We describe a 47-year-old woman with sciatic neuropathy caused by compression of the sacral plexus by posterior shift of the uterus.

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Case report

A 47-year-old woman complained of pain and numbness in the right calf and weakness of the tibialis anterior muscle. The ankle reflex was absent and hypopositivity and paraesthesia were felt in the L5 and S1 dermatomes. The power of the tibialis anterior, extensor hallucis longus, and flexor hallucis longus muscles was MRC 4. Straight-leg raising was normal on both sides. She had failed to gain relief with non-steroidal anti-inflammatory drugs.

MRI showed no evidence of spinal abnormality but the uterus was in contact with the anterior aspect of the spine (Fig. 1). Myelography and CT myelography revealed no significant intradural abnormalities. CT of the pelvis showed that the uterus had shifted to the posterolateral space in direct contact with the anterior aspect of the sacroiliac joint (Fig. 2).

Electromyography revealed an abnormal voluntary action potential in the ventral roots of L5, S1 and S2 but the dorsal roots were normal.

We decided that the pain was due to compression of the appropriate nerve roots by the uterus which also had a small myoma-like lesion. Hysterectomy was advised.

At operation, carried out transabdominally, the uterus was mildly adherent to the sacrum with a marked indentation, 7 cm x 3 cm (Fig. 3), on its posterolateral surface because of compression against the anterior surface of the sacrum. It was normal except for a minor degree of endometriosis.

After operation, the sciatic pain disappeared, with gradual return of motor function. No recurrence was apparent on review at 16 months.

Discussion

The sacral plexus runs along the posterior and lateral walls of the pelvis, between the piriformis muscle and the internal iliac vessels, which are embedded in the pelvic subserous fascia. Compression from disc herniation, the piriformis syndrome, \(^{1,2}\) endometriosis, \(^{3-5}\) an abscess, \(^6\) or a tumour, \(^7\) etc, can provoke pain.

It has been suggested that a retroverted uterus may cause low back pain, \(^8\) and hysterectomy has been carried out with varying results. We assessed the sagittal lumbar MR scans of 856 women and in only 14 did the uterus come into contact with the sacrum. We are aware of only one report of sciatic neuropathy caused by an adjoining uterus, which was enlarged and irregular, and have not seen an account of sciatica provoked by a normal uterus.
We describe two patients with obturator dislocation of the hip which was irreducible by described techniques of closed reduction. The first required open reduction using the iliofemoral approach with release of rectus femoris. The second was treated on a traction table which allowed disengagement of the head and, when combined with simultaneous lateral traction, adduction and gradual release of the longitudinal traction, facilitated a smooth reduction. Since the hip is stable in flexion, early mobilisation in an extension-limiting brace avoids the prolonged bed rest traditionally recommended for this injury.

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Case report

Case 1. A 24-year-old man was admitted after a motorcycle accident with his right hip in 30° of abduction, 10° of flexion and externally rotated. Radiographs confirmed an obturator dislocation (Fig. 1). Under general anaesthesia and with fluoroscopy, reduction was attempted using manual longitudinal traction with lateral traction to the femur. This was unsuccessful. The hip was then exposed through an iliofemoral approach. The femoral head had burst through the capsule medially, and reduction was blocked by the tight anterior structures of the capsule, labrum and rectus femoris (Fig. 2), which were released. Reduction was achieved using a corkscrew to provide traction in the line of the femoral neck, with the hip flexed to 30° to relax the iliofemoral ligaments. After operation he was mobilised with partial weight-bearing for six weeks using a brace to prevent full extension and abduction. No abnormality was detected on CT apart from a small indentation fracture. MRI at 14 weeks showed no evidence of avascular necrosis. He made a full recovery.

Case 2. A 30-year-old man was admitted after a motorcycle accident with gross fixed abduction of the hip. Manual reduction was unsuccessful and further reduction was attempted using the traction table, where a greater longitudinal load could be applied through the foot piece. Success was then achieved by simultaneous lateral traction to the thigh with gradual adduction of the hip and slow release of the longitudinal traction, swinging the hip into adduction and internal rotation in a controlled manner. CT showed no fracture of the femoral head. The patient was mobilised in a brace with partial weight-bearing for six weeks. MRI at this stage showed no evidence of avascular necrosis. He made a full recovery.

References