# A rare consequence of very common osteoporotic pubic rami fracture in a patient with myeloproliferative disease

Chathuri Liyanapthirana, Rosie Neal, Todor Iordanov, Aktham Nahhas

Geriatrics, Eastbourne District General Hospital, Eastbourne, East Sussex, UK

### Correspondence to Dr Chathuri Liyanapthirana, chathuril@live.com

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## **DESCRIPTION**

An 80-year-old female with janus kinase 2 positive myeloproliferative disease with stable blood parameters on aspirin and anagrelide admitted to the emergency department after a fall over the kerb complaining of pain limiting mobility. Initial assessment was stable without any external injuries noted. Pelvic X-ray demonstrated a stable pubic rami fracture (figure 1). Later on, her haemoglobin dropped 106 g/dL to 67 g/dL for no apparent cause. She was also noted to have an abdominal fullness and examination revealed a suprapubic mass. CT scan showed a well-defined hypointense collection measuring  $85 \times 60 \times 105$  mm extending superiorly from the symphysis pubis compressing bladder (figure 2-4). It was compatible with a late development of a haematoma. There was no contrast extravasation suggesting active bleeding. Her platelets and coagulation were normal. She was managed conservatively with blood transfusions but there was a place for angiography if she was to remain unstable.

Unlike with high-energy pelvic fractures seen in young males following poly trauma, it is not very common to have bleeding with low-energy osteoporotic fractures.<sup>1</sup> This is an uncommon occurrence of a large palpable haematoma, 1 2 secondary to fragility pubic rami fracture in the presence of a prothrombotic condition. This unusual delayed development of haematoma seen in her can be attributed to the following



**Figure 1** X-ray pelvis showing the fractures of superior and inferior pubic rami on the left.



Figure 2 CT pelvis showing the well-defined hypointense collection seen in the superficial pelvis. Also note the fractures in the left rami.



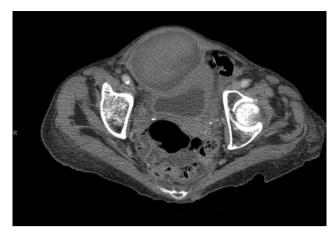
Figure 3 Parasagittal section of the CT showing the well-defined collection situated anterior to the bladder extending to superficial pelvis.



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# Images in...



**Figure 4** Cross-sectional image over pelvis showing the anteriorly situated hypointense collection (haematoma) compressing bladder posteriorly.

facts. She being on aspirin despite normal platelets, the prophylactic enoxheparin given to prevent deep vein thrombosis and the fact that geriatric patients have lost their ability to mount an effective tamponade effect due to loss of vasospasm and tissue elasticity. <sup>1</sup>

## **Learning points**

- ► Low-energy osteoporotic fractures despite being stable injuries, being managed conservatively pose a serious health hazard to elderly patients.
- ► Even in the presence of a prothrombotic conditions, it is better to be cautious when prescribing deep vein thrombosis prophylaxis for patients with pelvic fractures who are otherwise of low risk category (mobilising).

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