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Case Report

Intraarticular Osteochondroma of Ankle Joint Two Cases

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Abstract: Intraarticular osteochondroma is a rare pathological condition conditi0n encountered in clinical practice. Here we are presenting two cases of intraarticular osteochondroma of ankle joint, which is much rarer in incidence.Case 1: 20 year male patient came to the outpatient department with complaints of swelling in the ankle joint since two years, pain in the ankle joint since fifteen days. Case 2: 44 year old male patient came with swelling in the outer aspect of the ankle joint since childhood, pain in the ankle joint since four days. The radiological and histopathological examination after marginal excision confirms the diagnosis of intraarticular osteochondroma. In conclusion, Osteochondroma of ankle joint are very rare. Diagnosis is by radiological and histopathological examination. The treatment of choice is marginal excision of the tumour.
Keywords: Intra-articular osteochondroma, Ankle joint, Radiography, Marginal excision, Histopathology

INTRODUCTION

Intraarticular osteochondroma is a rare pathological condition conditi0n encountered in clinical practice. Here we are presenting two cases of Intraarticular osteochondroma of ankle joint, which is much more rare in incidence.

CASE REPORT

Case 1

20 year male patient came to the outpatient department with complaints of swelling in the ankle joint since two years, pain in the ankle joint since fifteen days. No other joint swelling, no history of fever, loss of appetite and weight. Examination reveals tenderness and a firm, nodular 2X2 centimetresswelling, just below the tip of the medial malleolus(Fig 1). Range of ankle movements is restricted terminally. No lymphadenopathy. X-ray examination of the ankle joint show a 1.5X 2 centimetres, oval lesion just below the tip of medial malleolus, with peripheral radiolucency and central radio resistant features suggestive of osteochondroma/ synovial chondromatosis(Fig. 2). Surgically treated with marginal excision of the lesion and sent for histopathological examination(Fig. 3, 4). Histopathology section show outer hyaline cartilage and inner cancellous trabeculae suggestive of osteochondroma(Fig. 7). Postoperative period was uneventful and follow-up at six months patient was asymptomatic doing regular farming.

Case 2

44 year old male patient came with swelling in the outer aspect of the ankle joint since childhood, pain in the ankle joint since four days. Examination of the ankle joint reveals a tender, 3X 3.5 centimetres, firm mobile swelling just posterior to the lateral malleolus. Range of movements at the ankle joint was restricted terminally. No lymphadenopathy. X ray examination of the ankle joint show a 3X3 centimetres, oval lesion just below the tip of medial malleolus, with peripheral radiolucency and central radio resistant features suggestive of osteochondroma/ synovial chondromatosis(Fig. 5, 6). Surgically treated with marginal excision of the lesion and sent for histopathological examination. Histopathology section show outer hyaline cartilage and inner cancelloustrabeculae suggestive e of osteochondroma. Postoperative period was uneventfull and follow-up at four months patient was asymptomatic doing regular clerical work in his office.

DISCUSSION

Generally, osteochondromas occur around the growth plate of long bones in a skeletally immature person and move towards the diaphysis with the connected bone. Therefore, it is rare that osteochondroma is located within the articular compartment of a joint in an adult[1].Intra-articular osteochondromas of the hip and ankle joint have been reported, these cases are rare[2]. The case of a large osteochondral loose body in the ankle joint of a 10-year-old girl has been reported byToshihiko Yamashita[3]. Intra-articular

osteochondroma in the knee joint has been reported only in two cases [4,5]. While the extra-articular tumors are usually symptomless, intra-articular tumors cause pain and discomfort with restrictions in the range of movements. Differential diagnoses include synovial chondromatosis, low-grade chondrosarcoma, and osteosarcoma [6]. The diagnoses of the tumors are made by a combination of clinical signs, plain radiography, andhistopathological examination of the lesion. Plain radiography shows a well-circumscribed lesion bone with a cartilaginous cap. The size of the cap is very important to rule out malignant transformation, as a cap larger than 1 cm suggests malignancy. Microscopic examination shows a cap of mature hyaline cartilaginous tissue covered by a fibrous membrane. The centre of the lesion consisted of mature bone trabeculae located beneath the cartilaginous cap containing bone marrow and amorphous calcified debris. To further rule out malignancy, cellular atypia and mitotic activity need to be evaluated [7].In two of our cases also showed matured bone trabeculae with a cartilaginous cap.Marginal excision is the treatment of choice for osteochondroma [1]. This can be performed via an open technique or arthroscopically. Recurrences mostly have not been reported in the literature [8].

Fig. 1:Nodular swelling, just below the tip of the medial malleolus

Fig. 2:X-ray examination of the ankle joint

Fig. 3: Surgically treated with marginal excision of the lesion

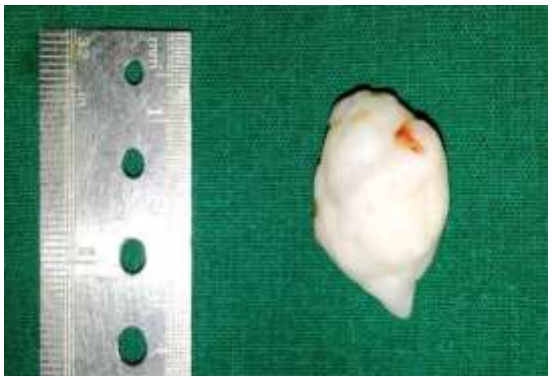

Fig-4: Size of the lesion

Fig-5: X-ray examination of the ankle joint

Fig 6: X-ray examination of the ankle joint

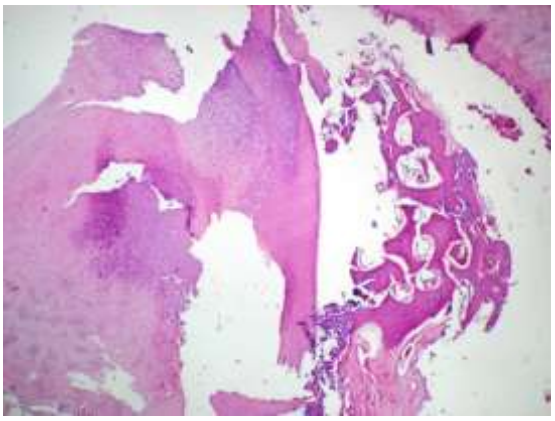

Fig. 7: Histopathology section

CONCLUSION

Osteochondroma of ankle joint are very rare. Diagnosis is by radiological and histopathological examination. The treatment of choice is marginal excision of the tumour.

REFERENCES

1. Rizzello G, Franceschi F, Meloni MC, Cristi E, Barnaba SA, Rabitti C*et al.*;Para-articular osteochondroma of the knee. Arthroscopy, 2007;23:910.e1–910.e4.
2. Siebenrock KA, Ganz R;Osteochondroma of the femoral neck. ClinOrthopRelat Res, 2002; 394:211–218.
3. Yamashita T, Sakamoto N, Ishikawa I, Usui M, Fujisawa Y;Intra-articular osteochondroma of the ankle joint. Journal of Foot and Ankle Surgery, 1998; 37(1): 66-68.
4. Schmoyer S, Ciullo JV;Arthroscopic resection of an osteochondroma of the knee.Arthroscopy, 2001;17:765–767.
5. Takahashi M, Nishihara A, Ohishi T, Shiga K, Yamamoto K, Nagano A; Arthroscopic resection of an intra-articular osteochondroma of the knee in the patient with multiple osteochondromatosis. Arthroscopy, 2004;20(Suppl. 2):28–31.
6. Giudici M, Moser R, Kransdorf M; Cartilaginous bone tumors. RadiolClin North Am., 1993;31: 237–259.
7. Garrison RC, Unni KK, McLeod RA, Pritchard DJ, Dahlin DC;Chondrosarcoma arising in osteochondroma. Cancer, 1982;49:1890–1897.
8. Reith JD, Bauer TW, Joyce MJ;Paraarticularosteochondroma of the knee: report of 2 cases and review of the literature. ClinOrthopRelat Res., 1997;334: 225–232.