Doi: 10.32677/IJCR.2016.v02.i02.001 Case Report

Solitary Osteoma of Femur – A case report

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Received: 04 February 2016 *Initial Review: 20 March 2016* *Accepted: 21 April 2016* *Published online: 30 April 2016*

ABSTRACT

Osteoma is benign tumor usually seen in flat bones. Osteoma usually presents as solitary tumor. It rarely presents as multiple lesion in Gardner's Syndrome. Osteoma involving long bones is very rare and review of literature showed only a few case reports. We report a case of osteoma involving the shaft of the femur. A 57 year old lady came with swelling over the anterolateral aspect of the thigh. Clinical and radiological examination showed a mass on the anterolateral aspect of the femur. Excision of the lesion was done and the biopsy report showed Osteoma. The patient is free from disease for the past two years. We report this case as osteoma is rare in such a location. Tumor occurring in rare locations need to be thoroughly investigated.

Key words –Femur, Osteoma, Tumor

Osteoma is a benign periosteal or endosteal tumour arising commonly in the cranio facial bones and mandible [1]. Usually, it is solitary and multiple osteomas are seen in patient who have Gardner's syndrome. Very few reports of extra cranial osteoma other than Gardner's syndrome have been reported [1-4]. 13 cases of solitary osteoma involving long bones have been reported in one study by Bertoni et al [3]. We report our case of a patient who had solitary osteoma involving the femur

CASE REPORT

This 57 year old lady had come with complaint of swelling over the left thigh region of 6 months duration and associated pain for two months. Swelling had been gradually increasing in size to reach the current size. Pain was continuous in nature with no aggravating or relieving factors. No similar swelling elsewhere in the body was noticed. No constitutional symptoms. No similar history of swelling in any other family members was present.

General examination did not show any positive finding. The local examination revealed normal skin over the swelling with no engorged veins. There was no muscle wasting. On palpation, 4 x 5 cm, hard, well defined mass was seen over the anterolateral aspect of femur. No distal neurovascular deficit was seen. Rest of the systemic examination was normal.

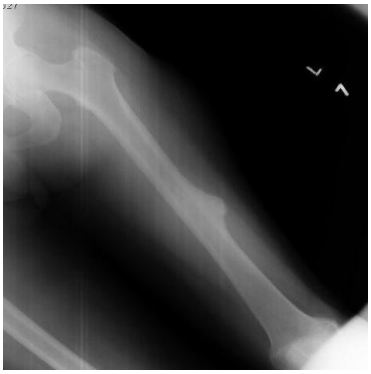

Figure 1 – X-ray showing growth on the anterolateral aspect of femur with no areas of lysis

Blood investigation like routine blood count and ESR were normal. Alkaline Phosphate was 86 U/L. X-Ray of left femur showed a growth on the anterolateral aspect of femur with no areas of lysis. We did an excision of the lesion and sent for biopsy. Histopathological examination of showed no continuity with medullary cavity of femur. Microscopic picture showed trabecular pattern of mature lamellar bone with no atypia. The interlamellar spaces were composed of fibrous tissue with proliferating blood vessel. Cartilage cap was not seen. These findings were suggestive of osteoma. Post operatively, wound had healed well. Regular follow-up of the patient for the past two years showed no clinical and radiological recurrence.

DISCUSSION

Osteoma is rare, benign lesion that occurs almost exclusively in the skull. The bones of face and mandible are commonly involved [4-6]. The prevalence has been estimated to be 4.2 per 1000 patients [1]. Cranial osteoma often causes no symptoms and is discovered incidentally. Osteoma involving long bones is extremely rare, with a prevalence of 0.03 patient of 1000 patient who have had a biopsy of a primary bone tumor [1]. Most of these extra cranial lesions are multiple. When they are associated with colonic polyps, fibromatoses and cutaneous cysts, they constitute Gardner Syndrome [1]. There have been only a few reports of osteoma in long bone [7-10]. In current report, we describe our finding in one patient who had juxta cortical osteoma involving long bone.

The differential diagnosis of juxta cortical osteoma includes osteochondroma and paraosteal osteosarcoma. The cartilage cap of an osteochondroma can ossify. Paraosteal osteosarcoma is a low-grade surface osteosarcoma that arises on the posterior aspect of distal part of the femoral metaphysic [5-6]. Histopathology of our lesion suggested feature more towards osteoma. The natural history of an osteoma of the craniofacial skeleton is of slow growth, and this type of lesion usually is treated with local excision. The behavior of osteoma of long bones is not well known as such lesions are very rare; however, they probably behave in a benign manner similar to that of craniofacial osteoma.

Campannacci suggested that an osteoma should be treated with total excision biopsy [4]. Partial resection of osteoma results in pain and necessitates an additional procedure to remove the remainder of the lesion [1]. Proximal and distal wide margins are not indicated. Marginal excision can be performed in most of the cases [1]. Therefore, we followed the principle of Campannacci and did a marginal excision.

CONCLUSION

We emphasize that a diagnosis of a solitary osteoma of a long bone should be made with caution and only after thorough histological examination of the completely resected tumor.

REFERENCES

1. Peyser AB, Makley JT, Callewart CC, Brackett B, Carter JR, Karim FWA. Osteoma of long bones and the spine. A study of eleven patients and a review of literature. J Bone Joint Surg Am. 1996; 78: 1172-80.
2. Bauma PA, Nelson MC, Lake EE, Bogumill GP. Case report 560, Parosteal osteoma of tibia. Skeletal Radiol. 1989; 18: 406-409.
3. Bertoni F, Unni KK, Beabout JW, Sim FH. Parosteal osteoma of bones other than of skull and face. Cancer. 1995; 75: 2466-2473.
4. Campanacci M. Osteoma in Bone and Soft Tissue tumors, New York, Spinger. 1990; PP 349-354.
5. Dahlin DC, Unni KK. Osteoma; In Bone Tumours: General Aspects and data on 8542 cases, Ed. 4, Springfield, Illinois, 1986; Pp 84-87.
6. Enneking WF. Osteoma, In, Musculoskeletal Tumor Surgery, NY, Churchill Livingstone. 1983. Pp 1023-31.
7. Meltzer CC, Scott WWN, McCarthy EF. Case report 698, Osteoma of clavicle. Skeletal Radiol. 1991; 20: 555 - 557.
8. Sundaram M, Falbo S, Mc Donald D, Janney C. Surface osteomas of Appendicular skeleton. AJR Am J Roentgenol. 1996; 167: 1529-1533.
9. O'Connell JX, Rosenthal DI, Mankin HJ, Rosenberg AE. Solitary Osteoma of long bone; A Case Report. J Bone Joint Surg Am. 1993; 75: 1830-1834.
10. Lambiase RE, Levine SM, Terek RM, Wyman JJ. Long bone surface osteomas. Imaging features that may help avoid unnecessary Biopsies. AJR Am J Roentgenol. 1998. 171; 775-778.

How to cite this article: Sadhanandham VK. Solitary Osteoma of Femur - A rare case report. Indian J Case Reports. 2016; 2(2): 18-19.

Conflict of interest: None stated, Funding: Nil