

Osteochondroma of the Pubic Symphysis: Unusual Location

S. Faiz^{1*}, S. Tadsaoui¹, R. Roukhsi¹, A. Mouhsine¹, E. Athman¹¹Department of Radiology, Avicenne Hospital, CHU Mohamed VI, Marrakech, Cadi Ayyad University, Faculty of Medicine and Pharmacy, Marrakech, MoroccoDOI: [10.36347/sajp.2021.v10i10.003](https://doi.org/10.36347/sajp.2021.v10i10.003)

| Received: 16.08.2021 | Accepted: 23.09.2021 | Published: 30.10.2021

*Corresponding author: S. Faiz

Abstract

Case Report

We report the case of a left pubic osteochondroma in a 55-year-old man, without any particular pathological history, which revealed itself as a painful left laterotesticular induration. This induration increased in volume and bothered the patient during daily activities. The CT scan was in favor of a left pedunculated pubic osteochondroma pushing back the spermatic cord. Surgical resection of the tumor confirmed the diagnosis of an osteochondroma.

Keywords: osteochondroma, pathological history, CT scan, laterotesticular.

Copyright © 2021 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Osteochondroma is the commonest benign bone tumor. This lesion is defined as a cartilage-capped bony projection arising on the external surface of a bone containing a marrow cavity that is continuous with that of the underlying bone [1, 2].

It occurs in 3% of the population and accounts for more than 30% of all benign bone tumors. Solitary osteochondromas show a predilection for the metaphyses of the long tubular bones, especially the femur (30%), humerus (26%) and tibia (43%). Rare sites are in the carpals, tarsals, patella, sternum, pelvis and spine.

Osteochondromas are usually asymptomatic and found incidentally. The usual symptoms are painless, slow-growing mass on the involved bone. The clinical signs of malignancy are pain, swelling and an enlargement of the mass.

We report a case of osteochondroma of the left pubic symphysis.

CASE REPORT

We present a case of an 55-year-old man, without any notable pathological history, who consulted for a painful subcutaneous induration located on the left side of the scrotal bursa. This swelling had recently increased in size and had become bothersome during movement and sexual intercourse. Clinical examination revealed a subcutaneous bony swelling located on the

left side of the scrotum, painful to palpation, with no other associated abnormalities.

The standard X ray (Fig 1) showed a cauliflower-like tumor of 6 cm long axis developed from the left iliopubic branch.



Fig 1: Frontal radiograph a cauliflower-like tumor developed from the left iliopubic branch. Its medullary cavity is continuous with that of the underlying bone

The computed tomography (Fig 2) showed a pedicle-like bony mass extending from the anterior aspect of the left iliopubic ramus, slightly compressing the urethra. This mass was covered by a thin

cartilaginous cap, regular without calcifications; this aspect was in favor of an osteochondroma without signs

of degeneration.

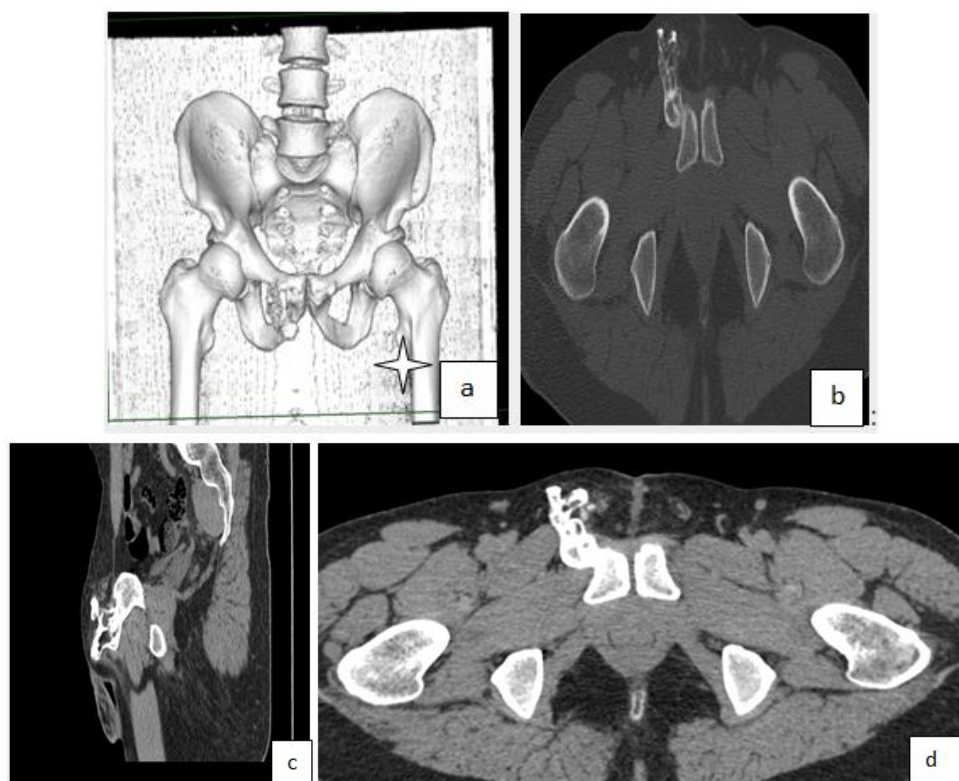


Fig 2: Pelvic Ct: 3D (a), Axial bone window (b), Sagittal small part window(c), Axial small part window (d) sections, showing a pedicle-like bony mass extending from the anterior surface of the left iliopectoral ramus

DISCUSSION

Osteochondromas represent 40% of benign tumors and 10% of all primary bone tumors [3]. These tumors are found preferentially on the metaphyseal side of the fertile growth plates, but also on the flat bones and bones of the axial skeleton. Their frequency in the pelvis is estimated at 7% [2, 6]. Osteochondromas are most often asymptomatic, but complications can occur, especially if the tumor is large or if it is located in an anatomical site at risk. Indeed, cases of symphysis pubis OC with sexual disturbances [4, 9, 10], prostate mass [11] or bladder compression [8] and cases of ischium osteochondroma with sciatica [3, 12, 13] have been reported.

The complications are of three kinds [6], they can be:

- Extrinsic secondary to the compression or irritation of an anatomical structure surrounding the exostosis: frequently musculoskeletal [14], vascular or neurological [15]. Urogenital structures are exceptionally concerned by these compressive manifestations. A review of the literature reports only seven cases in four publications [8-16] in which urogenital manifestations secondary to an osteochondroma are reported;
- Intrinsic in relation to a fracture of the base of the pedicle or a malignant transformation;

- Mixed in relation to bone deformities and joint movement discomfort, then most often encountered in the context of an exostosing disease.

In our case, the discovery was fortuitous following a radiological assessment for a hard subcutaneous swelling in the left latero scrotal. The radiological exploration is essential to evoke the diagnosis on the one hand and to decide on the surgical act on the other hand. CT is useful in osteochondromas of atypical locations as in our case. It allows to define the integrity of the cortical area and the distribution of calcifications [5]. Excisional surgery is not systematic when an osteochondroma is found, but the indication becomes more obvious in complicated forms and in locations in the trunk and girdle where the risk of degeneration is major [2].

CONCLUSION

Osteochondromas are frequent benign bone tumors. In their usual forms, they are often asymptomatic. Localizations in the pelvis, especially in the pubic area, are rare and often complicated. Contrary to the usual forms, they require excision surgery to remove compression or to prevent sarcomatous degeneration.

REFERENCES

- Dahlin, D. C., & Unni, K. K. (1986). Osteochondroma, (osteocartilaginous exostosis). In: Thomas CC, editor. Bone tumors. Illinois: Springfield; p. 18-32.
- Tomeno, B. Tumeurs cartilagineuses bénignes. In: Conférences d'enseignement de la SOFCOT.
- Gökkuş, K., Atmaca, H., Sağtaş, E., Saylık, M., & Aydın, A. T. (2015). Osteochondromas originating from unusual locations complicating orthopedic discipline: case series. *Joint Diseases and Related Surgery*, 26(2), 100-109.
- Mnif, H., Zrig, M., Koubaa, M., Zammel, N., & Abid, A. (2009). An unusual complication of pubic exostosis. *Orthopaedics & Traumatology: Surgery & Research*, 95(2), 151-153.
- Gökkuş, K., Aydın, A. T., & Sağtaş, E. (2013). Solitary osteochondroma of ischial ramus causing sciatic nerve compression. *Joint Diseases and Related Surgery*, 24(1), 49-52.
- Lee, K. C. Y., Davies, A. M., & Cassar-Pullicino, V. N. (2002). Imaging the complications of osteochondromas. *Clinical radiology*, 57(1), 18-28.
- Gouin, F., Venet, G., & Moreau, A. (2001). Exostoses solitaires, maladies exostosantes et autres exostoses. *Encyc Med Chir, Appareil locomoteur. Paris: Elsevier*, 14-72.
- Carpintero, P., Urbano, D., Segura, M., de Tembleque, F. R., & Saceda, J. L. (2007). Discomfort during sexual intercourse secondary to osteochondroma: a report of two cases. *Joint Bone Spine*, 74(4), 401-403.
- Hoshimoto, K., Mitsuya, K., & Ohkura, T. (2000). Osteochondroma of the pubic symphysis associated with sexual disturbance. *Gynecologic and obstetric investigation*, 50(1), 70-72.
- Carpintero, P., Urbano, D., Segura, M., de Tembleque, F. R., & Saceda, J. L. (2007). Discomfort during sexual intercourse secondary to osteochondroma: a report of two cases. *Joint Bone Spine*, 74(4), 401-403.
- Cardenas, C. D., & Christensen, A. W. (1984). Osteochondroma of symphysis pubis presenting as a prostatic mass: a case report. *The Journal of urology*, 132(1), 140-141.
- Gökkuş, K., Aydın, A. T., & Sağtaş, E. (2013). Solitary osteochondroma of ischial ramus causing sciatic nerve compression. *Joint Diseases and Related Surgery*, 24(1), 049-052.
- Moraes, F. B. D., Silva, P., Amaral, R. A. D., Ramos, F. F., Silva, R. O., & Freitas, D. A. D. (2014). Solitary ischial osteochondroma: an unusual cause of sciatic pain: case report ☆, ☆ ☆. *Revista brasileira de ortopedia*, 49, 313-316.
- Uri, D. S., Dalinka, M. K., & Kneeland, J. B. (1996). Muscle impingement: MR imaging of a painful complication of osteochondromas. *Skeletal radiology*, 25(7), 689-692.
- Bottner, F., Rodl, R., Kordish, I., Winkelmann, W., Gosheger, G., & Lindner, N. (2003). Surgical treatment of symptomatic osteochondroma: a three-to eight-year follow-up study. *The Journal of bone and joint surgery. British volume*, 85(8), 1161-1165.
- Phillips, R. R., Lee, S. H., & Flannigan, G. M. (1990). Pelvic osteochondroma causing haematuria. *British journal of urology (Print)*, 66(1), 99-100.