

7th Advanced Course on Knee Surgery

Val d'Isère January 2018

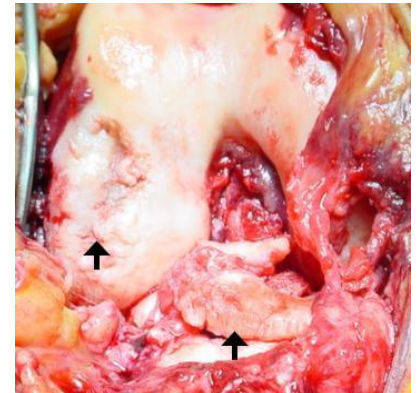
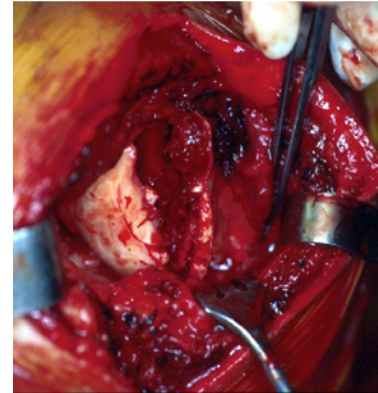
# ***Atraumatic localized osteochondral lesion***

*S. Lustig, C Batailler, Ph Neyret, E Servien,*

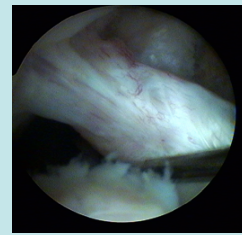
Service de chirurgie orthopédique  
Hopital Universitaire de la Croix Rousse - LYON

# Tears - Etiology

- **Traumatism ++**
  - articular fracture

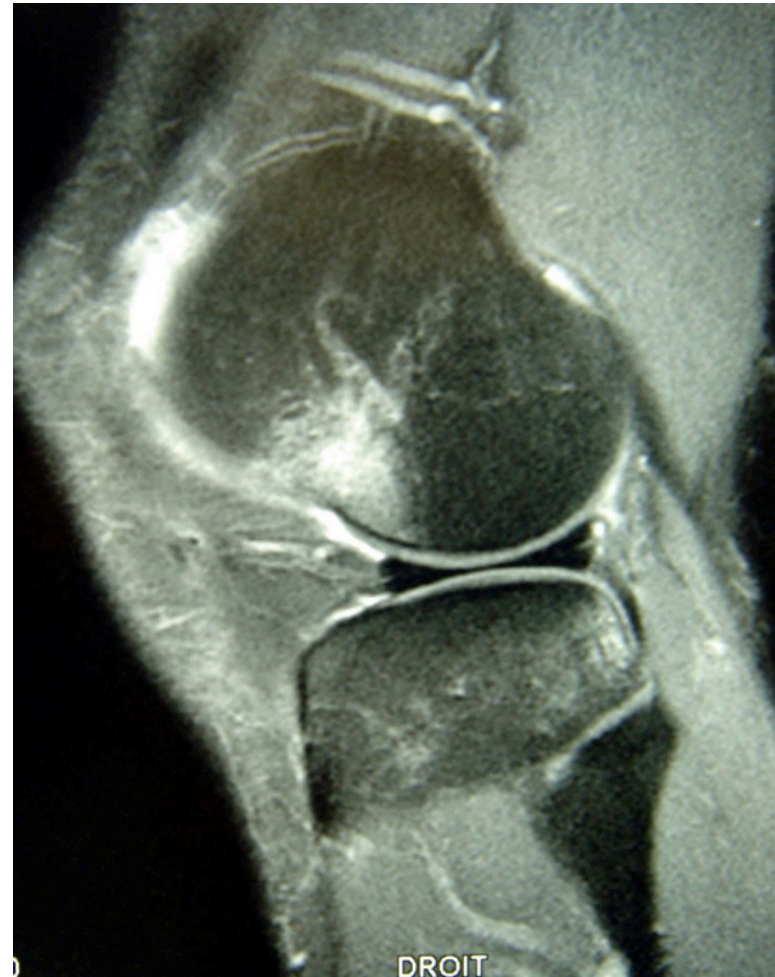
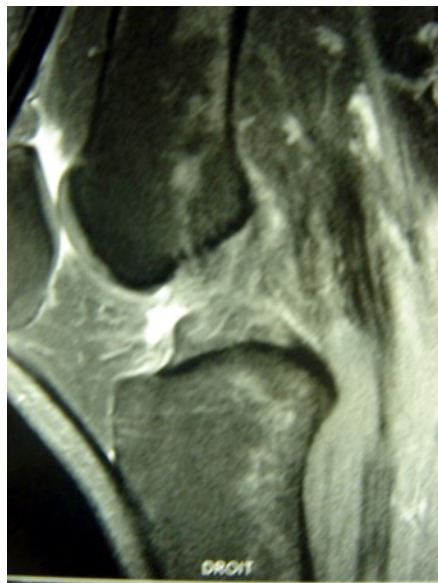


# Tears - Etiology



## ➤ Traumatism ++

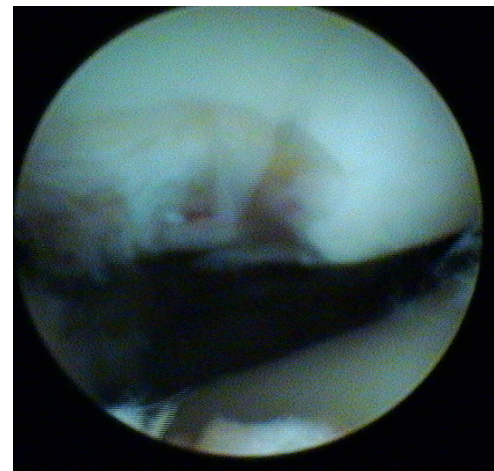
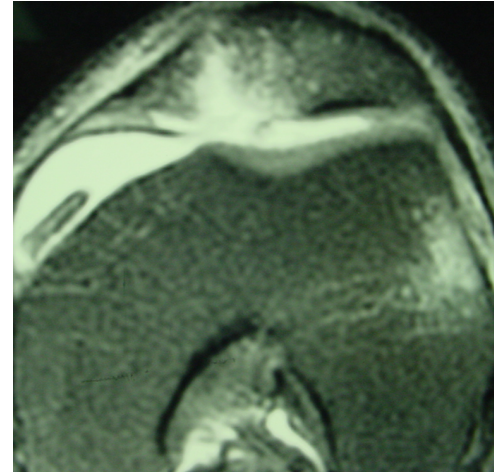
- articular fracture
- ACL injury



# Tears - Etiology

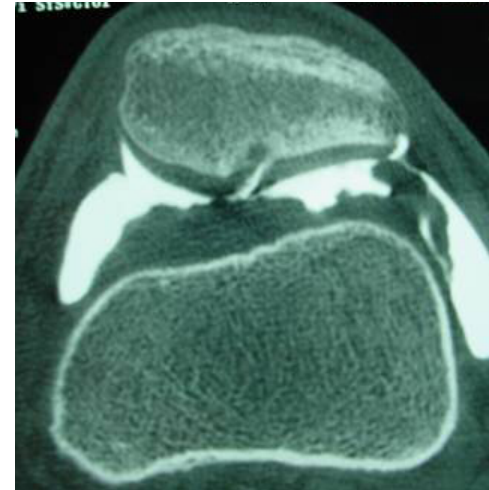
## ➤ Traumatism ++

- articular fracture
- ACL injury
- EPD



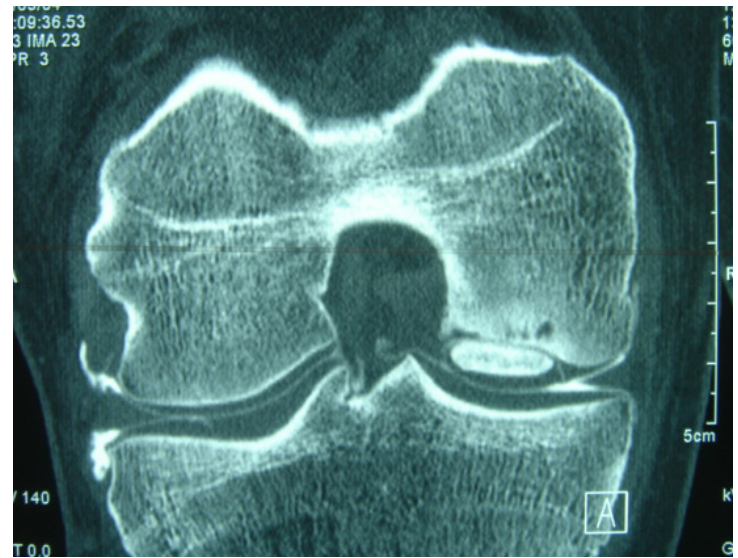
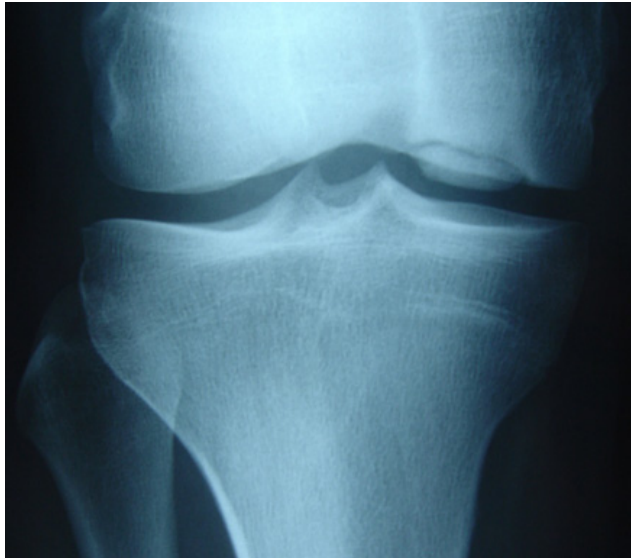
# Tears - Etiology

- Traumatism ++
- **Micro-traumatism**



# Tears - Etiology

- Traumatism ++
- Micro-traumatism
- **OD**



# Tears - Etiology

- Traumatism ++
- Micro-traumatism
- OD
- **Iatrogenic**



Seil R., Kohn D, et al. Chondral lesions after arthroscopic meniscus repair using meniscus arrows. Arthroscopy. Oct 2000.

# Tears - Etiology

- Traumatism ++
- Micro-traumatism
- OD
- Iatrogenic
- **... Osteoarthritis**

Unipolar lesions

Kiss lesions





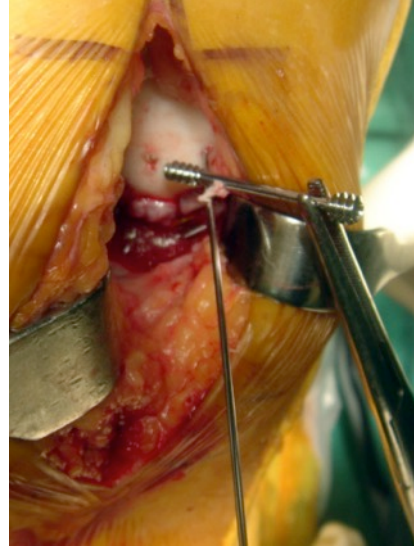
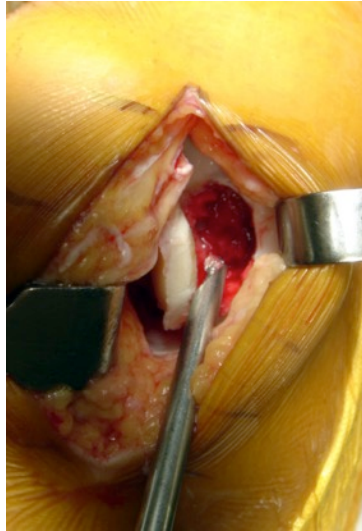
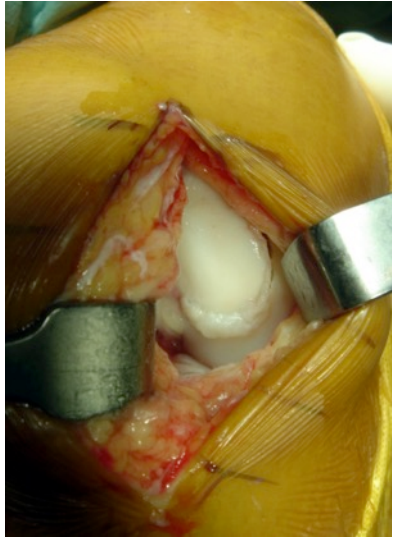


# Treatments

- **Fixation**
- **Subchondral bone stimulation**
- **Osteochondral Autografts**
- **Osteochondral Allografts**
- **Chondral grafts**
  - **ACI**
  - **MACI**

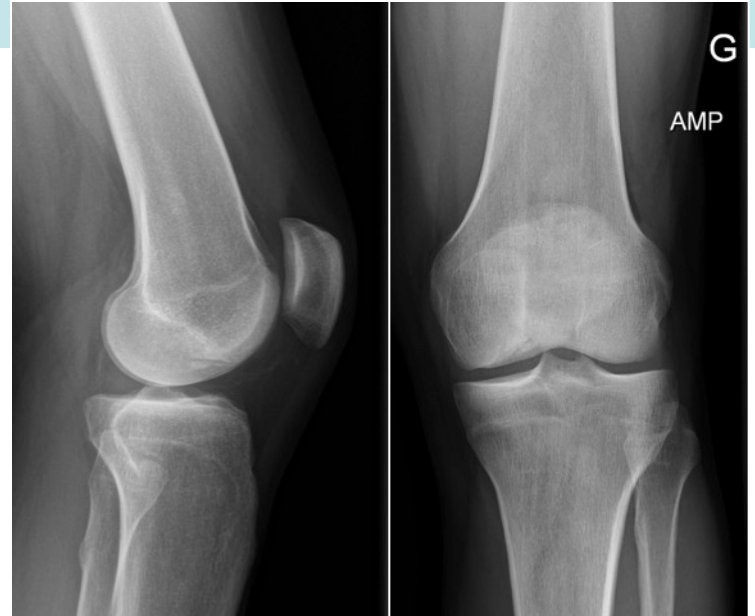
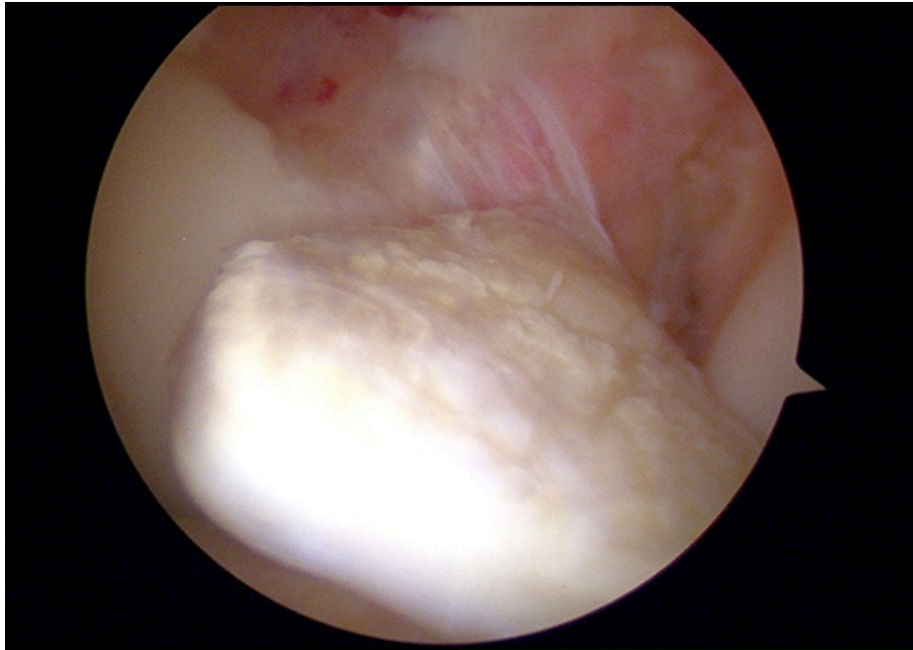
# Treatments

## ➤ Fixation



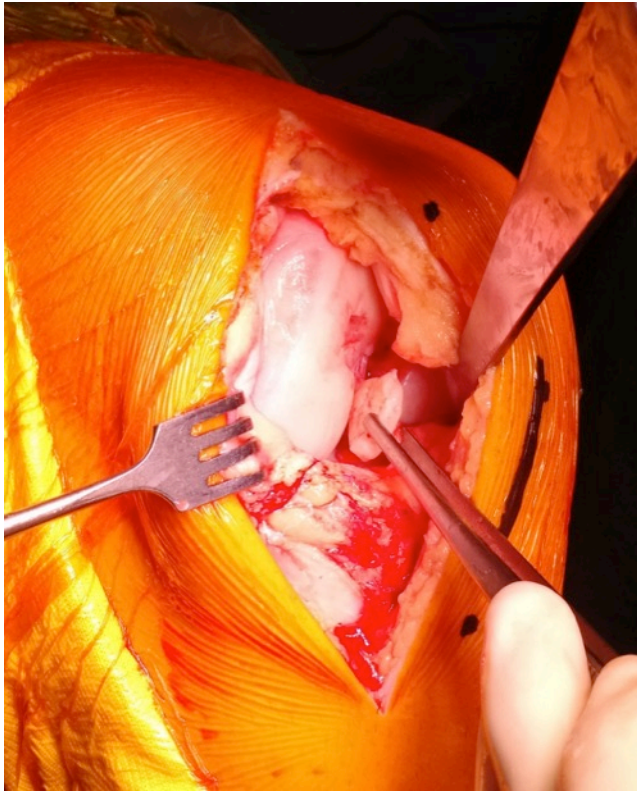
# Treatments

## ➤ Fixation



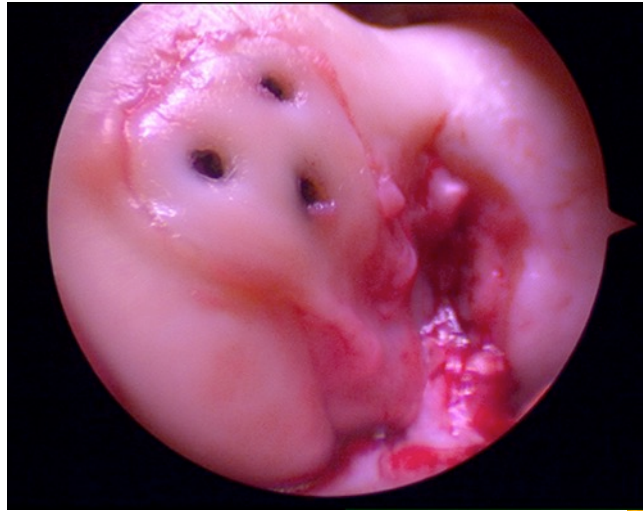
# Treatments

## ➤ Fixation



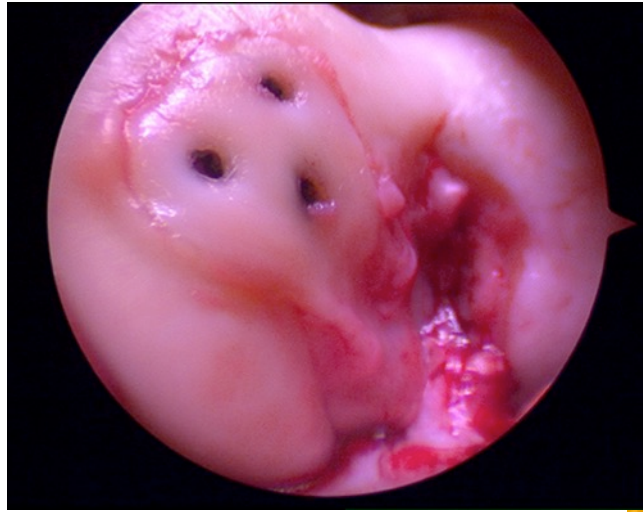
# Treatments

## ➤ Fixation



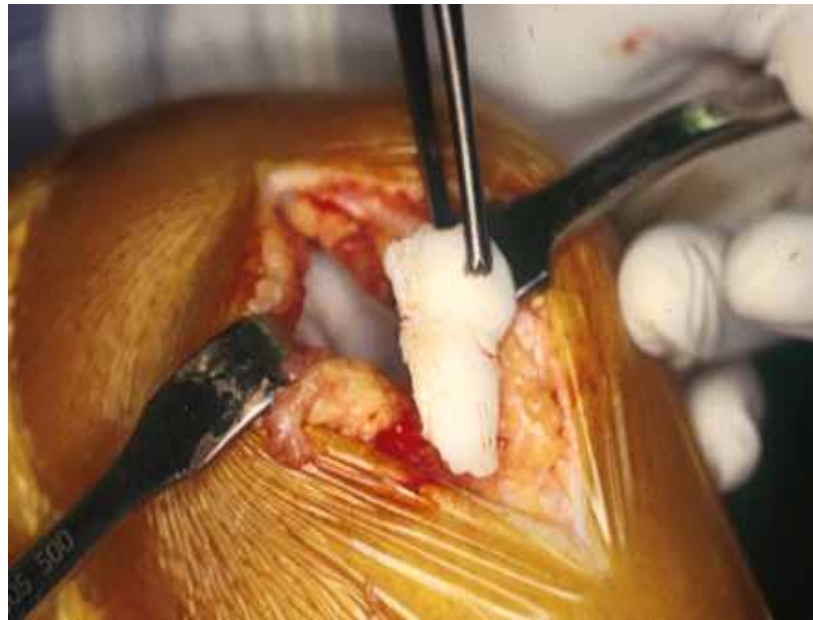
# Treatments

## ➤ Fixation



# Treatments

- **Fixation vs ablation « debridment »**

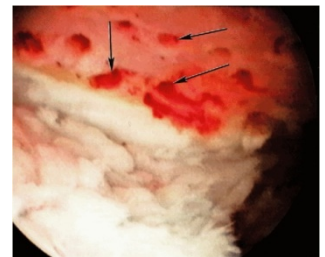
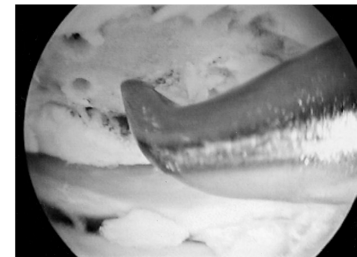
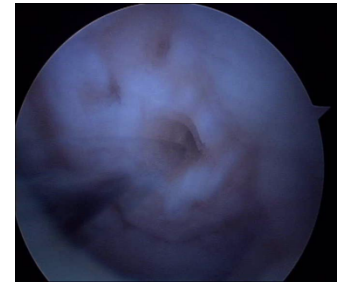




# Treatments ?

- Fixation
- **Subchondral bone stimulation**

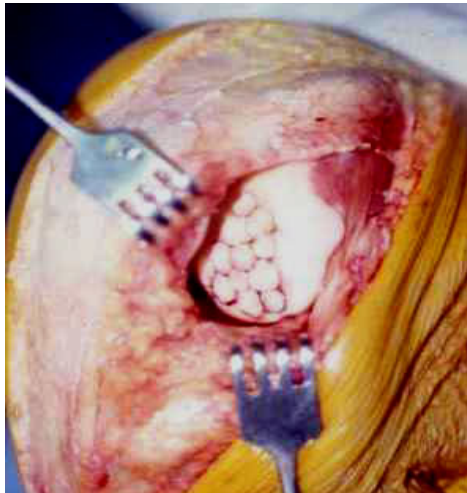
- **Perforations** (*Pridie*)
- **Microfractures** (*Steadman*)
- **Abrasion** (*Johnson*)



# Treatments ?

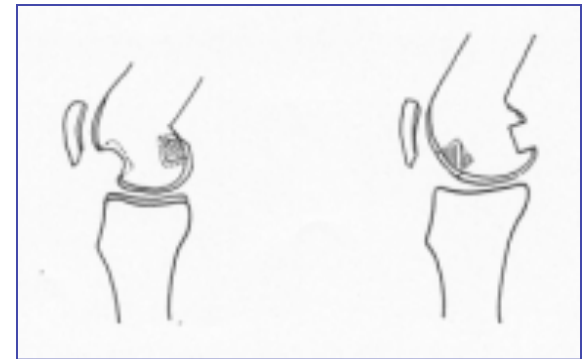
- Fixation
- Subchondral bone stimulation
- **Osteochondral Autografts**

« Mosaicplasty »



With R Jakob in Lyon 1999

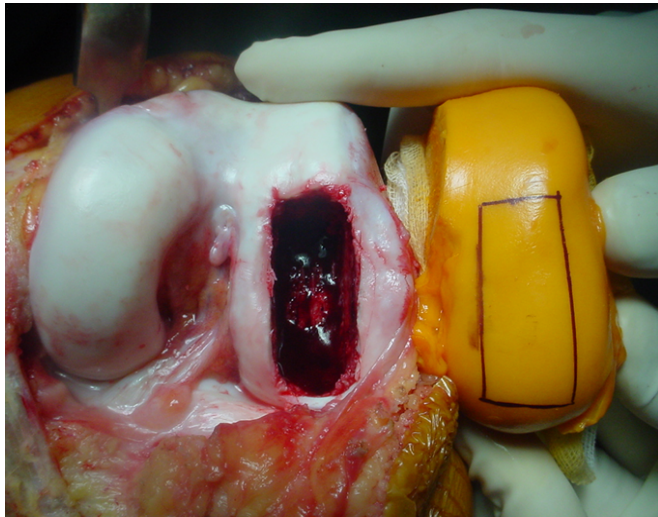
« bloc »



- *Wagner (Posterior condyle)*
- *Outerbridge (patella)*

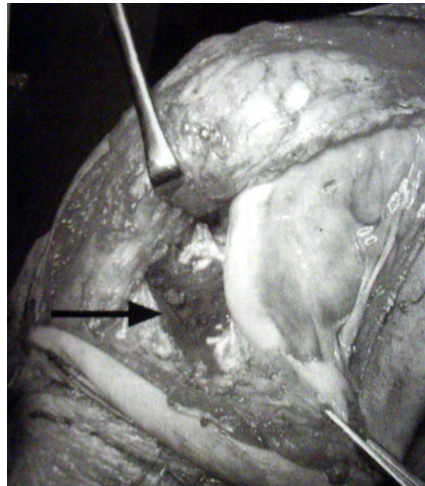
# Treatments

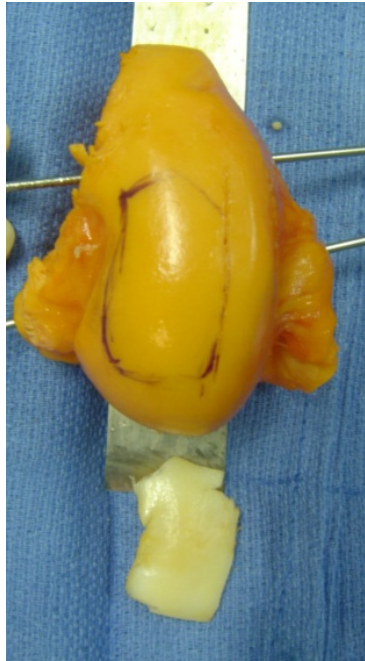
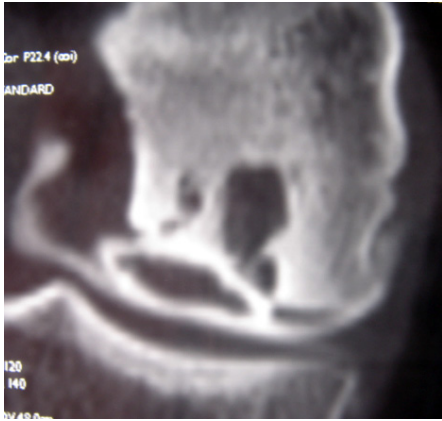
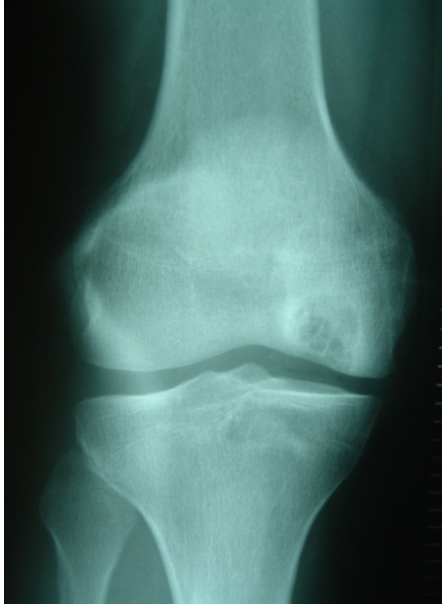
- Fixation
- Subchondral bone stimulation
- Osteochondral Autografts
- **Osteochondral Allografts**



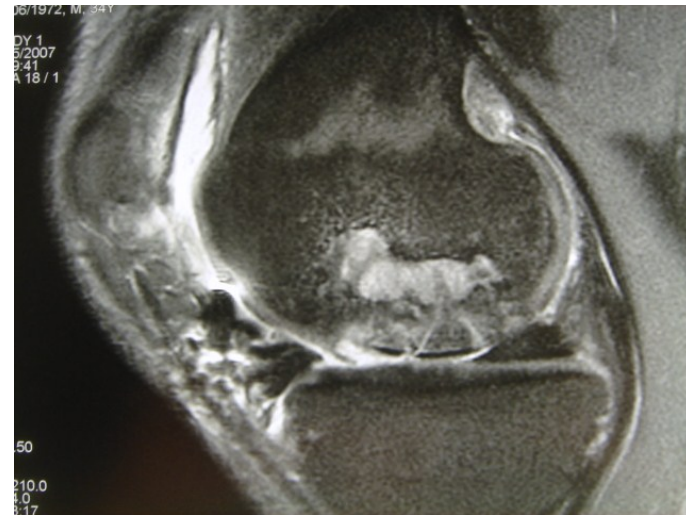
# Treatments

## ➤ Allograft (*tibia?*)





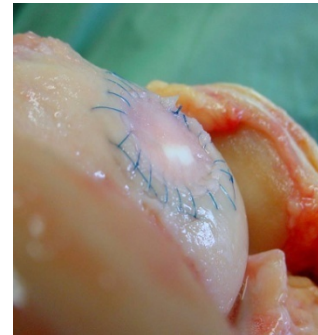
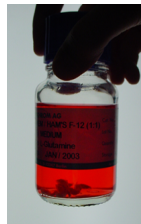
# 3y Follow up...



# Treatment

- Fixation
- Subchondral bone stimulation
- Osteochondral Autografts
- Osteochondral Allografts
- **Chondral grafts**
  - ACI

*ACI*  
*(Autologous Chondrocytes Implatation)*



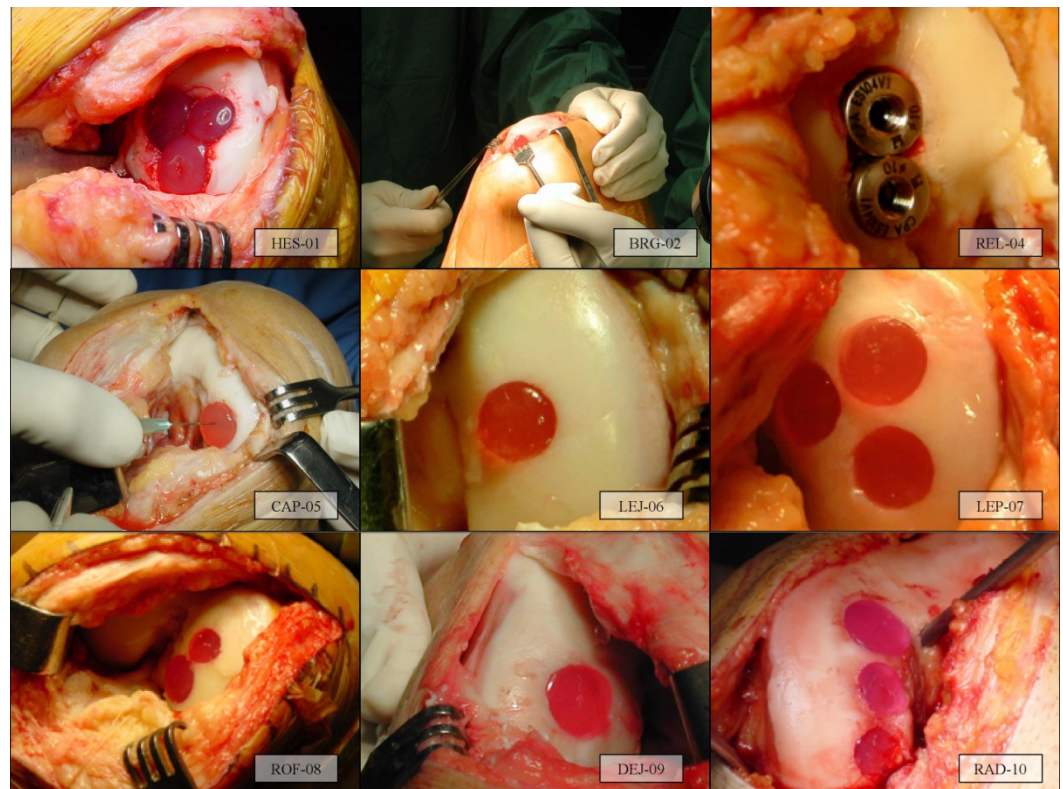
*Culture*



# MACI

- Fixation
- Subchondral bone stimulation
- Osteochondral Autografts
- Osteochondral Allografts
- **Chondral grafts**
  - ACI
  - **MACI**

## MACI (Matrix Autologous Chondrocytes Implantation)







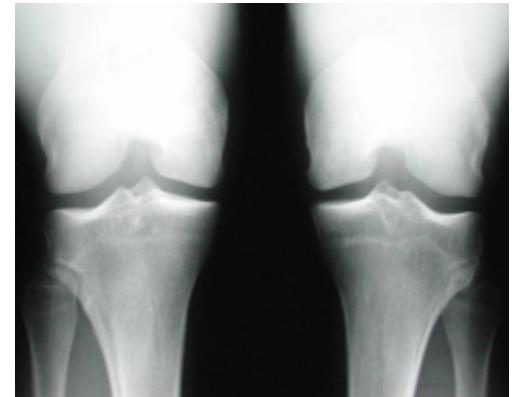
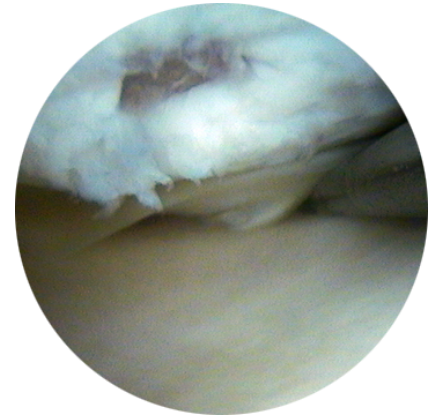
# Indications : *Fixation*

- **OCD childhood ++**
- **Traumatic tears**
- **Stable synthesis**
- **«Mosaïc» fixation**
- **Associated tears**



# Indications : *Reparation*

- **Stage (3) 4**
- **Surface  $> 1 \text{ cm}^2$**
- **Age  $< 40$**
- **Condyle ++**
- **No mirror tears**
- **Safe meniscus**
- **Stable knee**



# Indications : *Technique*

## ➤ Age

Reparation

40 y

Microfractures  
Osteotomy  
Arthroplasty

## ➤ Surface



Mosaicplasty

4 cm<sup>2</sup>

MACI  
Allograft  
Mosaic. Allog.



ADVANCED COURSE: REVISION KNEE ARTHROPLASTY



18<sup>èmes</sup>

Journées Lyonnaises  
de Chirurgie du Genou

20 - 22  
SEPTEMBER  
2018  
LYON CONVENTION CENTRE



LYON KNEE  
SCHOOL of SURGERY

REGISTRATION: MCO CONGRÈS  
Contact: Audrey MARTIN  
Email: [audrey.martin@mcocongres.com](mailto:audrey.martin@mcocongres.com)  
Phone: +33 (0)4 95 09 38 00

INTERACTIVE SESSIONS  
SIMULTANEOUS TRANSLATION 

[www.lyon-knee-congress.com](http://www.lyon-knee-congress.com)

