Septic arthritis of the pubic symphysis

Luís Cardoso,¹ Patricia Alves,² Fernando Santos,² John J Ross³

¹Department of Endocrinology, Diabetes and Metabolism, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal

²Department of Internal Medicine, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal

³Brigham and Women's Hospital, Hospitalist Service, Boston, Massachusetts, USA

Correspondence to

Dr Luís Cardoso,
mkcardoso@gmail.com

Accepted 7 February 2017

DESCRIPTION

A seamstress aged 57 years presented with fever and pubic pain radiating to the hips. She had recently been treated for *Staphylococcus aureus* bacteraemia of unclear source. MRI revealed gadolinium enhancement of the pubic symphysis (PS). Small fluid collections consistent with infection were present in the PS and right obturator externus muscle (figures 1 and 2), but when aspiration was attempted, its size had reduced and was deemed undrainable. Blood cultures were sterile, and transoesophageal echocardiography was negative for valvular vegetations. The patient completed 8 weeks of intravenous vancomycin for septic arthritis of PS and obturator pyomyositis, with clinical and radiological resolution. She is well after 3 years of follow-up.

Approximately 200 cases of septic arthritis of PS have been reported and were frequently associated

with prior gynaecological/urological surgery or pelvic malignancy.^{1 2} Insidious symptoms often delay the diagnosis; therefore, clinicians should consider this entity in patients presenting with pubic, groin or abdominal pain that increases on ambulation, and acute onset of fever.² In our patient, repetitive stress of PS from sitting cross-legged while sewing may have caused frequent microtrauma, leading to osteitis pubis and, in the setting of transient bacteraemia, septic arthritis.³ Despite MRI being the most sensitive imaging test, only aspiration (ie, microorganism isolation) provides the ultimate proof of the presence of infection. *Staphylococcus aureus* is the most frequently isolated organism and the selected empirical antibiotic should have antistaphylococcal activity.² Despite long-course intravenous antibiotherapy, >50% of cases require surgical debridement.² When adequate treatment is instituted, most individuals recover completely.

Figure 1 Coronal T2-weighted magnetic resonance image showing signal intensification in the pubic symphysis and right obturator externus muscle with interconnected fluid collections and hypointense peripheral rim.

Figure 2 Axial T2-weighted magnetic resonance image showing the right obturator externus muscle pyomyositis and oedema of adjacent tissues.

Learning points

- ▶ Septic arthritis of the pubic symphysis is a rare cause of pubic and hip pain.
- ▶ Long delays between the symptom onset and diagnosis are frequent and therefore awareness is paramount for early case detection.
- ▶ Long-course antibiotherapy is required and, in some cases, may preclude the need for surgical debridement.

Acknowledgements Authors would like to acknowledge Dr Isabel Sousa and Dr Miguel Pinto Gouveia for their involvement on the patient's clinical care.

Contributors LC and JJR were involved in the writing process. LC, PA and FS were directly involved in the clinical care of the patient. JJR contributed with expert opinion to the clinical decision-making.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Choi H, McCartney M, Best TM. Treatment of osteitis pubis and osteomyelitis of the pubic symphysis in athletes: a systematic review. *Br J Sports Med* 2011;45:57–64.
- 2 Ross JJ, Hu LT. Septic arthritis of the pubic symphysis: review of 100 cases. *Medicine (Baltimore)* 2003;82:340–5.
- 3 Agarwal V, Chauhan S, Gupta RK. Pyomyositis. *Neuroimaging Clin N Am* 2011;21:975–83, x.

To cite: Cardoso L, Alves P, Santos F, et al. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2016-216784

Copyright 2017 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow