

Osteochondrite disséquante

Hôpital des Enfants, Toulouse



Clinique



- **Garçons > filles**
- **Sportifs**
- **Parfois asymptomatique**
- **Douleurs mécaniques, pseudo blocages**
- **Condyle médial > latéral**

- **Douleur à la palpation**

Imagerie



Classification radiographique

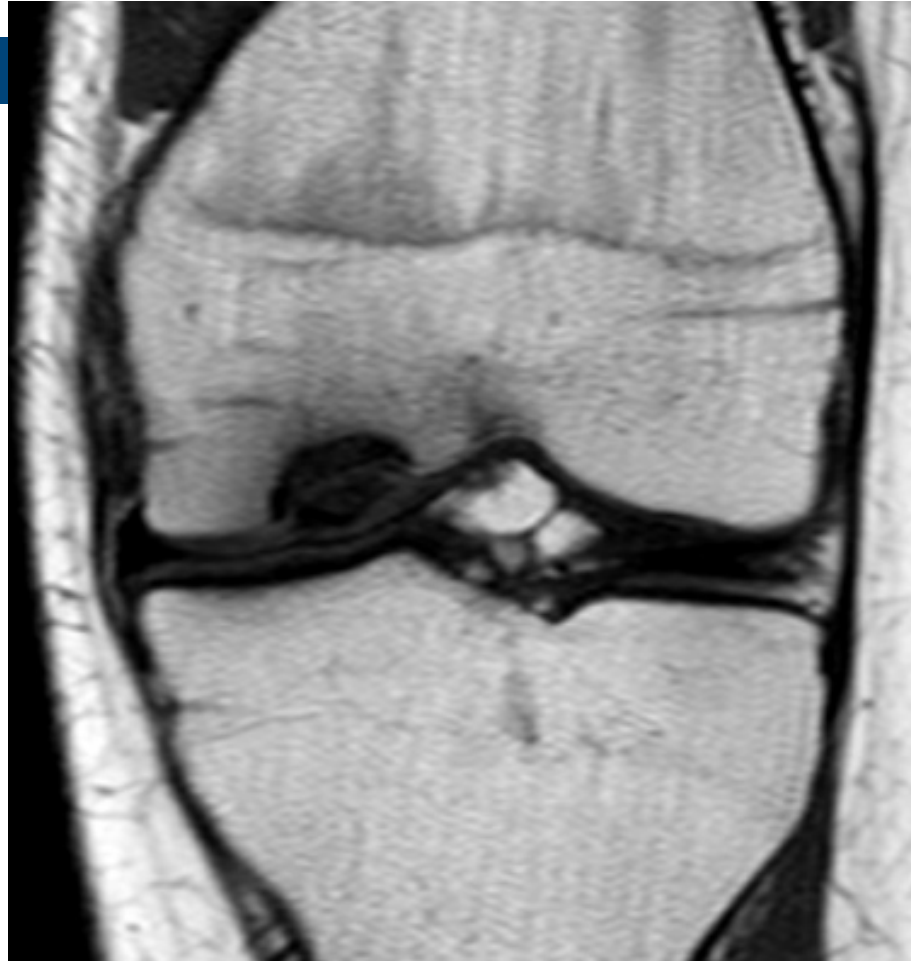
Stade 1: image lacunaire claire limitée par une zone dense

Stade 2: image nodulaire dense séparée de l'os normal par une zone radio transparente

Stade 3: Séquestre avec altération du contour Articulaire

Stade 4: corps libre intra-articulaire

IRM



Traitement

- **Asymptomatique: surveillance**

- **Symptomatique:**

**Repos sportif jusqu' à disparition des symptômes
et amélioration radiographique**

Arthroscopie indiquée:

- **Absence d' amélioration clinique / radiographique**
- **Généralement après 12 ans**
- **Signes d' instabilité IRM**

Instabilité IRM

De Smet AA, Ilahi OA, Graf BK. Reassessment of the MR criteria for stability of osteochondritis dissecans in the knee and ankle. *Skeletal Radiol* 1996;25:159-163.

TABLE 1. *De Smet MRI Criteria for Fragment Instability**

	Description
1	A thin line of high signal intensity 5 mm or more in length at the interface between the OCD and the underlying bone
2	A discrete, round area of homogeneous high signal intensity 5 mm or more in diameter beneath the lesion
3	A focal defect with a width of 5 mm or more in the articular surface of the lesion
4	A high-signal intensity line traversing the articular cartilage and subchondral bone plate into the lesion

Instabilité IRM

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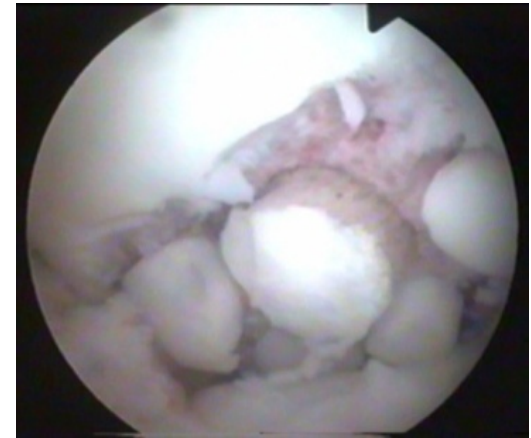


Correlation of Magnetic Resonance Imaging to Arthroscopic Findings of Stability in Juvenile Osteochondritis Dissecans

Christian S. Heywood, M.D., Michael T. Benke, M.D., Kathleen Brindle, M.D., and
Kenneth M. Fine, M.D.

Purpose: To determine the ability of magnetic resonance imaging (MRI) to characterize the stability of osteochondritis dissecans (OCD) fragments in juveniles. **Methods:** Twenty-eight consecutive patients underwent surgery for OCD between 2004 and 2008. Of these, 23 patients had adequate preoperative imaging. There were 14 boys and 9 girls with a mean age of 12.9 years. Of the 23 lesions, 21 were located in the knee and 2 were located in the talus. On the basis of MRI, a single radiologist (1) indicated the presence or absence of 4 established magnetic resonance signs of instability, (2) classified each lesion according to a staging system for OCD stability, and (3) described the lesion as stable or unstable. These findings were compared with the arthroscopic findings. Arthroscopy was considered the gold standard for diagnosing fragment stability. **Results:** Of the OCD lesions, 13 were found to be stable and 10 were found to be unstable. The final MRI impression was unstable in 21 patients and stable in 2 patients. This yielded a sensitivity of 100% and a specificity of 15% for diagnosing fragment instability. When 2 or more criteria were present, the specificity of MRI to classify lesion instability improved to 92%. The sensitivity, however, dropped to 50%. **Concordance between arthroscopic stage and MRI stage was 30% (7 of 23).** **Conclusions:** MRI predicted 21 of 23 lesions to be unstable, whereas arthroscopy found only 10 of these 23 lesions to be unstable. The most common pattern of false-positive findings involved lesions with an area of high signal intensity at the bone-fragment interface. MRI should not be used in isolation to determine lesion instability in young patients with juvenile OCD. **Level of Evidence:** Level IV, therapeutic case series.

Arthroscopie



- **Stable:** microperforations
- **Instable:** fixation vis +/- mosaïc
- **Défect:** microfractures / mosaïc

Suites opératoires



- Immobilisation attelle 6 semaines sans appui
- Mobilisation douce et verrouillage
- Sports à impact: 6 mois

Perforations transchondrales

- **Canule**
- **Kirschner 12 ou 15/10mm**
- **Moteur vitesse lente**
- **Profondeur: +/-2cm**
- **Issue de lobules graisseux / sang**

Perforations transchondrales



Mosaic plasty / vissage

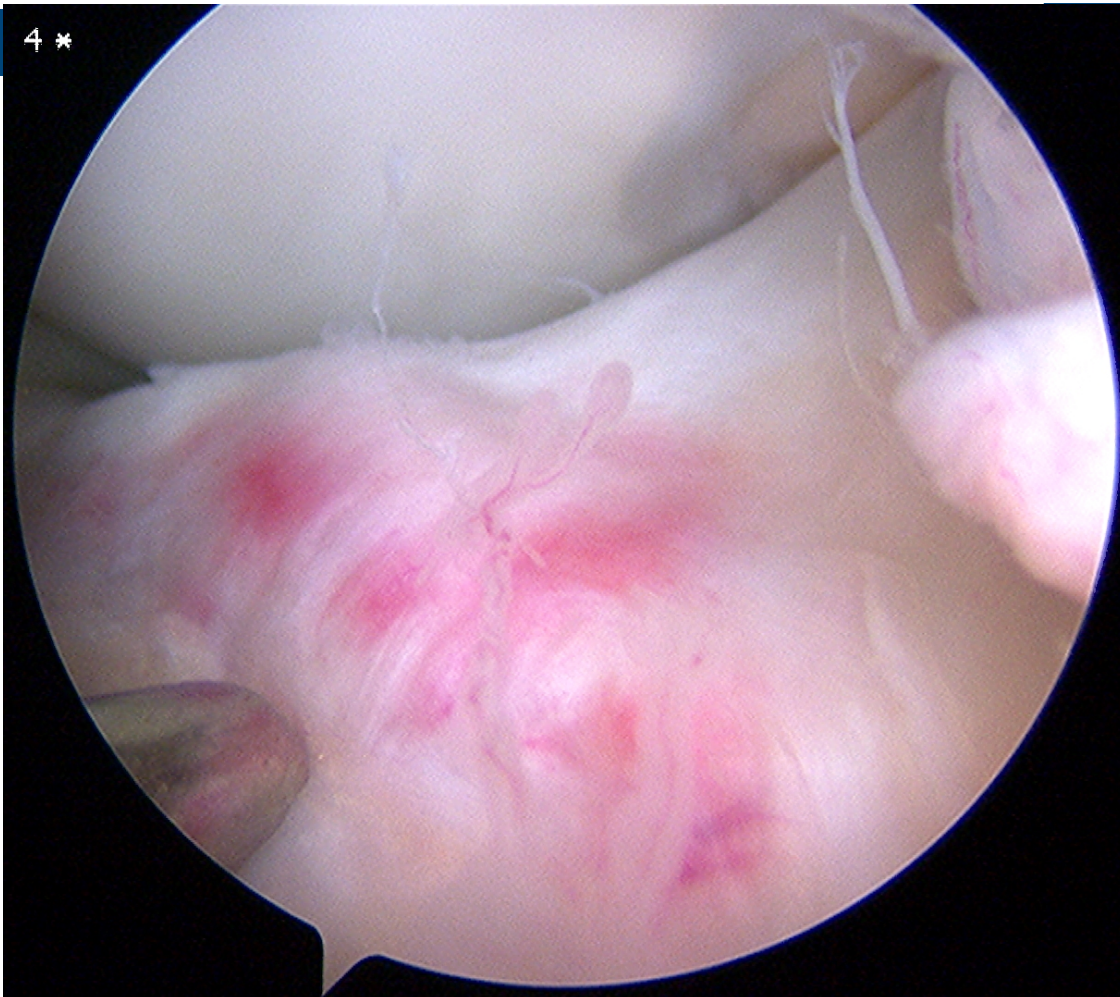


ENREG. *



D
Bloc

Physiopathologie?



A retenir



- **Rarement chirurgical avant 12ans**
- **Bons résultats des perforations transchondrales**
- **Indication sur aspect arthroscopique**