Sciatica due to heterotopic ossification: case illustration

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A 33-year-old man was referred for surgical evaluation with a diagnosis of symptomatic lumbar disc herniation. His chief complaint was persistent sciatic pain on the right lower limb, aggravated by physical activity and prolonged sitting. He had a previous history of minor back pain.

A physical examination showed normal lumbar mobility, normal strength and reflexes on the lower limbs, and hypesthesia of L-4 and L-5 dermatomes of the right foot. Provocative tests for sacroiliac joints and piriformis muscle were negative, but there was limited, although painless, internal rotation of the right hip.

MRI showed moderate facet and flavum hypertrophy and disc protrusion that caused bilateral foraminal stenosis, more severe on the left side (Fig. 1 left). Due to the asymmetric hip examination results, pelvic radiographs were ordered, and a bone mass just below the ischial tuberosity was noted (Fig. 1 right). A CT scan revealed a heterotopic bone mass on the right at the level of the biceps femoris muscle (Fig. 2 left), adjacent to the sciatic nerve. A foraminal L4–5 nerve root block, performed for differential diagnosis, was negative.

A posterior transgluteal surgical approach was performed, achieving complete release of the sciatic nerve and extraction of the bone mass, which measured 6.5 cm in length (Fig. 2 right). Histopathological examination reported mature bone tissue, compatible with heterotopic ossifica-

tion. The patient had fully recovered clinically 2 months after surgery, and follow-up imaging at 1 and 2 years showed no recurrence. In cases of sciatica, without clear clinical and radiological correlation, extraspinal causes should be investigated.^{1–4}

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FIG. 1. Lumbar axial MR image (**left**) showing disc protrusion and foraminal stenosis at L4–5. Preoperative pelvic radiograph (**right**) showing heterotopic bone mass.

FIG. 2. A CT scan of the pelvis (**left**) revealed a heterotopic bone mass on the right side at the level of the biceps femoris muscle. The heterotopic bone mass (**right**), 6.5 cm in length, was dissected and removed. Figure is available in color online only.