sangat langka. Pasien tidak memiliki riwayat batuk atau penurunan berat badan, tidak ada riwayat kontak dengan pasien TB paru. Tidak ada gejala spesifik dari TB paru yang ditemukan. Pada pemeriksaan fisik, status generalis pasien normal. Pada status lokalis ditemukan massa yang teraba keras, dan sulit dibedakan dengan tumor testis. Dengan ketiadaan hasil histologi, maka diagnosa TB testis menjadi mustahil (Shugaba et al, 2012). Pasien dengan massa testis harus diinvestigasi secara penuh baik saat pra-operasi maupun post-operasi, dengan tujuan untuk meningkatkan petunjuk diagnosa pada kondisi ini. **Simpulan:** Diagnosa infeksi oleh TB mungkin akan terlewat ketika temuan klinis mengasumsikan suatu tumor (Hamm, 1997). Temuan pada pemeriksaan fisik mungkin berupa nodul keras ataupun lembut, dilatasi dan penebalan epididimis (Hassan et al, 2009). Keterlibatan testis dapat terjadi secara unilateral ataupun bilateral. Riwayat klinis pasien, seperti kontak dengan pasien TB paru dan orang dengan defisiensi sistem imun tidak selalu membantu dalam menegakkan diagnosis. Meski TB testis merupakan suatu penyakit yang sangat langka, klinisi harus tetap menganggap TB testis sebagai diagnosa banding yang mungkin dari tumor scrotum, terutama di daerah endemis seperti Indonesia (Mbala et al, 1997). Hal ini akan meningkatkan kemungkinan diagnosa dini, juga tatalaksana dini dan tepat. Selain itu, harus diingat bahwa tidak hanya TB testis yang harus dicurigai, penyakit lain yang memiliki gejala mirip seperti

hidrokel, spermatokele, epididimo-orkitis, non-hodkin limfoma, fusi spleenogonadal, dan suatu adrenal rest atau second testis juga harus dipertimbangkan.

Kata kunci: *Tuberculosis saluran kemih, tuberculosis testis, pemeriksaan fisik.*

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INTRODUCTION

Genitourinary tuberculosis (GT) is the second most common manifestation of extra pulmonary tuberculosis where lymphatic involvement is the first.¹ It may occur during primary infection.² Cases of extra pulmonary tuberculosis in the pediatric age group are rare and accounted less than 3% of all cases of tuberculosis.³ The commonly infected sites of GT are the epididymis, seminal vesicles, prostate and testis.⁴ However, testicular tuberculosis is uncommon.⁵ We report a patient with unilateral testicular tuberculosis, referred to Haji Adam Malik Hospital, Medan, Indonesia. In this report we stressed on the findings in the physical examination of the patient, so it can be applied for the other case of testis tuberculosis.

CASE PRESENTATION

A 3-years old boy came to the Hospital with a painless unilateral right scrotal enlargement. No history of fever, cough, weight loss, anorexia or trauma before. His immunization was complete as the schedule. There was no history of contact with persons with pulmonary TB in the past.

On the physical examination, he was alert and a febrile, with pulse rate 90 cycle/minute, regular. His blood pressure was 100/70 mmHg. His

respiratory rate was 24 cycles per minute. He was not pale and anicteric. The chest was symmetric and both of lung fields were clear. The abdomen was not distended and moved with respiration with no palpably enlarged abdominal mass. The kidneys were not ballotable and no flank pain. The left scrotum was normal whereas the right was swollen. On palpation, the area was found to be non-tender, a firm and indurated mass was palpable, measuring 6 x 3 cm, not attached to the overlying skin, and not transilluminable. The spermatic cord was normal with intact sensations. The epididymis was non palpable.

Complete blood count showed a hemoglobin (Hb) of 13.3 g%, white blood cell (WBC) of 12.000 cells/mm³, platelets of 357.000, lactate dehydrogenase (LDH) of 996, α -Fetoprotein of 0.84, and β human chorionic gonadotropin (β hCG) of 0. CT scan abdomen showed there was no paracaval and interaorto-caval lymph nodes enlargement.

Based on the data from anamnesis, physical examination and laboratory testing, a diagnosis of right testicular tumor was made and the patient was planned for a right radical orchidectomy.

He was underwent of right orchidectomy and the testis tissue was sent for histopathology examination. The histology findings of the right testis were: macroscopic description: firm testicle tissue measuring 6 x 2.5 x 1.5 cm and spermatic cord

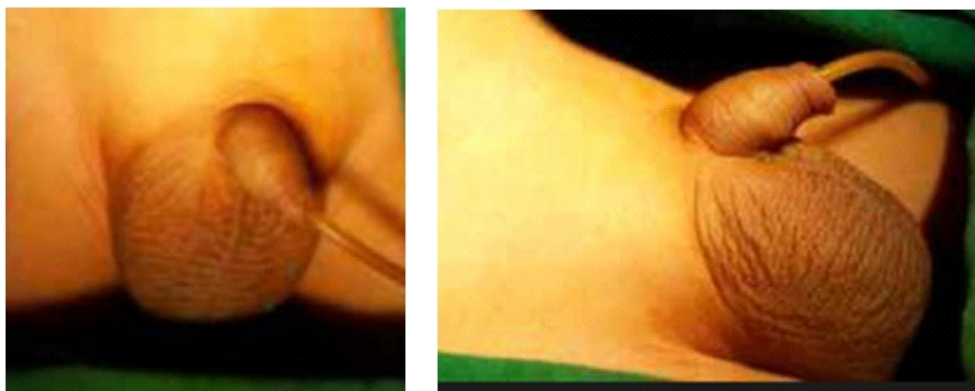


Figure 1. Clinical presentation of the patient.



Figure 2. The patients after underwent orchidectomy.

2 cm on length and 0.2 cm on diameter. Microscopy showed a specific chronic inflammation process with tubular atrophy and Langerhans cells was found. The histology diagnosis was specific tuberculosis.

DISCUSSION

GT has been reported to account for 20-73% of all cases of extra pulmonary tuberculosis in the general population, but is much rarer in the pediatric age group, and accounts for less than 3% of all cases of tuberculosis.³ Genital involvement in children is virtually unknown in the prepubescent age as the average time interval between the development of the primary lesion and genitourinary manifestation is rarely less than 5 years, and is usually more than 10 years.⁶

The patient was 3 years old boy and showed a very rare case. This patient had no history of chronic cough or weight loss, no history of contact with a person with pulmonary tuberculosis. No specific symptom of tuberculosis was found. On the physical examination, general state was normal. The local state was found a firm, non-tender palpable mass, and it was difficult to differentiate with testicular tumor.

In the absence of a histology finding, the diagnosis of TB testis may be impossible.⁶ Patients with testicular masses should be fully investigated preoperative and post-operative in order to increase the diagnostic index of this condition. However, unilateral or bilateral Testicular Tuberculosis is uncommon and the report said that there are two patients with unilateral testicular tuberculosis referred to Sina Hospital Tehran University of Medical Science.⁴

CONCLUSION

GT can present as a testicular painless or slightly painful scrotal mass that is difficult to differentiate from malignancy. TB infection diagnosis might be missed when clinical findings assume a tumor.⁷ Physical examination findings may include a non-tender or tender sensible nodule, dilation and thickening of the epididymis.⁴ Testicular involvement may be either unilateral or bilateral. The clinical history of patients such as contact with lung tuberculosis patient and immune deficiency condition are not always helpful in diagnosis. Although it is a very rare disease, the clinician should consider tuberculosis of the testis as a possible differential of a scrotal mass especially in endemic area like Indonesia.⁸ This will increase the possibility of early diagnosis, as well as proper and early management.

And also have to remember that not testicular tuberculosis itself should be suspected, others kind of disease mimicking symptoms like hydrocele, spermatocele, epididymo-orchitis, non-hodgkin lymphoma, spleenogonadal fusion, and an adrenal rest or a second testis need to be considered.

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