

Psoas Abscess Secondary To Pott's Disease In A Brazilian Amazon Man

A Rodrigues, D Vasconcelos, M Lobato, K Dias, T Lage, A Santos, R Aguiar

Citation

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Abstract

Tuberculosis is an endemic disease in the Brazilian Amazon region. Pott's disease is a common extra-pulmonary form of tuberculosis and psoas abscess may occur secondary to that. The authors describe a 25-year-old Brazilian Amazon man with fever, pain in the left iliac fossa and paresthesia of the inferior members due to a psoas abscess secondary to Pott's disease. Concurrent paresthesia of the superior members due to spine compression with edema caused by cervical Pott's disease was diagnosed. Surgical drainage with adjuvant anti-tuberculosis therapy was carried out. Afterwards, the patient underwent arthrodesis of the cervical spine with good clinical evolution.

INTRODUCTION

Tuberculosis (TB) continues to be a serious problem of public health in the Amazon, mainly assailing individuals of a lower social income. Osseous assailing is common in extra-pulmonary TB and, in some 50% of the cases, there is assailing of the vertebral spine, better known as Pott's Disease (PD)⁽¹⁾. Whenever spinal TB occurs at the thoracolumbar region, due to juxtaposition, it may reach muscular para-spinal structures, enabling formation of abscesses in the psoas muscle⁽²⁾.

Psoas abscess (PA) is not a very common affection for it shows a non-specific symptomatology and, therefore, it is associated to late diagnosis⁽³⁾.

In this case report we present a youngster with an abscess in the left psoas muscle secondary to PD and discuss clinical manifestations and diagnosis of such a disease.

CASE REPORT

A 25-year-old man complained of daily fever followed by light intensity pain in the left iliac fossa and paresthesia of the lower members for 30 days. As interesting background, he has reported anti-microbial oral therapy with Ciprofloxacin 500mg for a small abscess in the left psoas muscle, but the symptoms remained. Physical examination showed plain and a flat and painful abdomen at palpation at the left iliac fossa. Laboratory tests and serology for AIDS were normal. Telethorax was normal. Computed Tomography of the abdomen revealed a hypodense lesion of

the left psoas muscle suggesting abscess with muscular edema and lytic lesions at L1 and L2 vertebral bodies (figure 1).

Figure 1

Figure 1: CT scan showing left psoas abscess.



Surgical drainage of the abscess with a great quantity of pus and necrotic tissue was performed. Antibiotic treatment was changed to Ceftriaxone 1g and Metronidazole 1.5g/day I.V. The histological study of the necrotic-purulent material revealed an intense quantity of caseous necrosis and established the diagnosis of tuberculous abscess secondary to Pott's disease. During commitment, the patient started to refer paresthesia of superior members. He was referred to anti-tuberculosis treatment with scheme I and also to neurological evaluation. Magnetic resonance imaging of the cervical spine revealed lytic lesions affecting C3 to T1

vertebral bodies, with intense medullary compression and edema (figure 2).

Figure 2

Figure 2: MR scan showing lytic lesions affecting C3 to T1 vertebral bodies, with intense medullary compression.



Then, the patient underwent arthrodesis of the cervical spine. At the moment, the patient is in the sixth month after surgery in good clinical condition, without symptoms, undergoing anti-tuberculosis treatment and followed by the surgeon, neurologist and infectologist.

DISCUSSION

In the Amazon, TB is still one of the most common infectious diseases, demanding, even in our days, important life losses. Among the various forms of extra-pulmonary TB, the assailment of the spinal cord is relatively common, with the thoracolumbar junction being the mainly attacked place (2).

The association of PD and PA is quite well-known, arising as a result of dissemination through contiguity of the

tuberculous spinal process (3,5,6). The symptoms related to PA are non-specific as fever, pain in the iliac fossas, weight loss and pain at hyper-extension of lower members (3,4,5,6). PA may also simulate a paralytic ileum due to inflammation through contiguity of the root of the mesenterium(5). This non-specific characteristics of the symptoms contribute a lot to delayed diagnosis and, due to the anatomic shape of the retrofascial space of the retroperitoneum, including the iliac muscles, psoas major and psoas minor, the abscess content is retained in this anatomic region for a long period (4), as in the case reported here. Computed tomography is the radiologic method of choice to diagnose PA, presenting indexes of specificity between 88 and 99%, with tomographic findings of augmented density of the psoas muscle, calcifications, destruction of vertebral bodies and gas accumulation (5,6). Among these findings, calcification is pathognomonic of tuberculous PA (6). Magnetic resonance imaging is also a good method for diagnosis of PA, showing the same alterations as tomography. However, it is not a very accessible to the population in general (6).

Differential diagnosis of tuberculous PA includes pyogenic PA; the latter is found in children and young adults, with *Staphylococcus aureus* presenting as main pathogen (6).

The treatment of tuberculous PA is based on the drainage of the abscess, either percutaneously or surgically, in combination with specific anti-microbial therapy. Bacteriological and histopathological studies of the necrotic content of the PAs must always be performed (6,7,8). In most cases, evolution is favorable when the treatment is conducted correctly (1,6,8).

In conclusion, PA secondary to PD is not a rare condition and must always be suspected in the differential diagnosis of such affections. Bacteriological and histopathological examinations should always be performed. Although in the Amazon tuberculosis is an endemic disease, there are no reports on the association of PA with PD in patients from the Amazon region; however, such a fact must be related to late and incorrect diagnosis.

CORRESPONDENCE TO

André Rodrigues, MD Av. Roberto Camelier 362
66033-640, Belém, Pará, Brazil Email:
santosrodrigues@superig.com.br

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Author Information

André Rodrigues

Department of Surgery, Hospital de Clínicas “Gaspar Vianna”

Douglas Vasconcelos

Department of Neurosurgery, Hospital Ophir Loyola

Marcelino Lobato

Biologic and Health Sciences Center, Universidade Estadual do Pará

Karla Dias

Health Sciences Center, Universidade Federal do Pará

Thaiane Lage

Health Sciences Center, Universidade Federal do Pará

Antônio Santos, Jr.

Health Sciences Center, Universidade Federal do Pará

Reuber Aguiar

Health Sciences Center, Universidade Federal do Pará