Osteochondritis Dissecans Of The Femoral Condyles About 5 Cases

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Abstract: Osteochondritis of the femoral condyles can be defined as a localized alteration of the trophism of the epiphyseal bone and articular cartilage opposite which may, without scarring, and necrosis to the release of an osteochondral fragment. This lesion is relatively rare, with around 20 per 100,000 boys and girls, and occurs in 70% of cases between 10 and 20 years. The pathophysiology of this condition remains mysterious. If the radiography usually allows diagnosis, however, it cannot identify the anatomical characteristics of the lesion. We studied five patients with Osteochondritis dissecans of the femoral condyles. Data were collected from records of clinical and radiological information, and the results were analyzed according to clinical and radiological criteria.

Keywords: Osteochondritis, dissecans, femoral condyle, knee.

INTRODUCTION
Osteochondritis dissecans is cartilage damage that can lead to necrosis of a less extensive area of articular cartilage and subchondral bone chatter. The origin of this food disorder is strongly suspected trauma or microtrauma, at least in the majority of cases.

MATERIALS AND METHODS
Five patients suffering from Osteochondritis dissecans of the femoral condyles were collected in our department, they are all male, the average age was 35 years with extremes of 27 and 58 years, the history of trauma were found in 3 cases, the reason for consultation was knee pain in 4 cases, with locking of the knee in 1 case. Clinical examination is quite poor and found a pain in the knee mobilization and palpation of the underside of the condyles, a slight limitation of extension was observed in 4 patients. The standard radiological examination showed that it was stage III classification REY (1) in 3 cases, 1 case in stage IV and stage II in one case (Fig1).

Arthrography was performed in 4 patients and showed the passage of fluid and air in the cracks in the cartilage, this assessment has been completed by arthrography in 2 cases which showed the location of lesions on the surfaces lower femoral condyles. Arthroscopy and MRI were not made in our patients. This assessment, later supplemented by arthrotomy has clarified the exact location of the lesion was posterior lower level of the lateral condyle in 3 cases, lower the medial condyle in 1 case, and on the lower surface of 2 condyles in 1 case. The surgical treatment was in all cases by arthrotomy. We conducted a drilling fragment in place in 2 cases, a fragment fixation in 2 cases, and removal of the receiver in 1 case (Fig2-Fig3).

References:
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RESULTS
The average follow-up was 2 years, the results are judged on clinical and radiological criteria (2).

<table>
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<th>Clinical criteria</th>
<th>very good</th>
<th>good</th>
<th>bad</th>
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|                   | - No functional disorder
- Normal mobility
- Knee dry and stable | - One of these disorders | - Not more than two of these disorders
- pain
- Signs of osteoarthritis |

| Radiological criteria | Normal radiological image
- Moderate deformation of the condyle
- Intercondylar residual Condensing | - Condylar deformation
- Residual receiver in place
- Foreign body joints
- Signs of osteoarthritis |

According to these criteria, one of our patients had a very good result, and 4 patients were considered good results.

DISCUSSION
The average age of our patients was 35 years, it is slightly higher than the literature (3,4,5), this can be explained by the narrowness of our sample. The history of trauma was found in 60% of cases, this is also greater than that of the literature (2,4), and is discussing the differential diagnosis of osteochondral fracture that arises, however, that before the stage forms IV (1case), some authors (2) do not distinguish between these two conditions, especially if one accepts the traumatic etiology of Osteochondritis dissecans The reason for the consultation (2,3,5) is a knee pain topography imprecise, which occurs when walking and relieved by rest, is the case of our patients, lameness is inconstant and moderate blocking true is seen in more advanced stages of articular foreign body, in the case of one of our patients. Clinical examination (2,3,5) is also relatively poor, there may be a
slight limitation of the extension of hyperflexion, pain caused by pressure can be found from the bottom upwards on the underside of the condyle knee flexion to 90 % Radiological examination (6) is a standard anteroposterior radiograph and lateral and patellofemoral parades, but a radiograph shifting the condyles and an anteroposterior radiograph at 45 ° of flexion. Must request a review of both knees for a comparative examination and search for bilateral lesions, CT scans (2,5,6) will indicate the location and extent of lesions better than conventional radiography. Arthrography made in our patients showed the passage of liquid in cartilage cracking, it is not currently practiced in relation to other radiographic examinations. This arthrography (2.6) was supplemented by arthrosan in 2 of our patients and revealed denser pictures patchy and irregular intra flawed, it allows better locate lesions on the femoral condyles (2.6). MRI (6.7) is particularly interesting in terms of Osteochondritis dissecans, it shows the lesions as hypointense image. Arthroscopy (2,3,5,10) can take stock accurately and be used for therapeutic actions. These two exams and lack of resources have not been made in our patients. At the end of this review we note the predominance of stages III and IV, whereas in the literature there is a predominance of stage I and II according to the classification of REY (1).

Stage I: Image incomplete or limited good niche
Stage II: Image escrow darker in the cubicle separate from the rest condyle by a clear band.
Stage III: Receiver bell in the cartilage is open.
Stage IV: Foreign body joint.

Radiological stages of osteochondritis dissecans of the femoral condyles

The differential diagnosis (2,3) is mainly with polyosteocondrosis of the femoral condyles, theochondrodystrophies poly-epiphyseal, and also osteochondral fractures. Treatment can be conservative: no treatment with discharge or orthopedic treatment by immobilization (2,8,10), it is indicated especially in stages I. Surgical treatment (2,3,10) is done by arthroscopy or arthroscopy as appropriate and uses several techniques: drilling the fragment in place, fixation of the fragment, removal of the fragment or the recess-boring extra-articular according WAGNER, the cartilage graft is differently indicated according to the authors (11). Home we treated all our patients arthroscopy with a drilling fragment in place in 2 cases, fixation of the fragment by malleolar screw and cartilage graft from the contralateral condyle in 2 cases, and removal of the receiver in 1 case. Evolution is based on clinical and radiological also (2) criteria, it was good in all patients. It can be done to worsening of stage I to stage III or IV which must modify the therapeutic strategy or long-term to osteoarthritis of the knee.

CONCLUSION

Osteochondritis dissecans of the femoral condyles is an uncommon condition that requires a positive diagnosis, an accurate topographic, a good therapeutic indication, and monitor to watch for the appearance of complications.

REFERENCES