



Case report

Early evacuation of haematoma causing sciatic nerve compression:
Yes or no? A comparative case report

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1. The cases

1.1. Case 1

A 68-year-old gentleman, Mr. GS, with a past medical history of Atrial Fibrillation (AF) and chronic renal disease (due to chronic glomerulonephritis) presented to a fracture clinic with a history of progressing foot drop and complete anaesthesia of the L4 to S1 dermatomes and dysthaesia to the surrounding dermatomes. He was on anti-hypertensive therapy in addition to warfarin for AF.

A week previously the patient had been on holiday in Spain and had fallen. He complained of pain and swelling around the right iliac crest and was able to weight-bear almost immediately. Over the next 2 days the pain worsened and he noticed a weakness in dorsi-flexion of the foot and some numbness. A pelvic radiograph at the Emergency Dept. was taken which demonstrated a longitudinal fracture of the right iliac blade ([Fig. 1](#)).

On arrival in orthopaedic clinic he mobilised with a frame and had an obvious foot drop. Examination revealed plantar flexion, dorsi-flexion and EHL function of just 1/5 (MMC scale). In addition the patient also had anaesthesia and pain in an L4 to S2 dermatomal distribution with brisk reflexes.

After discussion with our radiology colleagues, an MRI of the hip, pelvis and lumbar spine was performed specifically to exclude nerve root avulsion injuries. The spine images were unremarkable, but the pelvic films showed a mass suggestive of a haematoma (see [Figs. 2 and 3](#)).

The images were sent to a specialist regional orthopaedic centre to rule out a sarcoma.

Over the next 8 months, the patient's neurological symptoms slowly improved, but there was some residual neurological deficit.

1.2. Case 2

K.H. is a 78-year-old lady taking warfarin for AF who had a mechanical fall landing on her hip. She was able to weight-bear immediately. Overnight, she developed pain and awoke to discover a grade 3/5 weakness in the distribution of the sciatic nerve and dysthaesia affecting the L5 to S2 dermatomes. This progressively worsened over the next day, when she presented to our department.

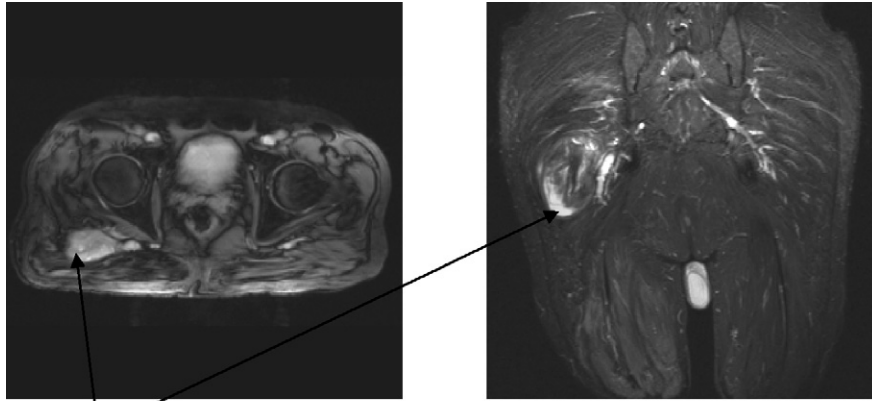
A plain radiograph was entirely normal, and a diagnosis of haematoma secondary to warfarin therapy was made. An early management plan to treat surgically was made and her warfarin was reversed with vitamin K. In the time taken to for her INR to return to an acceptable level, an MRI scan was requested. This confirmed the diagnosis (see [Figs. 4 and 5](#)).



Fig. 1. Longitudinal fracture through iliac blade.

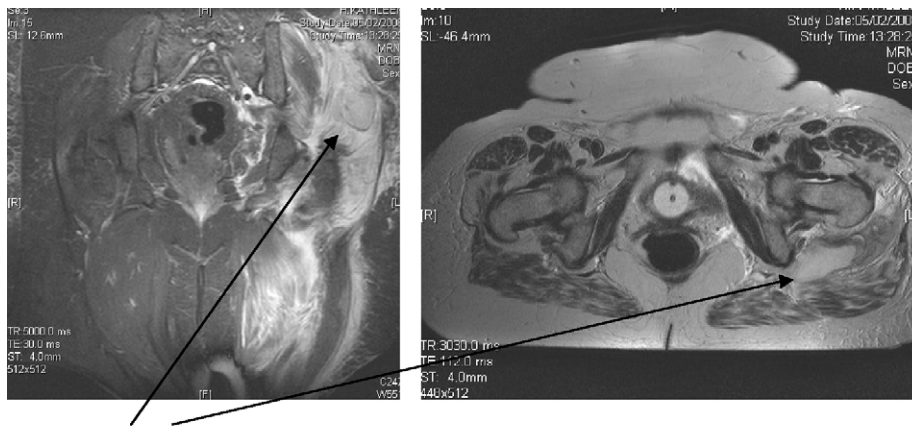
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Haematoma – compressing the oedematous right sciatic nerve – seen on a Fat suppression sequence - Axial (fig2) and coronal (fig 3) MRI scan

Figs. 2 and 3. Haematoma – compressing the oedematous right sciatic nerve – seen on a fat suppression sequence – Axial (Fig. 2) and coronal (Fig. 3) MRI scan



haematoma of Left buttock between gluteus medius and minimus on a coronal (fig 4) and axial (fig 5) T1 views.

Figs. 4 and 5. Haematoma of left buttock between gluteus medius and minimus on a coronal (Fig. 4) and axial (Fig. 5) T1 views.

She had an evacuation using a posterior approach to the hip, with the sciatic nerve carefully identified and protected. A large haematoma was removed (around 300 ml including any necrotic tissue).

She made an incredibly quick recovery and within 2 days walked home unaided with no neurological deficit.

2. Conclusion

While the presentation of sciatic nerve palsy following hip surgery is well documented^{1,2,4} and early evacuation is advocated in the majority of these cases. Interestingly in the series where non-operative treatment was followed, only 50% of patients had good outcome after 5 years³. However, injury associated sciatic palsy and the treatment plan is less well reported.

This presents an interesting treatment dilemma. Our comparative case reports are obviously single individual cases, however, in

two similarly aged patients with two extreme treatment modalities. Our findings suggest that early surgical intervention in this case has led to quicker resolution of symptoms. Of course this is counterbalanced by the risks of iatrogenic injury to the nerve, infections and re-accumulation of haematoma.

References

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