

Splenic Infarct And Epidural Abscess: A Case Report Of Rare Presentation Of Infective Endocarditis.

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Citation

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Abstract

We present an unusual case of a 47 year old man who presented with pyrexia, left lumbar pain and night sweats. He was found to have splenic infarcts and epidural abscesses. Blood cultures grew *Staphylococcus Aureus* from multiple sites. We review the history and appraise the argument in favour of infective endocarditis.

INTRODUCTION

Splenic infarction is a very rare event though it can occur in a multitude of conditions with general or local manifestations [1]. For every patient diagnosed with splenic infarction, a scrutiny on the possible source of emboli should be carried out. The incidence of splenic involvement during endocarditis is approximately 35% [2]. This is predominantly in form of splenic abscesses. However, there is patchy evidence from few case reports that these patients can present with splenic infarcts as well [1-8]. Epidural abscess is a relatively uncommon disorder. Association of epidural abscess with infective endocarditis has rarely been described [9-14].

We present here a case of splenic infarct and epidural abscess associated with *Staphylococcus Aureus* endocarditis which has not been reported previously.

CASE REPORT

A 47 years old Caucasian man with no significant past medical history presented with 1 week history of feeling generally unwell, pyrexia of 40°C, lower left sided lumbar pain. Associated symptoms included off and on night sweats and vomiting episodes. He was initially treated by his primary medical practitioner with Trimethoprim for suspected urinary tract infection.

On examination there were normal heart sounds and abdomen was tender in left iliac fossa with left flank tenderness associated with restricted straight left leg raise upto 45 degrees. There was no neurological deficit apart from burning sensations down to legs from lumbar area.

Initial basic blood investigations showed normal renal functions with full blood count with raised C-reactive protein of 295 mg/l. Chest and abdominal radiographic images were insignificant and electrocardiogram showed sinus tachycardia.

On the background of his history, a high suspicion of an endovascular focus for sepsis was considered. From that prospective, various non-invasive diagnostic imaging modalities were requested. These included Computed Tomography (CT) of abdomen, Transesophageal Echocardiography (TOE) and Magnetic Resonant Imaging (MRI) of Spine. Blood cultures from three different venous routes grew Methicillin Sensitive *Staphylococcus Aureus* (MSSA).

CT abdomen showed few segmental splenic infarcts (Figure 1). MRI spine showed epidural abscesses at T9-T10 and L5-S1 (Figure 2). TOE showed friable and oedematous anterior mitral valve leaflet (Figure 3, Video 1). His MSSA bacteraemia was treated with empirical antibiotics through peripherally inserted central catheter (PICC) line. He responded very well to treatment and was discharged home with follow up TOE.

Figure 1

Figure 1. CT showing splenic infarcts (Arrows)

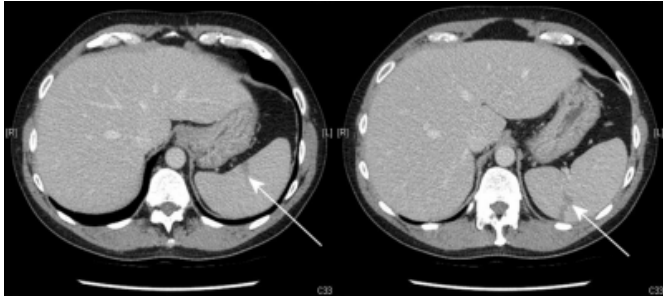


Figure 2

Figure 2. MRI Spine showing vertebral oedema (Arrows A, B) and abscess (Arrow C)

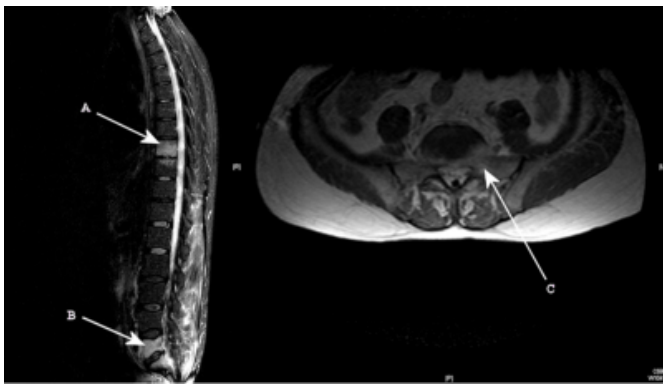
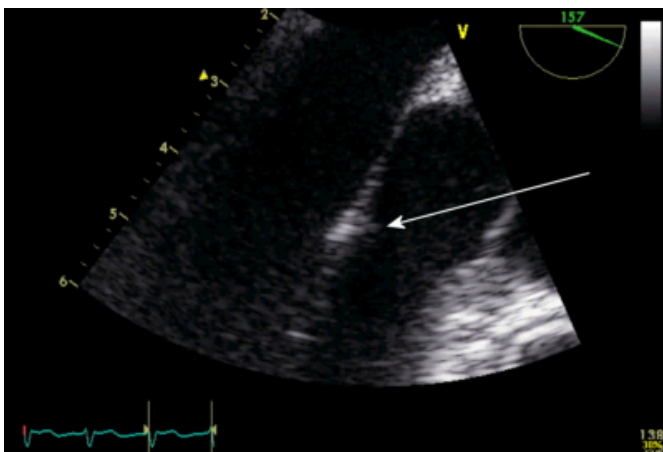


Figure 3

Figure 3. TOE image of oedematous anterior leaflet of mitral valve (Arrow).



Video 1. TOE of oedematous and friable anterior leaflet of mitral value.

DISCUSSION

This case was complex and Duke's criteria's were used to help make the clinical diagnosis of Infective endocarditis [15]. Even though there were some suggestions of

involvement on TOE of anterior leaflet of mitral valve, there was no clear visible vegetation. As per suggestions from previous case reports, splenic infarcts can present as late complication of endocarditis [4]. Our patient had at least one major criterion (positive blood cultures) and three minor criteria's (fever $>38^{\circ}\text{C}$, evidence of embolism, echocardiographic findings which did not meet the major criterion) to help make clinical diagnosis of infective endocarditis. This is first case report of MSSA endocarditis involving splenic infarct and epidural abscesses.

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