Pathological Fractures from benign tumours
(About 27 cases)

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Abstract: A pathologic fracture occurs when a destructive processes cause defects in the bony architecture. Most of benign bone tumors were revealed and complicated by pathologic fractures. These tumors continue to pose problem in diagnostic , therapeutic and prognostic .Our study is a retrospective analysis of 25 cases of adult patients with pathological fractures. The aim of our study is to reveal the diagnostic and therapeutic difficulties that affect prognosis

1 INTRODUCTION
A pathologic fracture occurs when a destructive processes cause defects in the bony architecture. Most of benign bone tumors were revealed and complicated by pathologic fractures. These tumors continue to pose problem in diagnostic, therapeutic and prognostic. Moreover all our patients consolidated their management and operated (2,3). -

2 MATERIALS AND METHODS:
Our study is a retrospective analysis of 25 cases of adult patients with pathological fractures treated at the University Hospital of Rabat during the period 2008-2012. The clinical and radiological follow-up is for a decline of 2 to 6 years (mean follow-up was 36 months).

3 RESULTS:
The average age is 40 years. Female predominance is clear with 64% of women. The tumor was revealed in 91% of cases by fracture. Therefore, we found functional impairment, pain and vicious attitude. The most common radiology appearance is lytic image, but sometimes is condensing (osteoid osteoma) and mixed in some cases. In cases of giant cell tumor or aneurysmal bone cyst, we can find a soft tissue invasion. The tumors seat in the lower limbs in 19 cases with 70% in descending order (Femur: 13 cases, Tibia: 4 cases, Fibula: 1 case, Hock: 1 case), the upper limb in 8 cases with 30% in descending order (hand: 5 cases, Humerus: 2 cases). It should be noted that of the 10 cases of giant cell tumors, 6 of them siege at the lower end of the femur. In parallel, 5 of the 6 cases of chondromas seat at hand.

Histological data: Among the 25 cases
10 cases of giant cell tumors
6 cases of chondroma
5 cases of solitary bone cyst
3 cases of aneurysmal bone cyst
2 cases of non-ossifying fibroma
One case of fibrous dysplasia
One case of osteoid osteoma

4 DISCUSSION:
The treatment is definitely surgical, it consisted of a simple curettage - grafting and fixation with different materials (nails, pins, blade plates). Resection-arthrodese of the knee was performed in one patient with a giant cell tumor near the knee, and resection of the distal half of the 4th P3 phalanx was performed for a chondroma. Our results are satisfactory, as we noted only one case of recurrence observed 6 months after treatment of giant cell tumor of the knee and was nominated for an amputation. Furthermore all our patients consolidated with a good functional outcome.

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5 CONCLUSION:
Pathological fractures frequently reveal a benign bone tumor. At this stage, it is imperative to know the exact nature. It should therefore be able to determine the radio-clinical profile of the tumor in order to ask the indication for surgical biopsy. It is necessary except for the typical essential bone cysts. For essential or aneurysmal bone cysts small, treatment depends on the usual parameters of the fracture. In other cases, curettage biopsy diagnosed transplant is required. For giant cell tumors and other benign tumors with risk of degeneration, extra-lesional resection after histological evidence should be considered.

6 BIBLIOGRAPHY:

FIGURES

Patient 1: Figure a and b : Giant cell tumor of the lower end of the femur. Figure c and d : Curettage - filling with cement and restraint by

Patient 2: Figure a : radiography of the knee showing the result of surgical treatment (curettage-Filling bone graft + cement + plate fixation target) and control after two ra months. Figure b: radiography after 6 months showing recidivism