

***Corresponding author**

*Jacopo Conteduca, Università Tor Vergata, Via Cracovia, 90, 00133 Roma RM, Italy.

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Enchondroma of the Iliac Crest as un-Usual Case of Sciatica-like Symptoms: Case Report

Jacopo Conteduca*, Damiano Longo, Marco Filippini Asl Lecce, Giuseppe Rollo Asl Lecce

Università Tor Vergata, Via Cracovia, 90, 00133 Roma RM, Italy

Abstract

A 22-year-old patient who presented with sciatica-like symptoms was unsuccessfully treated with rest, painkillers and physical rehabilitation. After a CT scan of the pelvis and surgical resection, the patient was diagnosed with enchondroma of the iliac crest.

This is the first English-language report that we know of describing an isolated enchondroma of the iliac crest. Our study highlights the importance of considering other aetiologies, including a bone tumour of the pelvis, in patients with sciatica-like symptoms without abnormalities in the lumbar region.

In this case, the patient was successfully treated with surgical resection. There was no evidence of recurrence at 18 months.

Introduction

Not all sciatica-like symptoms are characterized by lumbar spine derivation. Neoplastic, traumatic, vascular and other peripheral lesions could cause extraspinal sciatica.

Enchondroma is a solitary, benign, and intramedullary cartilaginous tumour that occurs most commonly in the small bones of the hands and feet, accounting for 3–10% of all bone tumours. They originate from the growth plate cartilage, which later proliferates to form enchondroma. The lesions are central or eccentric, and metaphyseal involvement is most common in long bones.

We report a case of an atypical occurrence of enchondroma of the iliac crest causing sciatica-like symptoms.

Case presentation

A 22-year-old medical student presented at the office for pain in the right buttock and posterior thigh for 8 weeks. He denied any history of trauma. He had stopped participating in habitual activities such as running, playing tennis and going to the gym. He took anti-inflammatories without benefit. Patient denies any past medical history or relevant past interventions.

At the examination, the pain was localized at the buttock level and went down towards the back of the thigh and leg. The Lasegue test was positive at 60° on the right. Valleix's sign was positive for the right gluteus.

There was no strength deficit. He was neurologically intact throughout the lower extremities.

The patient underwent MRI of the lumbosacral spine, which revealed only L4-L5 cranial bulging. Physiotherapy was prescribed with no results.

He returned to the office, also suffering from a limitation in the range of motion of the right hip.

He underwent MRI (Fig. 1) of the pelvis and subsequently a CT scan (Fig. 2), which revealed neoformation at the iliac crest level and gluteus minimus and medius hypotrophism.

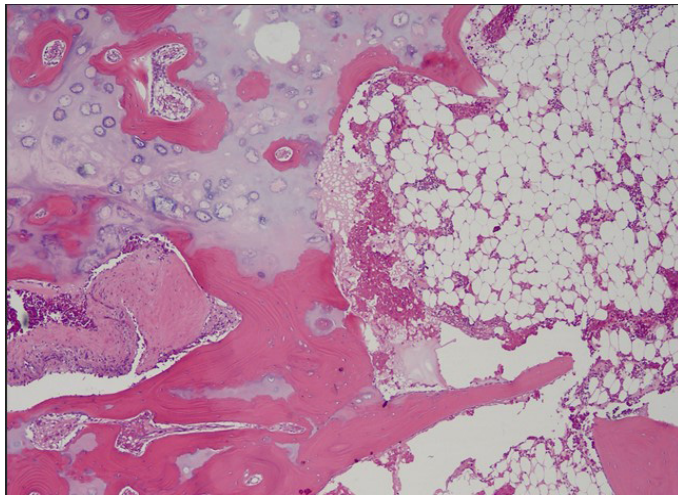


Figure 4: The results of the histological examination revealed the appearance typical of an enchondroma

and vein. The superior gluteal nerve and vessels pass superiorly to the piriformis muscle, after which the nerve divides into its superior and inferior branches.

Superior gluteal nerve entrapment syndrome is a rare clinical condition caused by impingement of the superior gluteal nerve between the piriformis and gluteus medius muscles. This syndrome is sometimes termed “pseudosciatica” because it can be misdiagnosed as sciatica, mimicking a herniated disc. The patient may feel pain or tenderness in the gluteal region and may demonstrate weakness when abducting the affected hip, leading to a waddling gait.

Sciatica can have both spinal and extraspinal sources and, in some cases, can have both origins simultaneously. Sciatica of lumbar spine origin is likely the most common cause of sciatica overall. However, the incidence of pseudosciatica and sciatica mimics could be far greater; we simply do not know how prevalent extraspinal sciatica is among the vast number of patients presenting with sciatica.

Possible extraspinal origins are piriformis syndrome, wallet neuritis, Lotus neuropathy, piriformis pyomyositis, and superior cluneal nerve disorders [1].

The schwannoma is the most common benign peripheral nerve sheath tumour of the sciatic nerve. In the case of sciatica-like pain with negative lumbar MRI for disc herniation, potential schwannomas along the pelvic and extrapelvic courses of the sciatic nerve (near the ischial tuberosity, gluteal region, posterior to the hip joint, and lower thigh) should be investigated.

In this case, the superior gluteal nerve was compressed by an enchondroma of the iliac crest.

Lesson learnt: Solitary enchondromas are frequently benign, often asymptomatic, cartilage tumours.

The presence of an enchondroma is not an absolute indication for surgical resection. A watch and wait approach is taken in cases in which there are no clinical manifestations. Surgery is indicated when there is compression of nerves, arteries or tendons or when there are functional and anatomical alterations. Therefore, in the present case, persistent symptoms were the formal indication for surgery. En bloc resection was performed (Fig. 3).

In the literature, the bone tumour of the pelvis causing sciatica that have been reported have been an ischial osteochondroma [2-5], an Ewing sarcoma of the pelvis [6], and a chondrosarcoma of the posterior iliac crest extending into the spinal canal [7].

This is the first English-language report that we know of describing an isolated enchondroma of the iliac crest causing sciatica like symptoms.

Consent: The patient represented in this study was informed that the data from the case would be deidentified and used in a medical publication.

Conflicts of Interest: The authors declare that there are no conflicts of interest related to this case report.

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