

ALLOGRAFT

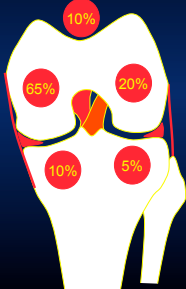
Resurfacing Methods for Focal Cartilaginous Defect

François Kelberine
Jean Philippe Vivona


Aix en Provence - France




Location & ACR : 34% to



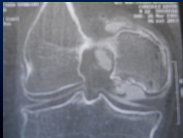
Pfeiffer CORR 1991



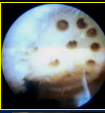
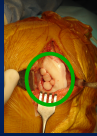


1 cent = 2.01 cm²

Which lesions to treat?

- Hypothesis : repair should avoid DJD
- Symptomatic in chronic cases
- Weight bearing area
 - Young population
 - Large size




Spectrum of treatment

- Bone marrow stimulation (MSC) 
- Osteochondral transplantation 
- ACI s 
- Prosthesis 

Osteochondral transplantation

- Autograft / Allograft Hangody JBJS 2003
- Mosaicplasty / Massive


- Technically difficult Bartz Am J Sport Med 2001
Terukina Arthroscopy 2003
Kohn Am J Sport Med 2004
- Challenge for restoring
 - Curvature
 - Deepness
- Hyaline tissue

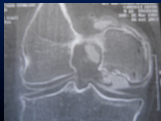
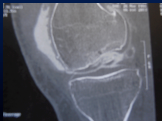


Allograft osteochondral transplantation

Large lesions Scaglione Arthroscopy 2003
Chu Clin Orthop 1999

Mosaicplasty

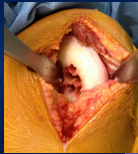
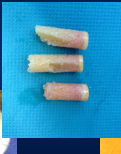







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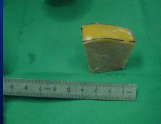







Allograft osteochondral transplantation

Large lesions Scaglione Arthroscopy 2003
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Massive

**16 yo male bilateral OCD L^{al} Condyle
Other side epiphysiodesis @ 11
Fully resolved with!! RCT?**

Osteochondral transplantaiton

- Allograft security
- Sizing
- Shape
- Congruency
- Impaction slightly proud
- Postop regimen = fracture


Molagne AJSM 2014
Wang JBJS 2017

Allograft results for OCT

Park ICRS 2006	Williams ICRS 2006
• 37 patients @ 3 y	• 20 patients @ 32 m
• 76% excellent/good	• Prospective
• Large tear 10.5 cm ²	• Clinical improvement
• 19 unipolar	• 18 MRI :
• 15 multipolar	• Graft cartilage intact
• Arthritic knees !	• Fusion 15/18
• 39% grade I - II	• Oedema : 10/18
• 61% grade III - IV	

Hyaline-like cartilage


Composition and mechanical resistance not similar to normal cartilage



+ 1 y

Hyaline
Fibrocartilage
No healing

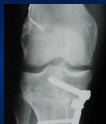

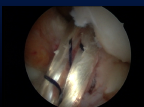

→





+ 2 y

Perimeter integration? Gapping? Cyst Versier SFA 1999

Combined Surgery

- Extra articular realignment
 - 
 - 
- Stabilization
 - 
 - 

Indications / techniques

- **Age**
 - Repair ↓ 40 ans ↑ Microfractures
Arthroplasty
- **Size of the tear**
 -  ↓ 4 cm² ↑ 
 - Mosaicplasty Scaffold 3D
Allograft
Mosaic. Allog.