

An unusual case of difficulty walking: a psoas haematoma

We report on an unusual case of difficulty walking in an octogenarian on warfarin therapy.

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Difficulty walking is a common presenting complaint in elderly patients. We describe a case of compressive femoral neuropathy and subsequent leg weakness caused by a psoas haematoma; a rare but important complication of warfarin therapy. This case highlights the need to have a high index of suspicion in patients on warfarin with difficulty walking. We discuss the management options for this difficult clinical scenario. The key points of this article are shown in the box.

Case history

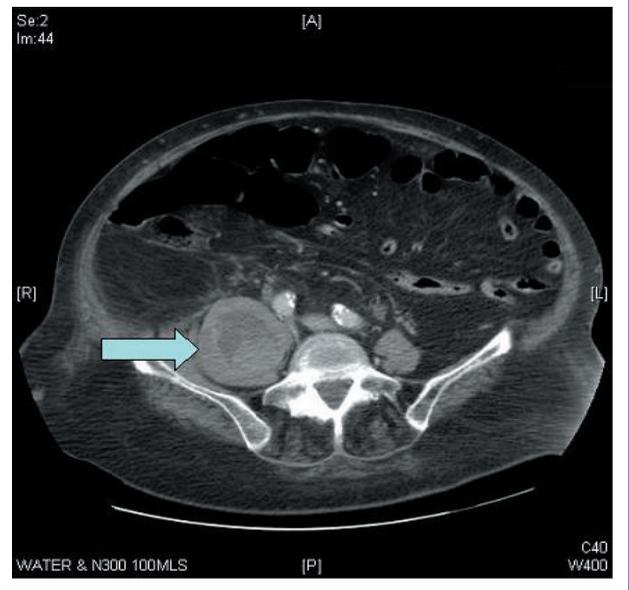
An 82-year-old lady, who had known atrial fibrillation, a history of ischaemic stroke and was taking warfarin as thromboprophylaxis, was admitted to hospital with difficulty walking. She had fallen 8 weeks previously and still had bruising over the right side of her abdomen and lower back. Her medical history included hypertension and ischaemic heart disease.

Since the fall, she reported increasing immobility and also complained of pain in the right flank radiating into the leg. Two days prior to admission, her right knee gave way on trying to walk down steps. She became increasingly immobile and required hoist transfer from bed to chair. Examination revealed a palpable mass in her right iliac fossa.

She had gross weakness in right-hip flexors (Medical Research Council strength scale 3/5) and adductors (3/5), and in knee extensors (2/5). The right patellar reflex was reduced, and she had hypoaesthesia that involved the L3 and L4 dermatomes. A CT scan confirmed a psoas haematoma (7.5 cm in diameter), which was compressing the femoral nerve (figure). Her INR was 10, which was reversed with intravenous vitamin K.

Figure:

Plain CT of the thorax with arrow showing haematoma



After an initial surgical consultation, a conservative approach to treatment was taken. A conservative approach involves leaving the haematoma to resolve or shrink on its own, thereby slowly releasing the pressure on the nerve.

On the fourth day after admission, a further surgical opinion was sought because her symptoms were not resolving. However, the surgeons felt that she was not fit enough, in cardiovascular terms, to withstand an operation to remove the haematoma. 3 months after discharge, she was walking independently with a frame and required minimum assistance for transfers.

Discussion

Compressive femoral neuropathy following retroperitoneal haemorrhage is a rare but known complication of warfarin therapy.^{1,2} Such a complication can occur within the normal therapeutic range of warfarin,³ and has also been reported in association with unfractionated heparin, low-molecular-weight heparin, and antiplatelet medication.^{3,4} The iliopsoas muscle is also prone to spontaneous intramuscular haemorrhage.⁵ When assessing elderly patients with limb weakness who are receiving anticoagulation, doctors should have a high index of suspicion for intramuscular haemorrhage and compressive neuropathy.

The treatment of this condition is controversial. Some practitioners advocate surgery because they think that the less time the nerve is compressed, the more complete the recovery.⁵ But others claim that the recovery rates with conservative treatment are as good as they are with surgery—one study noted that a good recovery was reported in 68% of cases.⁶ The need for surgery should be carefully considered when managing elderly patients because the complication rate of general surgery may be as high as 56% and the rate of postoperative hospital mortality as high as 5% in this age group.⁷ Studies on the surgical treatment of psoas haematomas have only been in patients from a younger population than our patient, and we have not found any accounts of this type of surgery in anyone older than 80 years. Conservative treatment risks the possibility of permanent loss of power and function of the limb,⁶ so this risk needs to be weighed against the mortality and morbidity rates associated with surgery in this age group.

An alternative to open surgery is percutaneous aspiration under ultra-sound guidance,⁸ but it is not an option if the clot is fully formed (as in our case). According to Wada and colleagues, transcatheter arterial embolisation was used successfully in an 85-year-old.² This intervention

prevents further haemorrhage and compression, but does not remove the existing haematoma.

In summary, whether a conservative or a surgical approach provides a better outcome in elderly patients is not known. Percutaneous aspiration or transcatheter arterial embolism are possible options for those not fit enough for surgery. Since older patients are more frequently anticoagulated,⁹ and have a high prevalence of falls (35%),¹⁰ they are at the most risk of haemorrhagic complications. Further studies to evaluate the treatment of psoas haematoma in this age group are warranted.

We have no conflict of interest. Written permission to publish this case report was obtained from the patient.

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Box: Key points

- High index of suspicion of retroperitoneal haemorrhage is needed in patients on warfarin therapy.
- Consider alternative treatments when conservative measures fail and surgical intervention is not appropriate.
- Evidence for management of a retroperitoneal haematoma in an elderly population is scant.