

FEMOROPATELAR ARTHRITIS

Place of arthroscopy

CCOS Group

Dr Nicolas GRAVELEAU , Dr Philippe COLOMBET , Dr Nicolas BOUGUENNEC ,
Bordeaux-Mérignac, France

MERiSCIENCE



Centre de Chirurgie
Orthopédique et Sportive
Bordeaux Mérignac - Rocade sortie 12


CLINIQUE DU SPORT
BORDEAUX - MERIGNAC

Femoro patelar pathologies

Classification de H.DEJOUR

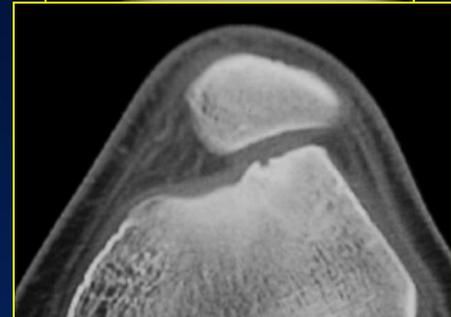
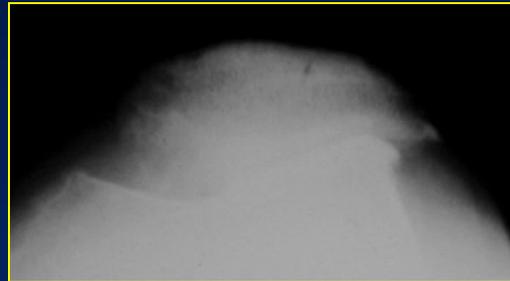
(VIII èmes Journées Lyonnaises du genou 1995)

✓ **Instabilité Rotulienne Objective**

✓ **Instabilité Rotulienne Potentielle**

✓ **Arthrose FP**

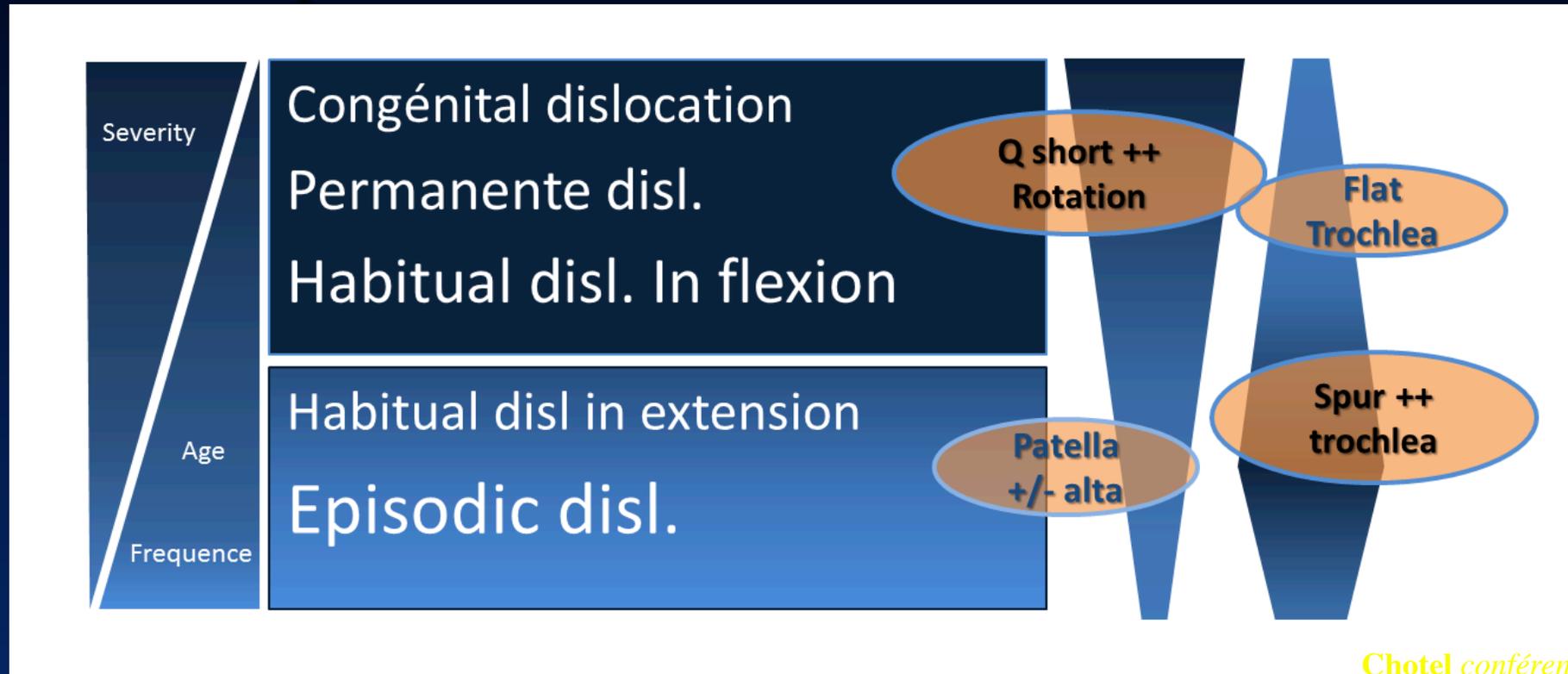
✓ **Syndrome rotulien**



Numerous clinical entities / classification of INSTABILITY

Severity varies according to the age at first symptoms

/ anatomique abnormalities :



Chotel

Chotel conférence
enseignement Sofcot
2013 - OTSR 2014





LA PATHOLOGIE FEMORO-PATELLAIRE

6^{èmes} JOURNEES LYONNAISES DE CHIRURGIE DU GENOU

LYON 1987

organisées par
H. DEJOUR
G. WALCH

CHIRURGIE DU GENOU
HOPITAL LYON-STUD

25 years later...

15^{èmes} Journées Lyonnaises de Chirurgie du Genou

La Patella

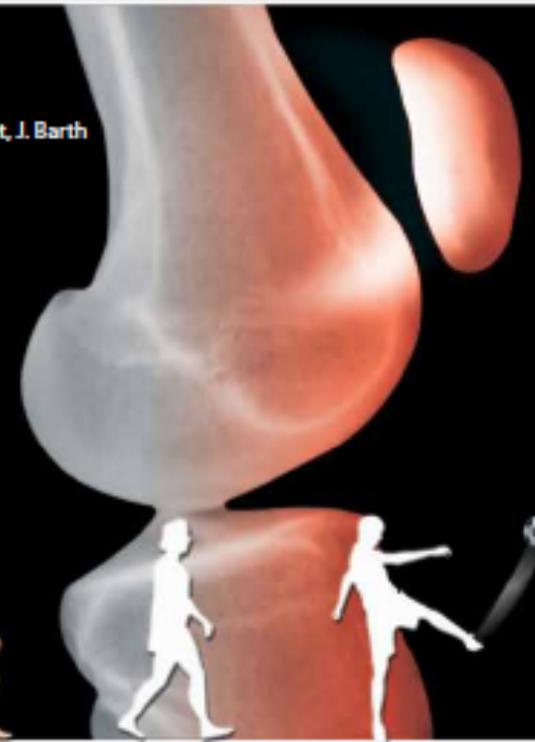
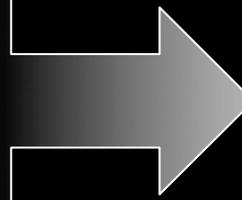
D. Dejour, M. Bonnin
E. Servien, J-M. Foyard
G. Demey, F. Trouillet
N. Bonin, B. Sonnery-Cottet, J. Barth

25 ans après...25 years later..

2012
ALRM Since 1969
Past presidents : Albert Trillat, Henri Dejour, Pierre Chambat, Philippe Neyret.

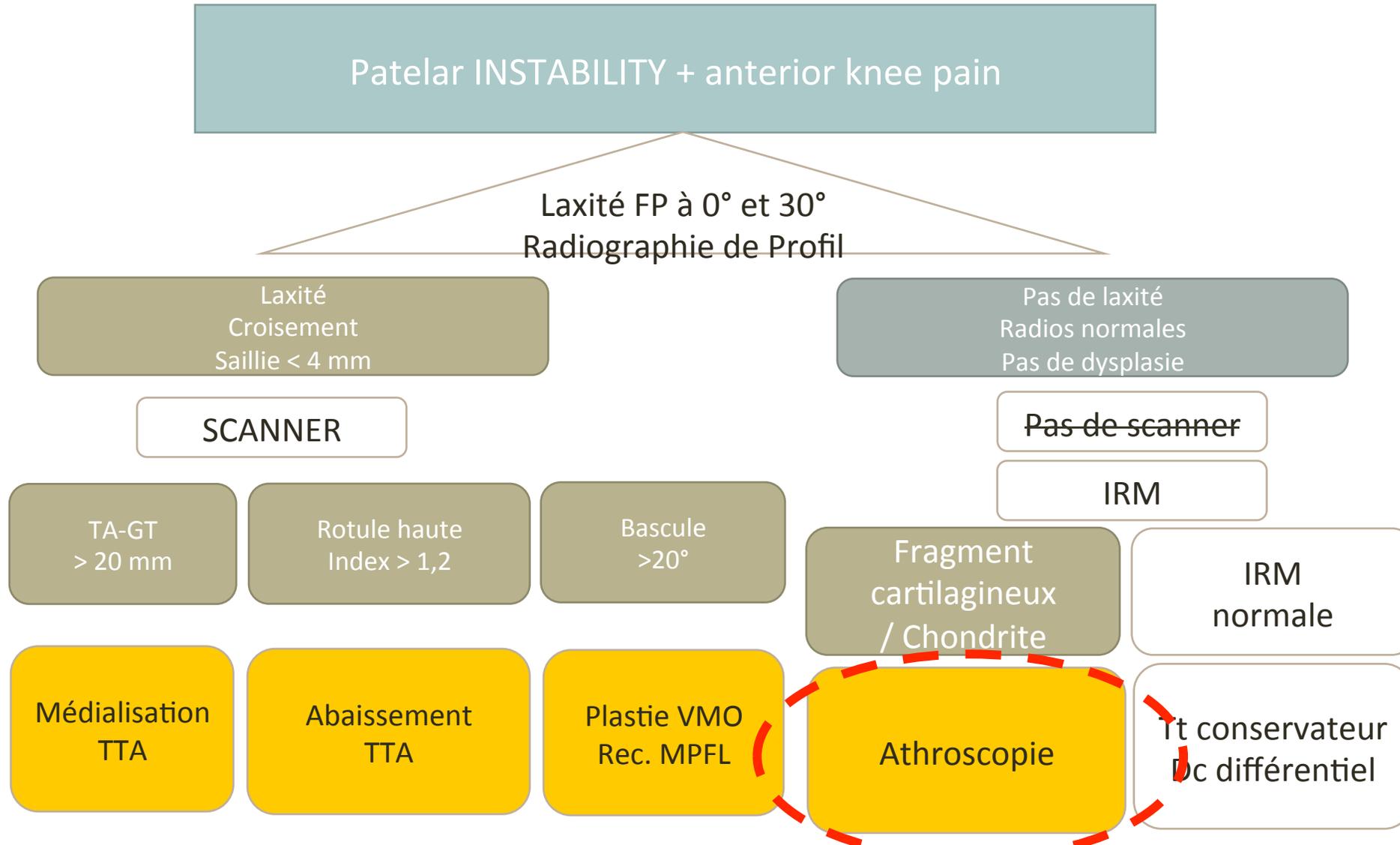
1987

SAURAMP'S MEDICAL



Algoorythm of traitement

Selon D Fithian , Ph Neyret, *Patellar Instability : the Lyon Experience*





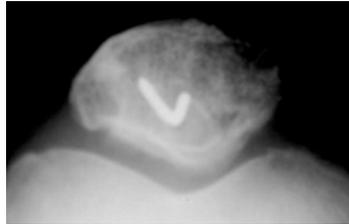
2012

**Patellofemoral
Arthritis**



Isolated PF OA

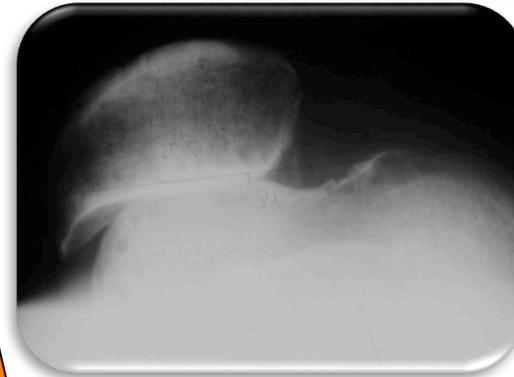
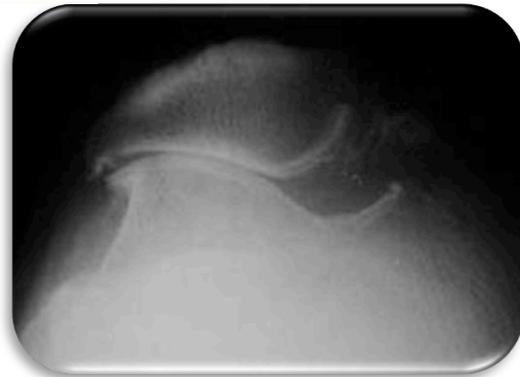
Aetiologies



Post - trauma 9 %



Chondrocalcinosis 9 %

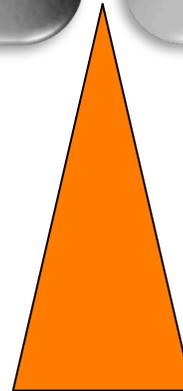


"Primary arthritis"
No orthopedic history

49 %

"Instability arthritis"
Dislocation history

33 %



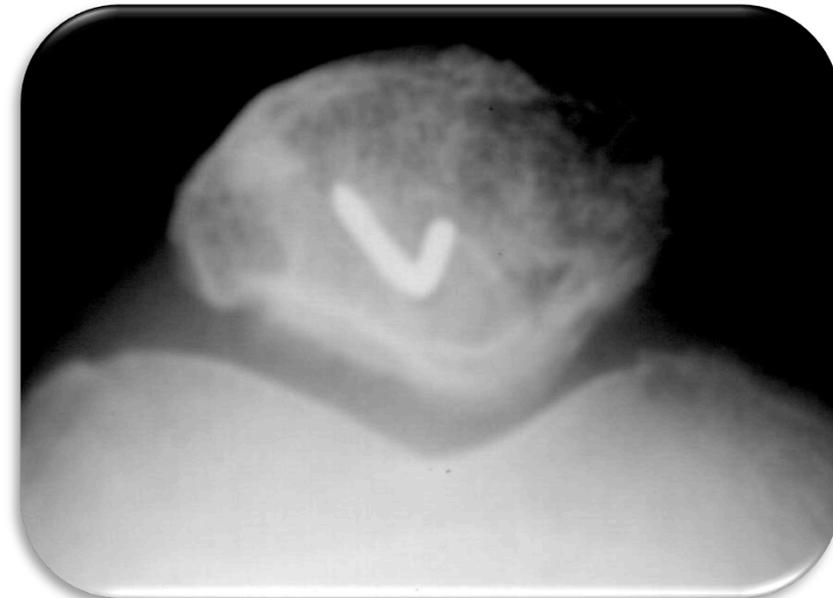
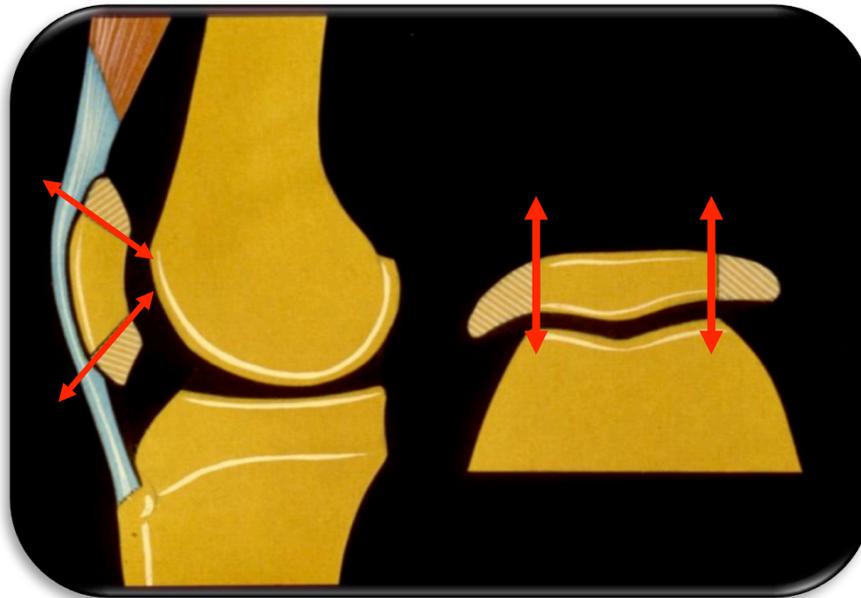


Patelloplasty

Patella Magna - Post traumatic



Osteophyte resection, global remodelling

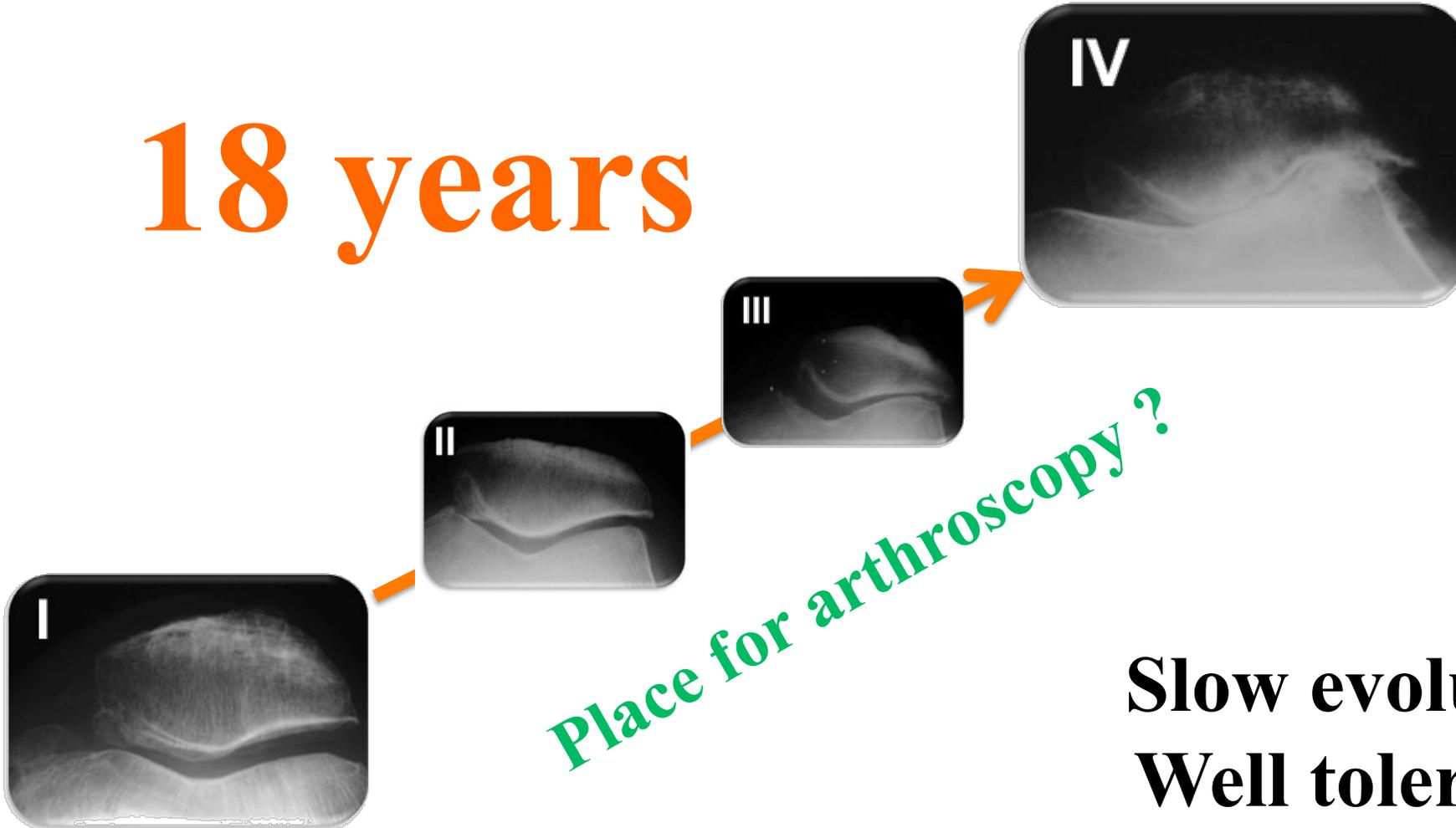




Natural History

Isolated patellofemoral arthritis

18 years



Slow evolution
Well tolerated

Lateral Patellectomy

Facetectomy O'Donoghue

Procedure rules :

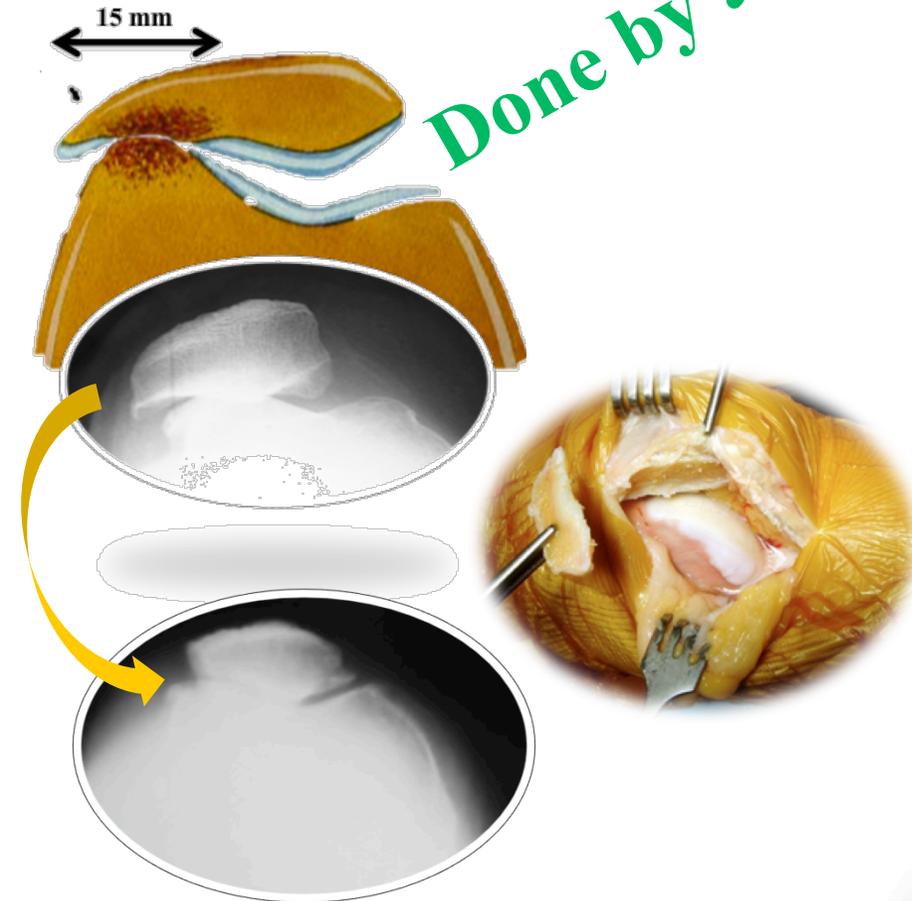
Ideal indication : Isolated PFA with Lateral patella pain and TT-TG < 20mm

Ideal candidate : young and active

Ideal procedure : resection of 15mm, lateral retinaculum release

Good option :

- Simple
- Quick recovery
- Can easily be converted to TKA
- ATT transfer : high rate of complication



Done by arthroscopy ?

ATT transfer

Medial +/- anterior transfer

Procedure rules :

Ideal indication :

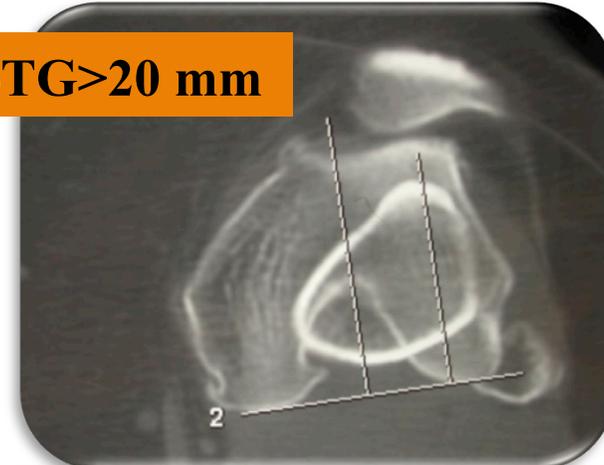
- Isolated PFA with Lateral patella pain and $TT-TG > 20\text{mm}$
- Young and active patient
- Medialization +/- anterior transfer

Combined surgery :

- Lateral patellectomy
- Lateral retinaculum release
- Patellofemoral prosthesis

Complications

TT-TG > 20 mm



Patellofemoral arthroplasty *indications*

Procedure rules :

Ideal indication :

- Younger patient
- Active patient
- "Instability osteoarthritis" +++
- Normal femorotibial compartment

Different designs :

- Resurfacing
- Anatomic ++



UKA and patellofemoral osteoarthritis

UKA and lateral patellectomy

- Symptomatic arthritis
- Joint space narrowing
- Lateral patella pain on physical examination



Alternatives

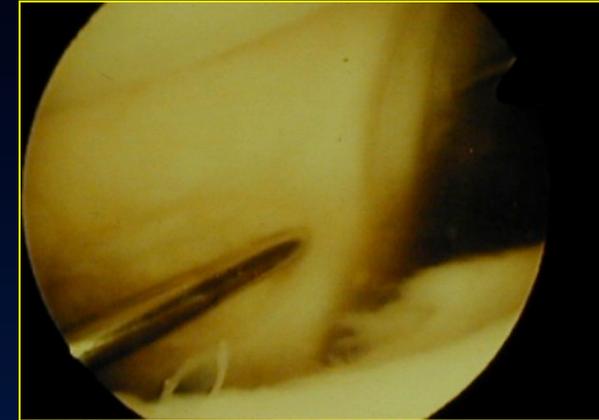
- UKA + PFP (Parrate and Argenson...)
- Bicompartamental prosthesis

Arthroscopic Techniques

✓ Lateral retinaculum release

Open = Arthroscopy

(Henry *AJSM* 1986, O'Neil *JBJS* 1997)



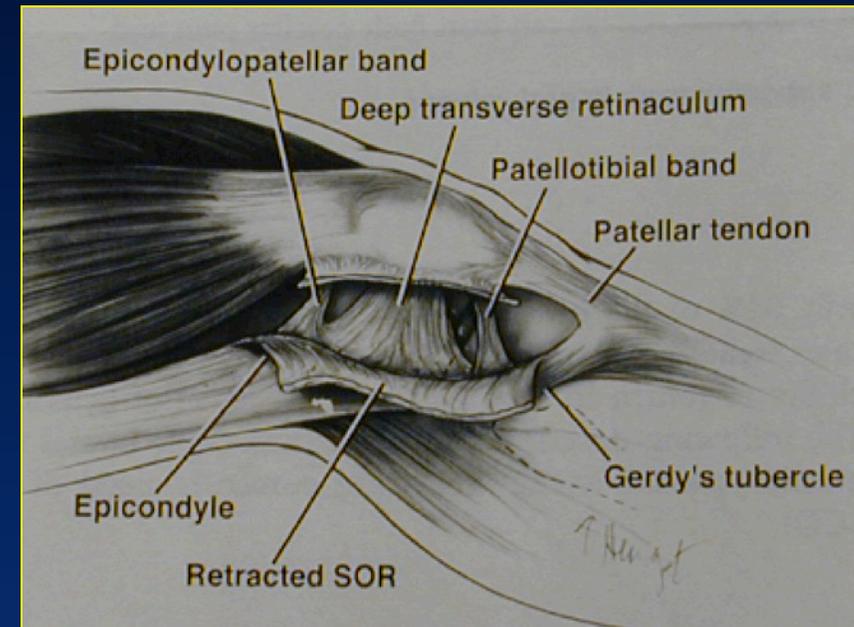
✓ Cartilage management

✓ Flap excision

✓ shaving

✓ chondroplasty

✓ Plica section



Lateral release and Objective patellar instability

! Literature controverses !

- ✓ Bigos & Mac Bride *CORR 1984* : 100% stable @ 1 year
- ✓ Schonholtz *Arthroscopy 1987* : 67% satisfied @ 4 years
but instability included and 2/3 reviewed
- ✓ Aglietti *CORR 1994* : 20 cases, 40% recurrence @ 8 years
- ✓ Dandy & Griffith *JBJS 1989* : 41 dislocations, 68% no recurrence
- ✓ Dandy & Desai *Arthroscopy 1994* : no decrease with time @ 8 years
- ✓ Chassaing *J Trauma Sport 1992* : 29 cases with medial ST plasty
79% stable



Lateral release and Objective patellar instability

! Literature controversial !

- ✓ Woods *AJSM* 2006 : 20 cases, prospective study @ 2 years
 - No recurrence
 - IKDC : 45 to 76pts
 - Subjective satisfactory results (53 to 86pts) ++, 1/20 poor
- ✓ Christoforakis *Knee Surg Sports Traum Arthro* 2005 : Cadaver study
 - Converse effect / force to dislocate laterally
 - Decrease > LRR

Rate of recurrence unacceptable / detrimental injury & ADL
Age of population

Lateral release and FP arthritis

- ✓ Aglietti *Arthroscopy 1989* : failure
- ✓ Jackson *Arthroscopy 1991* : 39 cases, 56% good results @ 6 years
31% re surgery
- ✓ Ewing in *Mac Ginty 1991 Raven Ed* : 78% good results @ 6 years
66% combined shaving
- ✓ Landsiedl *Z Orthop Ihre Grenzgeb 1992*, 56% @ 3,5 years
Pejorative if both patellar facets involved
- ✓ Christel *SFA 1995* : 50 cases, 60% good results @ 5 years
100% Combined DJD debridment
- ✓ Aderinto *Arthroscopy 2002* : 53 cases, 59% satisfied @ 31 mths
16% similar, 41% dissatisfied
4 TKA
FT arthritis not correlated



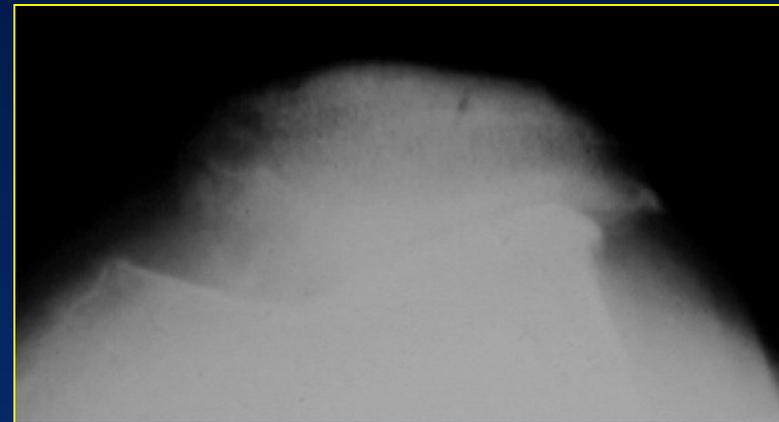
Lateral release and FP arthritis

Lateral release associated with arthroscopic debridement if

✓ Patellar tilt

✓ Do not correct TILT and SUBLUXATION

✓ "Decompressive effect"

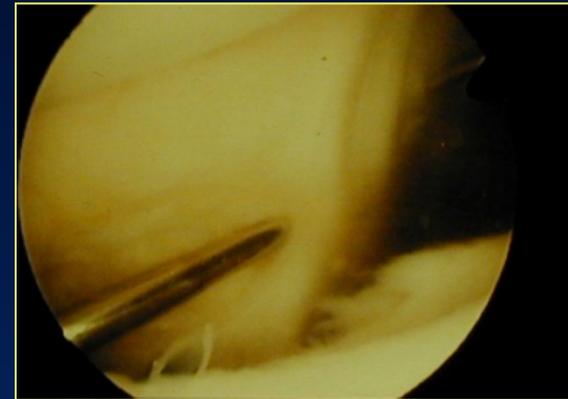


Lateral retinaculum release

Merchant & Mercer *CORR* 1974

Osborne & Fulford *JBJS* 1982

- ✓ Reasonable initial step to treat FP diseases
 - ✓ Instability / young patient
 - ✓ Avoid shaving (drop down to 28% of good results)
 - ✓ Arthritis
 - ✓ Avoid it in dislocations, AKP
- ✓ Doesn't burn any bridge
- ✓ Fithian & PF study group *Arthroscopy* 2004
 - ✓ LLR : 1 to 5 cases / year (experimentd surgeons in FP)
 - ✓ Objective evidence (radiological or clinical)
 - ✓ preoperative specific informed consent



Arthroscopic techniques

✓ Lateral retinaculum release

✓ Cartilage treatment

✓ Flap excision

✓ shaving

✓ chondrectomy



✓ Plica section



Cartilage flap excision

✓ Pseudo-meniscal locking

✓ 68% = seen @ arthroscopy

✓ Lateral aspect of the patella & crest

✓ Medial facette

✓ Trochléa (chondral fractures)

✓ Excision of unstable cartilage ?



Cartilage flap excision

✓ SFA retrospective study (10 cases)

✓ 90% good subjective results

✓ 40% good objective results

✓ SFA prospective study (8 cases)

✓ 1 bad result (associated shaving)

✓ Average recovery : 3 months



SHAVING

✓ SFA retrospective study (23 cases)

✓ Midd term bad results

✓ 73% « good » results at 4 ans

✓ 34% good objective results

**= DO NOT CHANGE NATURAL
HISTORY of FP OA**

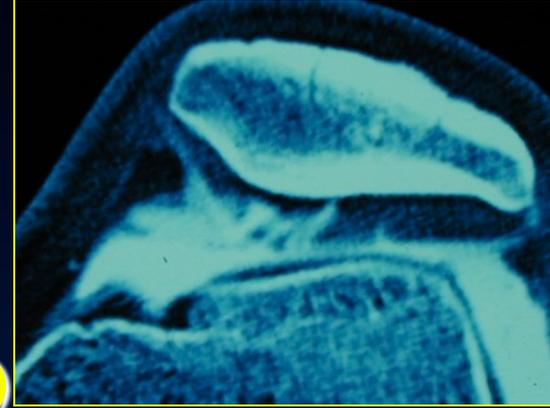
✓ SFA prospective study (6 cas)

✓ 4 scores rotuliens > 30

✓ 5 bad results de 1 à 2 ans



Arthroscopy for cartilage in FP



✓ Score SFA

✓ patella = 23,9 (comme / SARE)

✓ Trochlea = 4,03 (trochlée normale)

✓ Global results = 66% satisfied

✓ 95% if FLAP resection YES

✓ 28% for shaving or chondrectomy NON



Arthroscopic techniques

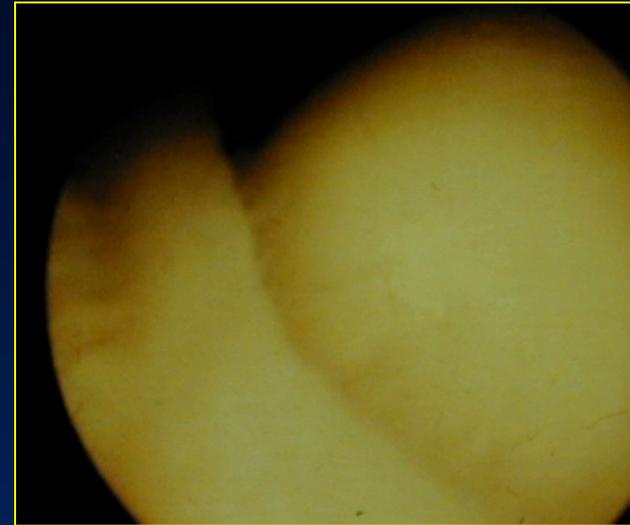
✓ **Lateral retinaculum release**

✓ **Cartilage surgery**

✓ **Flap excision**

✓ **shaving**

✓ **chondrectomy**



✓ **Plicae section**



CONCLUSIONS

✓ **Very few indications**

✓ **If clear anatomical lesion**

✓ **Cartilage FLAP**

✓ **Patella tilt ?**

✓ **plica**

LESS FREQUENTS

✓ **In balance with**

✓ **Well known surgical plan for instability**

✓ **abstention**

✓ **Source of conflicts w. patients**



SFA



2018

STRASBOURG

PALAIS DES CONGRÈS
13 > 15 DÉCEMBRE

PRÉSIDENT DU CONGRÈS :
PHILIPPE CLAVERT



Rupture du LCA après 50 ans. *S. Lustig (Lyon)*, *JC Panisset (Echirolles)*

Conflit postéro-supérieur. *J. Grimberg (Paris)*, *Y. Lefebvre (Strasbourg)*

Traitement arthroscopique de l'arthrose du coude. *Y. Carlier (Mérignac)*, *P. Desmoineaux (Versailles)*



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www.sofarthro.org

Renseignements et Inscriptions :
MCO Congrès - Tel : +33 (0)4 95 09 38 00
mary.abbas@mcocongres.com