

Testicular Tuberculosis with Tuberculoma of Brain in an HIV Negative Patient

M KHANOM

Summary:

Isolated testicular tuberculosis without renal or pulmonary involvement has not been reported much earlier. The case of a young HIV negative patient with testicular tuberculosis and tuberculoma of brain has been presented. A 32 years old normotensive, non-diabetic farmer presented to emergency facility with sudden onset of severe headache, vertigo and vomiting that developed over 24 hours and mild pain, swelling of right hemiscrotum associated with low grade fever for last one month. On examination, patient was conscious, oriented, pulse rate was 72/min, blood pressure was recorded 130/80 mm Hg, body temperature was 99 degree F, genital examination revealed swelling of right hemiscrotum with enlarged, firm and mildly tender right testis. He refused full neurological examination due to severe

headache and vertigo. MRI of brain revealed multiple, hyperintense, ring-enhancing lesions over right cerebellar hemisphere and corpus callosum. Aspiration of scrotal fluid revealed about 50 ml of yellowish pus, microbiology confirmed presence of few acid-fast bacilli and plenty of pus cells. FNAC from right testicular mass revealed presence of granuloma and caseation necrosis. His chest X-ray and CSF analysis were normal, ESR was 20, USG of abdomen, hepatic and renal work-up was normal. Soon the patient was started with category I antituberculosis drug along with intravenous steroids. An excellent symptomatic improvement developed on 5th day of initiating drug therapy, he was closely monitored and followed up after discharge. This case report was prepared with his full consent.

(J Bangladesh Coll Phys Surg 2016; 34: 112-114)

Introduction:

Tuberculosis is one of the major health problems in Bangladesh. Although genitourinary tuberculosis was the most common subtype of extra-pulmonary tuberculosis in the past, it has recently been reported to account for less than 0.5% of all patient with extra-pulmonary tuberculosis and 1.5% of pulmonary tuberculosis^{1, 2}. 15% to 20% of extrapulmonary tuberculosis involves the CNS³. CNS involvement manifests as meningitis, cerebritis, tuberculous abscesses or tuberculomas. Intracranial tuberculomas are a rare complication of tuberculosis occurring through hematogenous spread from an extracranial source. Testicular tuberculosis with only intracranial spread is an even rarer finding and to the best of our knowledge, only one previous case has been reported in the literature⁴.

Male genital TB can present as a testicular mass that is difficult to differentiate from malignancy. Again, misdiagnosis of scrotal TB may lead to otherwise avoidable epididymo-orchietomy⁴. Clinical suspicion or recognition and prompt diagnosis are important

because early treatment can prevent patient deterioration and lead to clinical improvement.

Case Report:

A 32 years old normotensive, non-diabetic farmer presented to emergency department with the complaints of sudden onset of severe headache, vertigo and vomiting that developed over preceding 24 hours and rendered the patient unwilling to move. On close questioning, he mentioned about mild pain and swelling of right hemiscrotum associated with low grade fever for last one month. There was no history of cough, haemoptysis or abnormal urethral discharge. He was non-smoker, non-alcoholic and there was no history of substance abuse or high risk sexual behavior, he was happily married and had two children. On examination, patient was conscious, oriented, pulse rate was 72/min, blood pressure was recorded 130/80 mm Hg, body temperature was 99 degree F, genital examination revealed swelling of right hemiscrotum with enlarged, firm and mildly tender right testes. He refused full neurological examination due to severe headache and vertigo, however, there was no neck stiffness, reflexes and fundus were normal. MRI of brain revealed multiple, small ring-like lesions over right cerebellar hemisphere and corpus callosum (Fig. 1). USG of scrotum showed presence of fluid at right

Address of Correspondence: Dr. Mehrunnissa Khanom, Assistant Professor, Department of Medicine, Southern Medical College and Hospital, Chittagong.

Received: 22 January, 2015 **Accepted:** 10 January, 2016

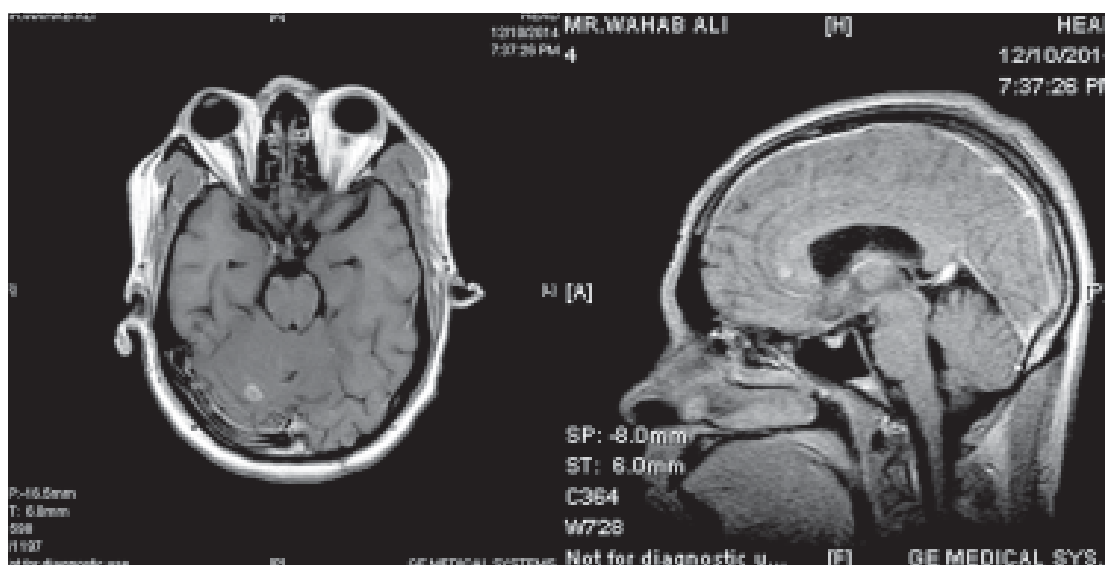


Fig-1: MRI of brain showing multiple, hyper-intense ring-enhancing lesions at right cerebellar hemisphere and genu of corpus callosum.

hemiscrotum and multiple hypo-echoic lesions inside right testis (Fig. 2). Aspiration of scrotal fluid revealed about 50 ml of yellowish pus, microbiology confirmed presence of few acid-fast-bacilli and plenty of pus cells. FNAC from right testicular mass confirmed presence of granuloma and central caseation necrosis (Fig. 3). His chest X-ray was normal. CSF analysis revealed two lymphocytes/high power field with normal protein, sugar levels and ADA level 3 IU/L. ESR was 20, USG of abdomen, hepatic and renal work-up was normal, HIV status was negative. Serum levels of beta-HCG, AFP, LDH and PSA were normal. A diagnosis of testicular

tuberculosis with tuberculoma of brain was made. Soon the patient was started with antituberculosis drug category I regimen according to national guideline for tuberculosis as well as intravenous steroids. An excellent symptomatic improvement developed on 5th day of initiating drug therapy, he was discharged on 9th day, when he was able to move independently. His follow-up visit was on 20th day of initiating drug, it was uneventful and revealed normal neurological findings with decreased size of testicular lump. Patient was re-assured and advised to continue anti-TB drug, the intravenous steroid was switched to oral to be

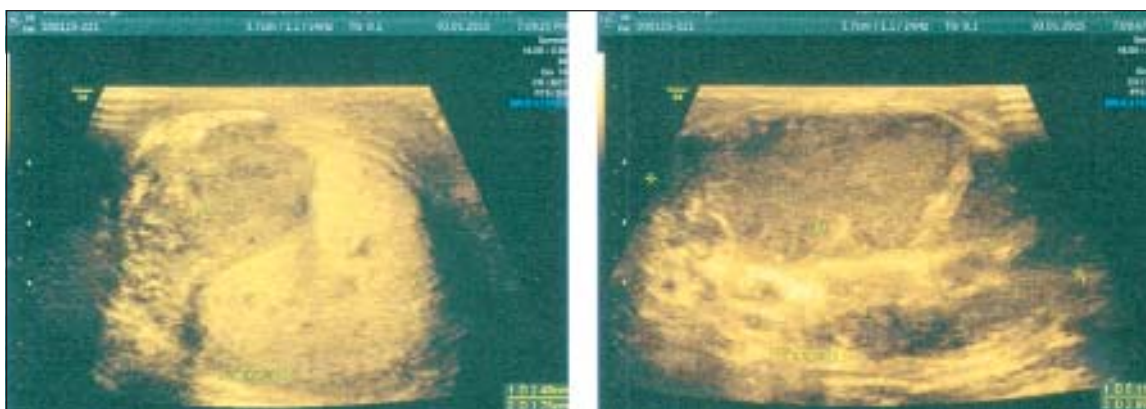


Fig-2: USG of right testis (Arrows indicate outline of hypo-echoic lesions).

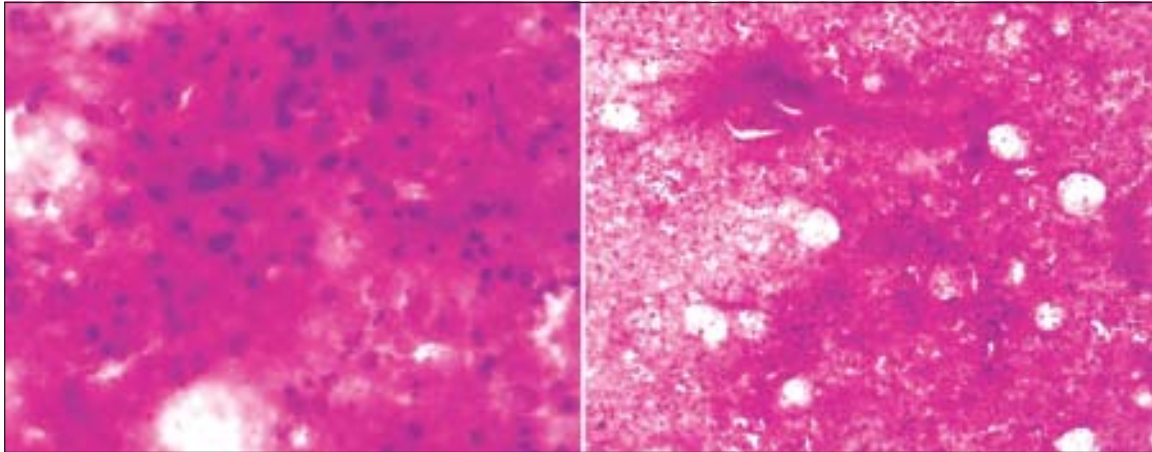


Fig.-3: Slides of FNAC from right testis showing granuloma and caseation necrosis.

continued as gradual tapered dose for next one month, a monthly follow-up schedule was offered.

Discussion:

To the best of our knowledge, there has been only one previously reported case of testicular tuberculosis with only intracranial spread, which was initially managed for testicular cancer and patient underwent radical orchidectomy, the diagnosis being made by histopathology of specimen. High index of clinical suspicion, multidisciplinary consultation and identification of tumor markers may guide diagnosis of testicular tuberculosis at initial stage as well as avoid over-diagnosis of cancers.

References:

1. Young Sam Cho, Kwan Joong Joo, Chil Hun Kwon, Heung Jae Park. Tuberculosis of testis and prostate that mimicked testicular cancer in young male soccer player. *Journal of exercise rehabilitation*: Volume 9(3); 2013
2. Suleman Merchant, Alpa Bharati, and Neesha Merchant. Tuberculosis of the genitourinary system-Urinary tract tuberculosis: Renal tuberculosis-Part I. *Indian J Radiol Imaging*: 2013 Jan-Mar; 23(1): 46–63.
3. Ing-Kit Lee, Wen-Chou Yang, Jien-Wei Liu. Scrotal Tuberculosis in Adult Patients: A 10-Year Clinical Experience. *The American Journal of tropical Medicine and Hygiene* :October 2007; vol. 77 no. 4 714-718
4. Oku S Bassey, Clement A Okolo, Samson O Ukperi, Ayotunde O Ogunseyinde. Testicular tuberculosis presenting with metastatic intracranial tuberculomas only: a case report. *J Med Case Reports*: 2011; 5: 100.

The Netlike Skin Lesion -Cutis Marmorata

MR ISLAM^a, MR AMIN^b

(*J Bangladesh Coll Phys Surg 2016; 34: 115*)



Fig 1 and 2: mottled bluish (livid) discoloration of the skin that occurs in a netlike pattern

This 24 years old gentleman presented with A netlike, arborizing pattern on the anterior thighs and buttocks defined by violaceous, erythematous streaks resembling lightning. The skin within the erythematous areas was pale. On exposure to cold, lesions becomes more pronounced but never fades completely on warming¹. There was no ulceration. There were no other physical symptoms and signs. There was no history of dyslipidaemia or cardiovascular complication and hence sneddon's syndrome is excluded.² The investigations ruled out the connective tissue disease, vasculitis or haematological diathesis. There was no drugs exposure

like quinine or amantadine. The patient was diagnosed as a case of Idiopathic Livedo Reticularis³. The skin condition is also known as cutis marmorata³. Management is keep from chilling, Pentoxifylline (400 mg PO three times a day), low-dose aspirin, and heparin. The patient was discharged without any complication in hospital.

References:

1. Rapini, Ronald P.; Bologna, Jean L.; Jorizzo, Joseph L. (2007). *Dermatology: 2-Volume Set*. St. Louis: Mosby. p. 1615. ISBN 1-4160-2999-0.
2. Sneddon, I. B. (April 1965). "Cerebro-Vascular Lesions And Livedo Reticularis". *British Journal of Dermatology* 77 (4): 180–5. doi:10.1111/j.1365-2133. 1965. tb14628.x. PMID 14278790.
3. Klaus Wolff, Richard Ellen Johnson (2009). *Fitzpatrick's Color atlas and synopsis of clinical dermatology, Sixth Edition*. Mcgraw Hill.p374.ISBN 978-0-07-163342-0

a. Dr. Mohammad Rafiqul Islam, Assistant Professor of Medicine, Dhaka Medical College.

b. Dr. Md. Robed Amin, Associate Professor of Medicine, Dhaka Medical College.

Address of Correspondence: Dr. Mohammad Rafiqul Islam, Assistant Professor of Medicine, Dhaka Medical College.

LETTER TO THE EDITOR

(J Bangladesh Coll Phys Surg 2016; 34: 116-117)

To
Editor-in-Chief
Journal of Bangladesh College of Physicians and Surgeons.

Subject: A letter to the Editor on an article titled '**Metabolic Syndrome in Bangladeshi Menopausal Women.**'

Dear Sir,

I would like to thank you for publishing the article 'Metabolic Syndrome in Bangladeshi Menopausal Women. -A Cross Sectional Study' in your journal. I am a regular reader and analyzer of the journal of Bangladesh College of Physicians and Surgeons. Reading, analyzing and understanding of a journal article keeps us updated to the recent development in the field of medicine. It also helps us to learn about the standard format of scientific journal publication. With this aim I have gone through the above mentioned article.

I must thank and appreciate the authors for this cross sectional study on 'Metabolic Syndrome in Bangladeshi Menopausal Women' because it is not very uncommon in Bangladeshi population and menopausal women are particularly vulnerable to atherosclerosis due to metabolic syndrome leading to increased risk of coronary artery disease and cerebro-vascular accident. As I read this topic, I have experience some sorts of deficiencies in the study which I like to share with you and the authors. The topics of the study and objective, method, result analysis and conclusion were written in proper scientific way with a few deficiencies. The introduction was properly written. In the heading of objectives instead of 'to assess the factors of metabolic syndrome' it may be appropriate to write 'to assess the components of metabolic syndrome'.

In the diagnostic criteria section in addition to the mentioned five components of metabolic syndrome there are other components of metabolic syndrome, namely hyperurecemia, prothrombotic state with increased levels of plasminogen activator inhibitor type 1 (PAI-1) and pro-inflammatory state, were not at all considered in this study. In the discussion section, the results were compared with the international studies

very nicely and appropriately but whether any of the studied patients have ever developed coronary artery disease and cerebro-vascular accidents were not mentioned in the study.

In the end, I must thank and appreciate the authors because of their hard work and appropriate way of analysis of the results of this study. The study is very much informative and give us updated knowledge to manage this groups of patients. I would like to request them to be generous to accept my soft criticism on the topic.

With regards

Dr. Md. Hafiz Sarder
Associate Professor
Department of Medicine
Dhaka Medical College

To
Editor-in-Chief
Journal of Bangladesh College of Physicians and Surgeons.

Subject: Response to the letter "to the Editor on an article titled '**Metabolic Syndrome in Bangladeshi Menopausal Women.**'"

Dear sir,

This is very much appreciating that aforementioned article was reviewed by one of your regular readers. We want to thank him for his nice critic on the article.

Every study has some limitation which enables us to conduct further study to reduce the gaps going through the limitations. We wanted to compare the factors that could be associated with the metabolic syndrome. In doing so we followed the National Cholesterol Education Program (NCEP) Adult Treatment Panel (ATP) III criteria for diagnosing Metabolic Syndrome (MetS). In that criteria, it was written that presence of whether any three of five risk factors would enable a person designated as a candidate of MetS. Because our criteria was to diagnose MetS according to NCEP ATP III criteria, we

didn't include other components for the diagnosis. And this is also the reason we didn't write 'components of metabolic syndrome' instead of factors related with metabolic syndrome.

In the discussion, development of coronary heart disease and cerebro-vascular accident were not mentioned because it was not also our objective of study. But nonetheless it can be called a limitation of our research. We really value the comment of our erudite reader which will lead us to carefully work with the scientific aspects of this kind of research work.

The other comments on deficiencies could not be addressed as those were not specific.

Thanking again for the valuable comments. We look forward to learn more from the expert comments.

Best regards.

Dr. Muna Shalima Jahan

Associate Professor

Department of Gynae and Obs

SSMC