IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 20, Issue 5 Ser.2 (May. 2021), PP 48-50
www.iosrjournals.org

A Case Report of Femur Osteochondroma in a 21 years old female

El Berkani.N , Bouhmou.A , Lahrach.K , Marzouki.A , Boutayeb.F

Abstract:
Understanding and recognising the spectrum of appearances of osteochondroma is important because it represents the most frequent pseudotumoral bone lesion. There are pathognomonic radiological features that are evident with the currently available imaging methods.
We report a case of a 21-year-old woman who presented with a chronis pain in the right lower extremity secondary to a femoral exostosis.
Keywords: *Bone tumors, Exostosis, Osteochondroma.*

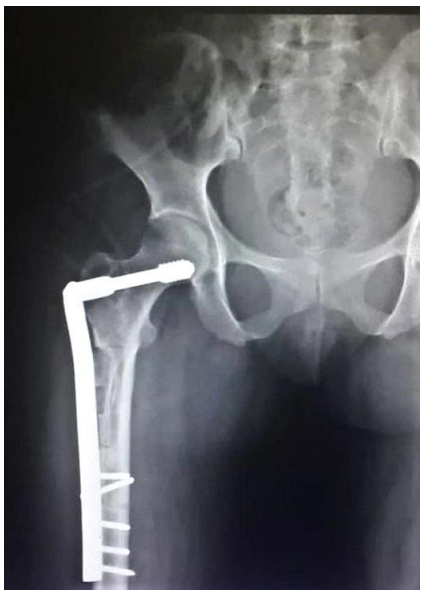
Date of Submission: 29-04-2021 Date of Acceptance: 13-05-2021

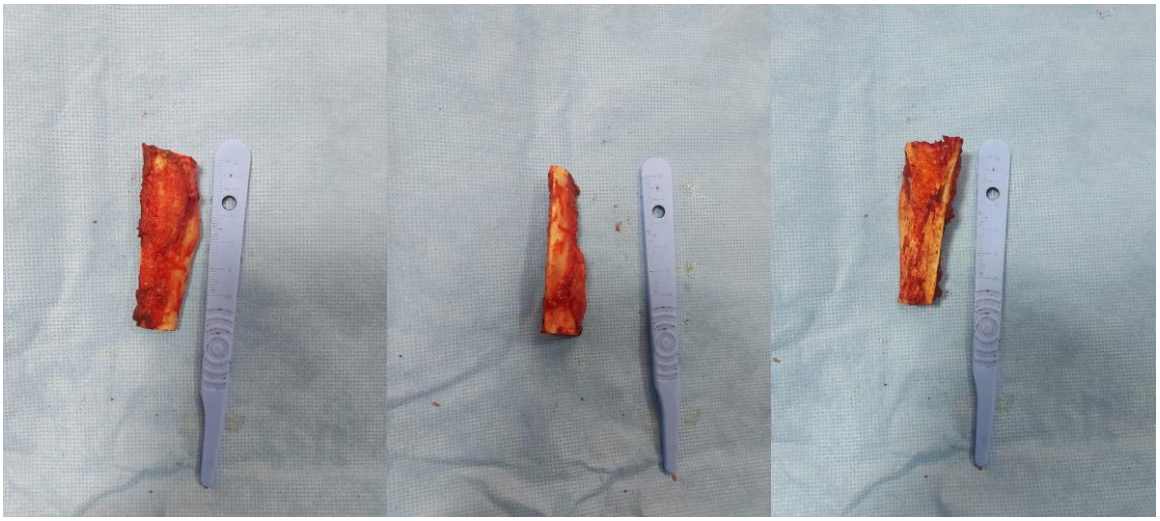
I. Introduction:

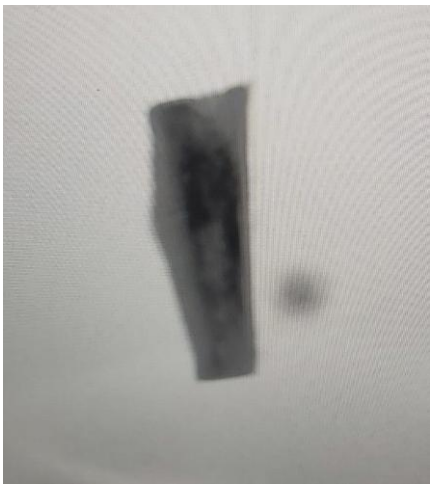
Osteochondromas represent the most common bone tumor accounting for 20 to 50% of all benign osseous tumors.[1][2]
They are usually asymptomatic but It must be assumed here that the true prevalence is underestimated due to asymptomatic lesions [3]
Complications associated with osteochondromas are common, including osseous deformities, fracture, bursa formation with or without bursitis, vascular compromise, neurologic symptoms, and malignant transformation. [1][2][4]
Mutations in tumor suppressor genes EXT1 and EXT2 are usually found in the cartilage cap [5].

II. Case Presentation:

A 21 ans patient with chronic pain in her right hip of an inflammatory type dating back to one year, gradually increasing in intensity without aesthetic functional repercussions or signs of vasculonervouscompression
The biopsy was performed 6 months ago returning in favor of an osteochondroma
3 months later, we performed an hemicirconferential tumor resection in the patient with an autografting from the iipsilater iliac crest protected by a DCS plate.







The anathomopatholigical study confirmed the diagnosis of an osteochondroma with a complete resection and healthy borders.
The recovery of the patient took 10 days and she was able to completly walk without support in 1 month.

III. Discussion

An osteochondroma or exostosis is a benign bone tumour along with a bony overgrowth that happens normally within metaphysis of lengthy bones and pelvis[6] despite the fact that any bone may be affected [7] Solitary osteochondromas represent 10% of all bone tumors and 35% of the benign tumors [8].Single lesions are discovered in 85% of the people identified With osteochondroma [9]. Usually asymptomatic THOSE lesions are normally determined in childhood, 75 to 80% before 20 years of age, with symptomatic lesions normally offering in more youthful patients.[1] Patients with hereditary multiple exostosis (HME) or familial osteochondromatosis are much more likely to be symptomatic and are more critically affected, consequently imparting at a more youthful age.[1] The long bones represent the bulk of cases (50%), with a 2 to at least one decrease extremity to top extremity ratio. The femur is the maximum normally affected long bone (30% of cases) with distal lesions more common than proximal. The tibia and humerus are the following most common long bones, every constituting 10 to 20% of cases. Proximal tibia involvement is more common than distal; consequently, osteochondromas approximately the knee are extremely common. When flat bones (pelvis, scapula, and spine) are involved, medullary continuity is much less obvious at the radiographs, and cross-sectional imaging is frequently required to characterize definitively. [1][2][10][11] Musculoskeletal manifestations of osetochondromas have covered hip impingement [12], limb deformities, fractures and localised pain or swelling of the affected area, which include across the ankle [13]. Yoong et al. [12] additionally document a case–control study of exostoses causing ischiofemoral impingement. As in this case report, osteochondromas can cause local bursa formation [1], [14], most regularly growing around regions that are mobile, which could cause local pain and swelling. Symptomatic lesions can also be secondary to fracture,

malignant transformation, compression of adjacent neurovascular structures. When lesions are symptomatic, cross-sectional imaging is indicated to evaluate the previously listed complications.

References

[1]. Murphey MD, Choi JJ, Kransdorf MJ, Flemming DJ, Gannon FH. Imaging of osteochondroma: variants and complications with radiologic-pathologic correlation. Radiographics. 2000 Sep-Oct;20(5):1407-34. [PubMed: 10992031

[2]. Garcia RA, Inwards CY, Unni KK. Benign bone tumors--recent developments. Semin Diagn Pathol. 2011 Feb;28(1):73-85. [PubMed: 21675379]

[3]. Motamedi K, Seeger LL. Benign bone tumors. Radiol Clin North Am. 2011 Nov;49(6):1115-34, v. [PubMed: 22024291]

[4]. Khare GN. An analysis of indications for surgical excision and complications in 116 consecutive cases of osteochondroma. Musculoskelet Surg. 2011 Aug;95(2):121-

[5]. Pannier S, Legeai-Mallet L. Hereditary multiple exostoses and enchondromatosis. Best Pract Res Clin Rheumatol 2008; 22: 45–54.

[6]. doi:10.1016/j.berh.2007.12.004

[7]. Wang D, DeRubertis BG. Popliteal artery occlusion secondary to exostosis of the femur. Perspect Vasc Surg Endovasc Ther. 2012;24(4):217–20.,

[8]. Vanhoenacker FM, Van Hul W, Wuyts W, Willems PJ, De Schepper AM. Hereditary multiple exostoses: from genetics to clinical syndrome and complications. Eur J Radiol. 2001;40(3):208–17

[9]. Khurana J, Abdul-Karim F, Bovée JV. Osteochondroma. In: Fletcher CD, Unni KK, Mertens F, editors. Pathology and Genetics of Tumours of the Soft Tissues and Bones. Lyon: IARC Press; 2002. p. 234-7.

[10]. Dorfman HD, Czerniak B. Osteochondroma. Bone Tumors. St. Louis: Mosby; 1998. p. 331-46

[11]. Douis H, Saifuddin A. The imaging of cartilaginous bone tumours. I. Benign lesions. Skeletal Radiol. 2012 Sep;41(10):1195-212. [PubMed: 22707094]

[12]. Mavrogenis AF, Papagelopoulos PJ, Soucacos PN. Skeletal osteochondromas revisited. Orthopedics. 2008 Oct;31(10) [PubMed: 19226005]

[13]. Yoong P, Mansour R, Teh J. Multiple hereditary exostoses and ischiofemoral impingement: a case–control study. Skelet Radiol. 2014;43(9):1225–30.

[14]. Herrera-Perez M, Aciego De Mendoza M, De Bergua-Domingo JM, Pais-Brito JL. Osteochondromas around the ankle: Report of a case and literature review. Int J Surg Case Rep. 2013;4(11):1025–7.

[15]. Kitsoulis P, Galani V, Stefanaki K, Paraskevas G, Karatzias G, Agnantis NJ, et al. Osteochondromas: review of the clinical. Radiological and pathological features. Vivo. 2008;22(5):633–46.

El Berkani.N, et. al. "A Case Report of Femur Osteochondroma in a 21 years old female."*IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 20(05), 2021, pp. 48-50.