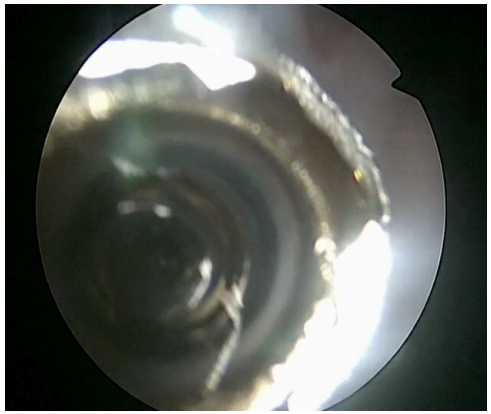
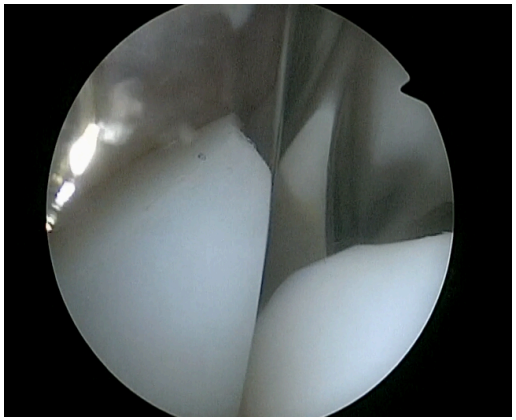
Hot topic: place of arthroscopy in TKA and Uni

O. Courage, A.Senioris, S.Rahali
V.Guinet, L.Malekpour
LH university France



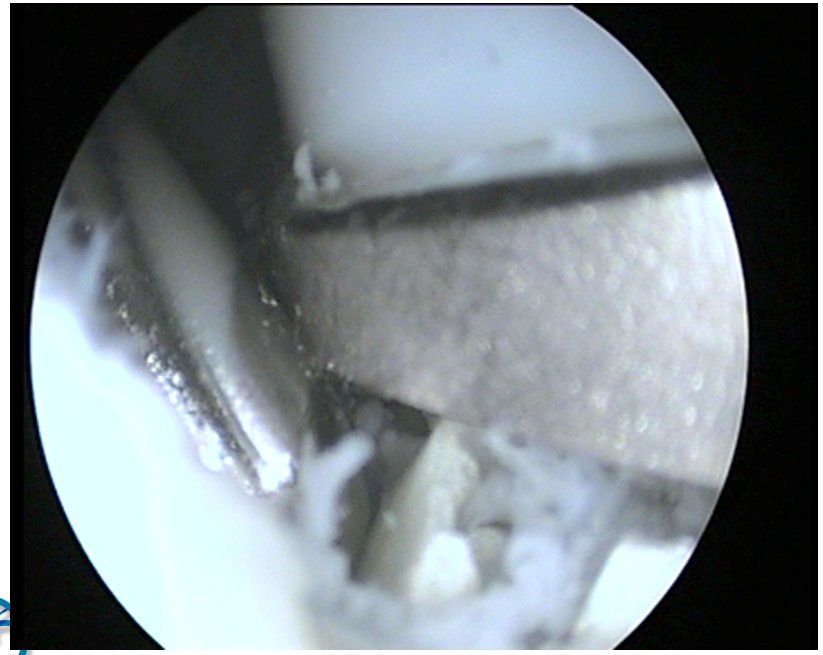


Arthrocopy

- **Few indications (<1%)**
- TKA
- Uni
- Patella

Unexplained painfull knee!

- Second side wery happy
- 75 years hold
- Pain +++



Second example

- Posterior lose body

Magic for unexplained knee pain or not …

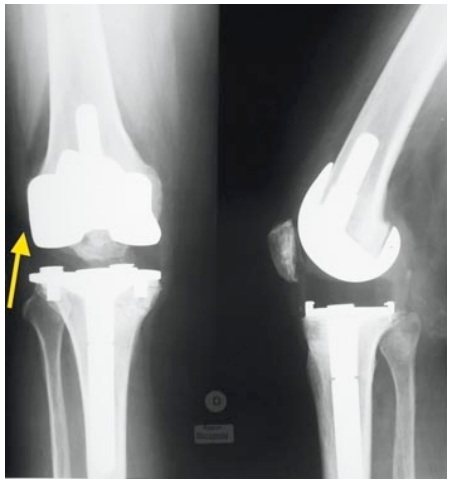
- Only few indications
- Litterature

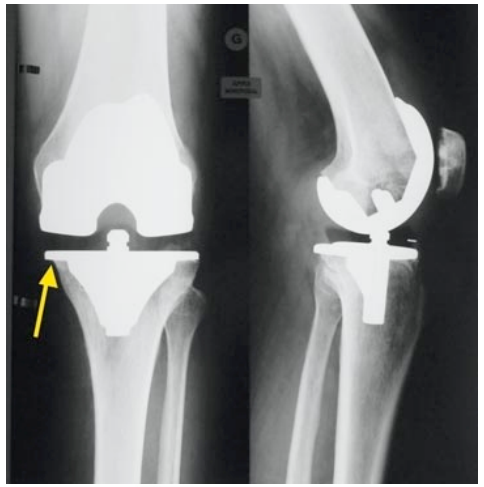
Watch out: sepsis

- Knee Ponction at any doubt +++
  - > 25 000 leucocytes/mL with >75 % Poly nuclear .
  - False negative, biofilm
- Blood count : NFS, CRP
  - combinaison d'une CRP ≤ 10 mg/L and VS ≤ 30 mm/h it's probabely 94 %

Not to do if !

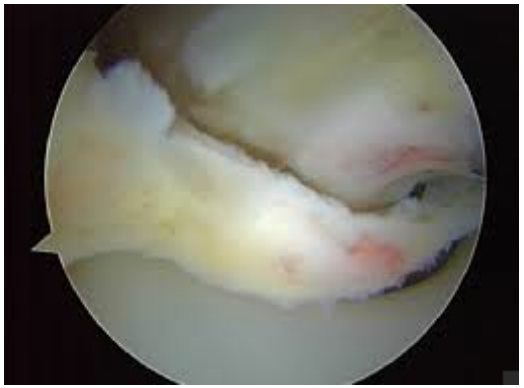
- Radiologic loosening
- Patella instability
- Impingement with to big implants





lLittérature: few cases(15)

- Lose body(cement - PE)
- Fibrosis, Pseudo meniscus
- Loosening
- PE wearing
- Synovialis hypertropy or pigmented SVN
- Metallose synovialis



The Role of Arthroscopy in the Problem Total Knee Replacement.
Arthroscopy: The Journal of Arthroscopic and Related Surgery 6(1):30-32. 1990. Donald R. Johnson, M.D.

Bucket-Handle Tear in Retained Meniscus After Unicompartmental Knee Arthroplasty. Mian Munawar Shah. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 19, No 6 (July-August), 2003

Kim WY, Shafi M, Kim YY, Kim JY, Cho YK, Han CW.
Posteromedial compartment cement extrusion after unicompartmental knee arthroplasty treated by arthroscopy (a case report).
Knee Surg Sports Traumatol Arthrosc 2006;14:46

Other papers

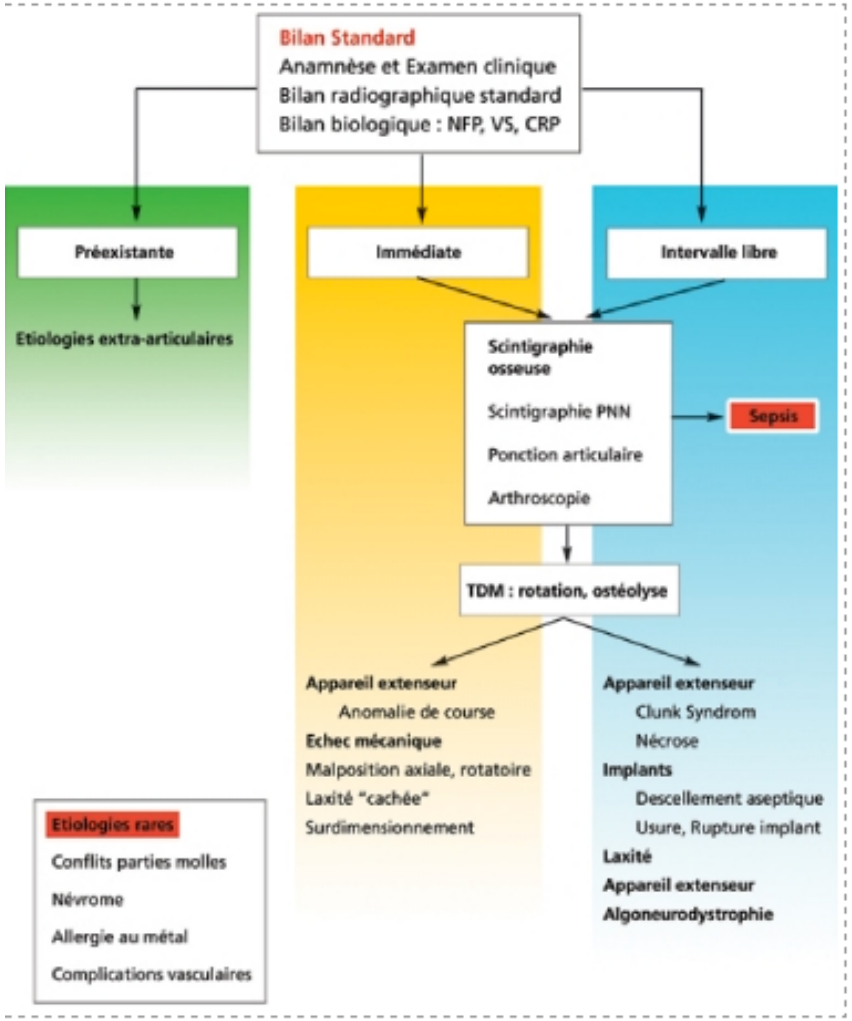
- Patella loosened
- Implant wrong side
- PCL residual , notch impingement
- Soft tissue
- Popliteus tendon dysfonction

A Rare Case of Diffuse Pigmented Villonodular Synovitis After Total Knee Arthroplasty.
Julius K. Oni. The Journal of Arthroplasty Vol. 26 No. 6 September 2011.

Arthroscopic Treatment of Popliteus Tendon Dysfunction Following Total Knee Arthroplasty.
Thomas J. Allardyce, The Journal of Arthroplasty Vol, 12 No. 3 April 1997

The results

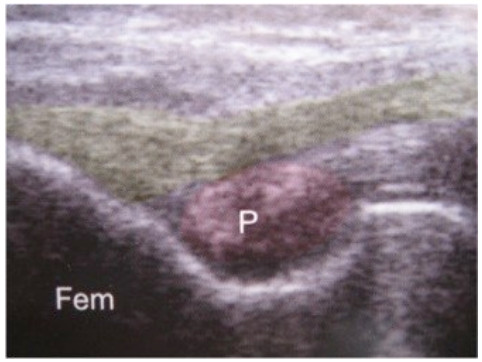
- Not so good
- Understand the pain ?
  - Painfull fibrosis …
  - Lose body
  - US tissue conflict



COMPRENDRE LA DOULEUR APRÈS PTG.
UN PATIENT DÉSEMPARÉ MAIS ACCOMPAGNÉ, UN CHIRURGIEN DÉSAPPOINTÉ MAIS IMPLIQUÉ
F. Trouillet, S. Lustig, E. Servien, G. Demey, P. Neyret
Maitrise orthopédique

Best indications @ TKA

- Stiffness
- Patella Clunck (pain)
- Unexplained painfull TKA
  - Normal biology
  - US tissue +



The Steefness

- When do it @
  - Before 8 weeks Anesthesia mobilisation
  - Between 8 weeks and 6 months
  - Arthrolysis
    - –Retinaculum release
    - – Fibrosis exision

Rev Chir Orthop Reparatrice Appar Mot. 2003 Feb;89(1):27-34
.[Management of stiffness after total knee arthroplasty: indication for different mobility management in 62 cases].[Article in French
Tirveilliot F, Migaud H, Gougeon F, Laffargue P, Maynou C, Fontaine C.SourceService d'Orthopédie (Pr C. Vielpeau)

Rev Chir Orthop Reparatrice Appar Mot. 2002 Apr;88(2):163-7.[
Arthroscopic release for knee joint stiffness after total knee arthroplasty].[Article in French
]Djian P, Christel P, Witvoet J.

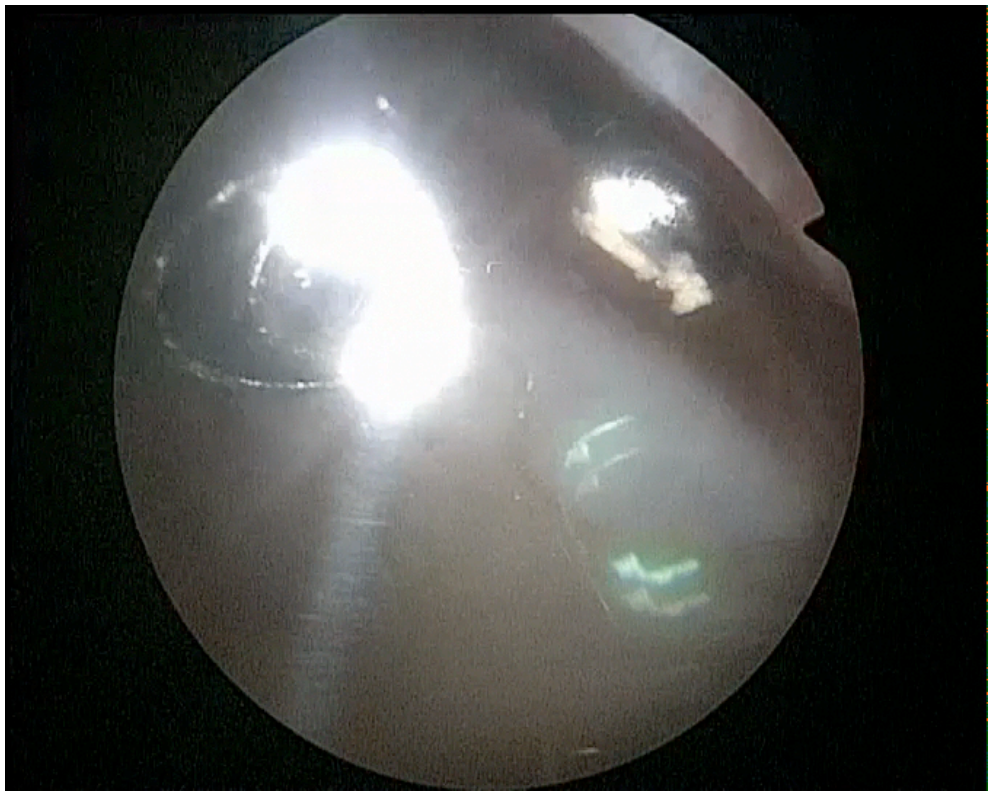
The technique

- A New Arthroscopic Technique for Revision of the Posterior Compartment in Symptomatic Total Knee Arthroplasty. Franz Landsiedl, M.D., Nicolas Aigner. Arthroscopy:

  The Journal of Arthroscopic and Related Surgery, Vol 21, No 4 (April), 2005: pp 506-510
- Femoral Notch Stenosis Caused by
  Soft Tissue Impingement in Semi or Open-Box Posterior-Stabilized Total Knee Arthroplasty. Peter M. Bonutti, MD.

  The Journal of Arthroplasty Vol. 25 No. 7 October 2010

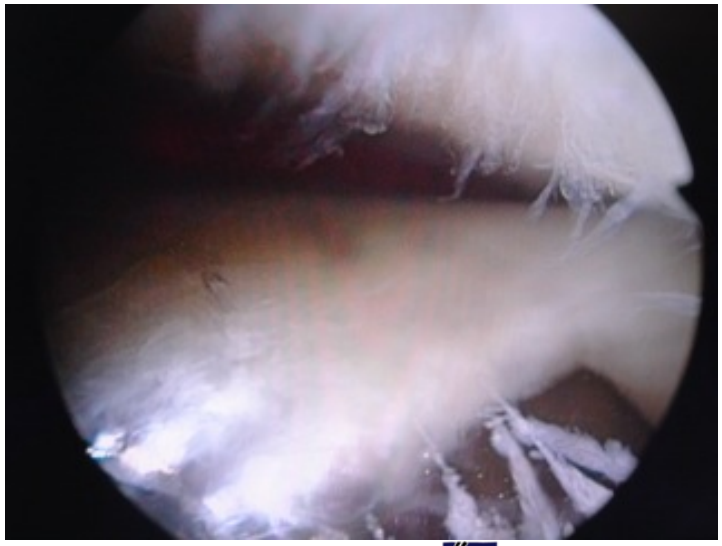
The mirror effect

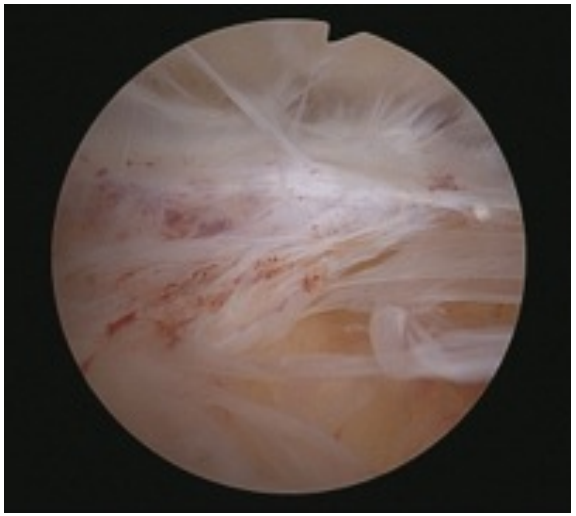


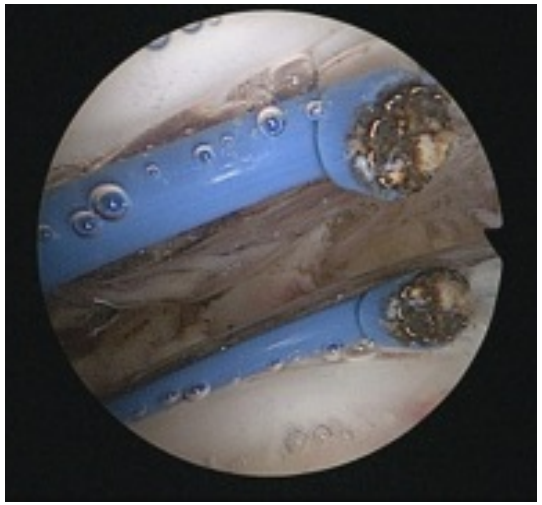
Be carefull no stripe !

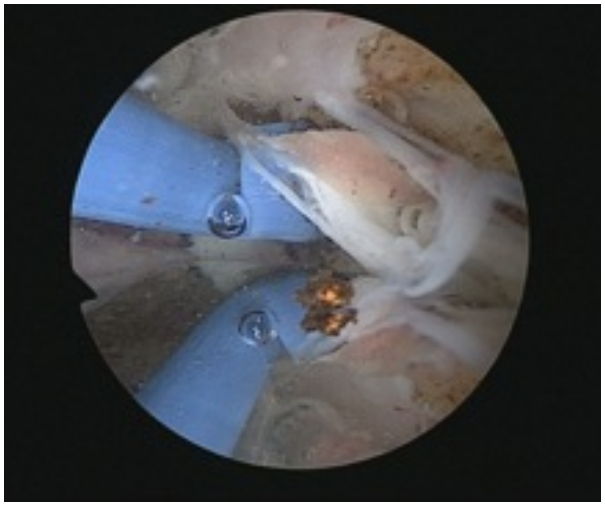
- Non nocere

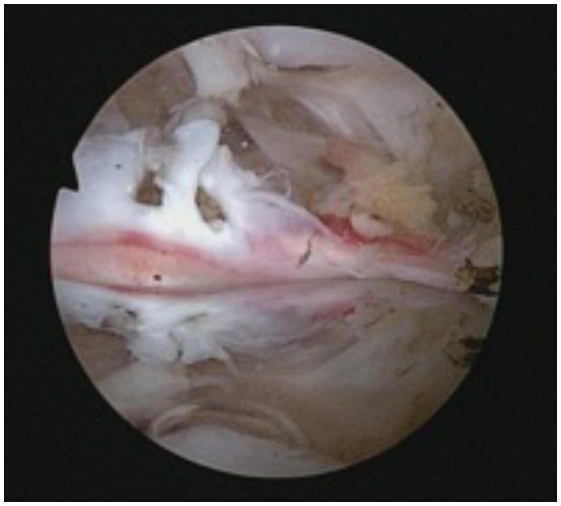
Portal above the patella

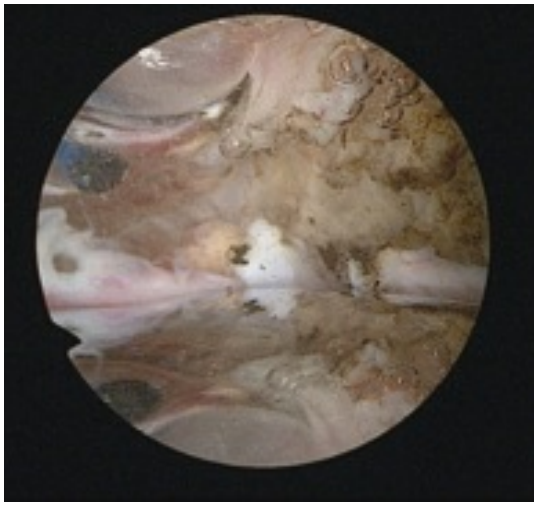




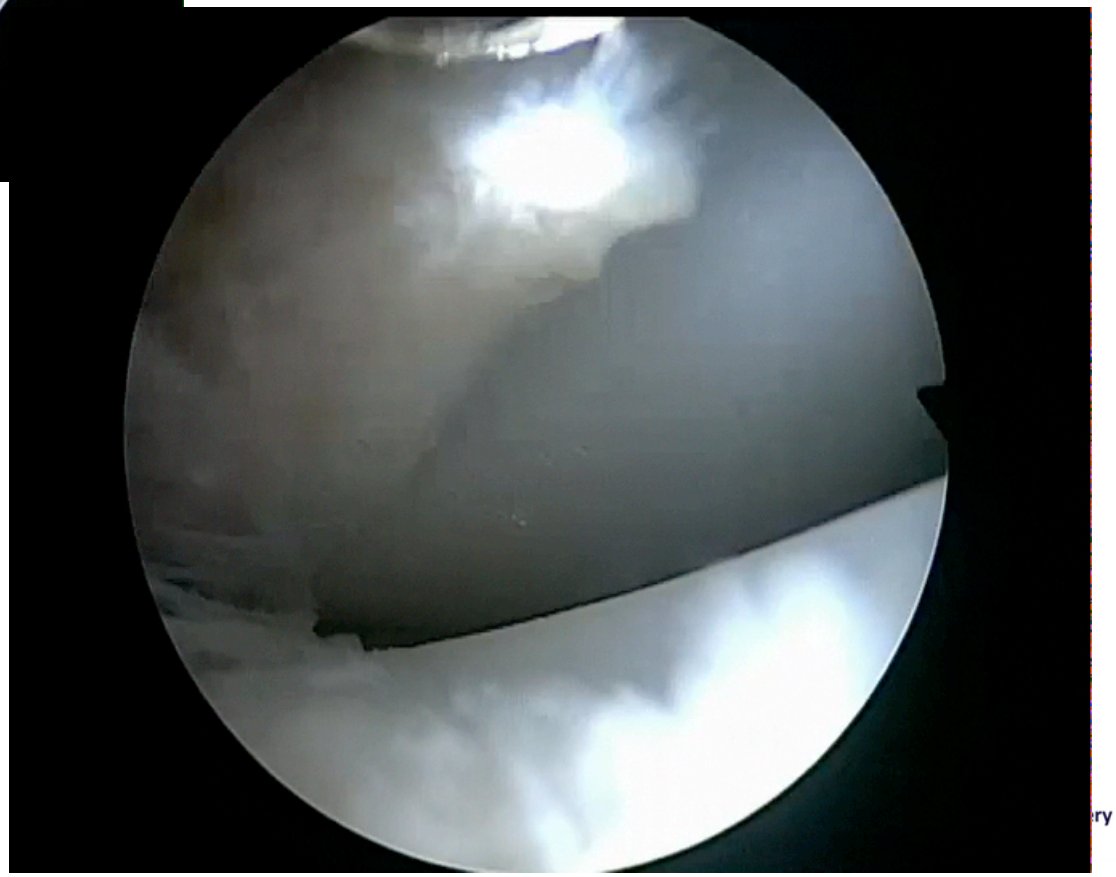








2nd time



Results

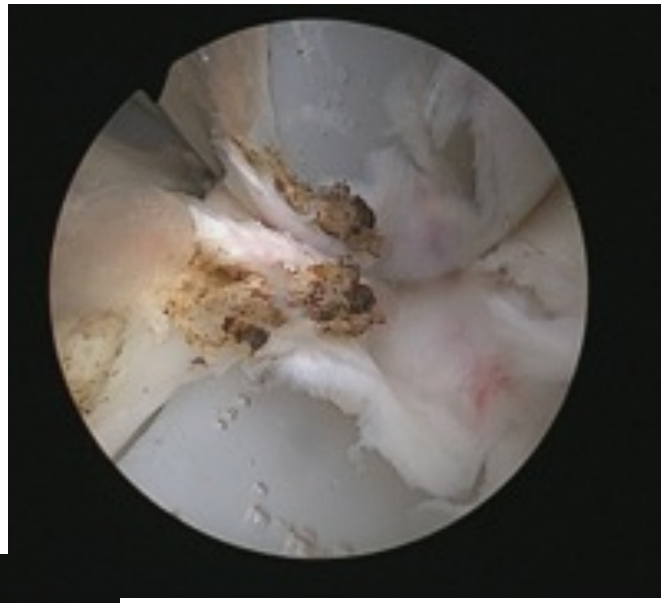
- Gain on pain
- Gain of mobility
- Speed recovory

- Low risk and revision is still possible

The Efficacy of Arthroscopy Following Total Knee Replacement.
David R. Diduch, M.D. Arthroscopy:
The Journal of Arthroscopic and Related Surgery, Vol 13, No 2 (April), 1997: pp 166-171

A Study of Effectiveness of Knee Arthroscopy After Knee Arthroplasty.
Hans-Michael Klinger, M.D. Arthroscopy:
The Journal of Arthroscopic and Related Surgery, Vol 21, No 6 (June), 2005: pp 731-738

Examples FT joint



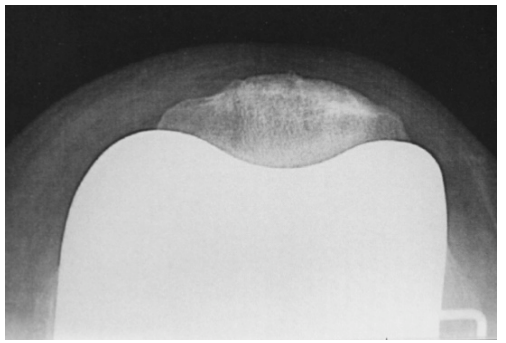
Patella and Clunk Syndrome

- TKA postero stabilised (plateaux mobiles)
  - Behind the patellar tendon
  - Nodule
  - Lack of extension

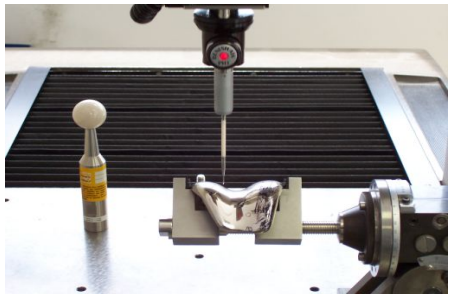
Arthroscopic Treatment of Soft-Tissue Impingement Under the Patella After Total Knee Arthroplasty
.Masaaki Takahashi. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 18, No 4 (April), 2002)
Arthroscopic Treatment of Patellar Clunk and Synovial Hyperplasia After Total Knee Arthroplasty.
Khaled A. Dajani, MD. The Journal of Arthroplasty Vol. 25 No. 1 January 2010
Patellar Clunk Syndrome in a Current High Flexion Total Knee Design.
Sanjay R. Agarwala. The Journal of Arthroplasty 28 (2013) 1846–1850
Patellofemoral Crepitation and Clunk Following Modern, Fixed-Bearing Total Knee Arthroplasty.
Juan V. Peralta-Molero. The Journal of Arthroplasty xxx (2013)

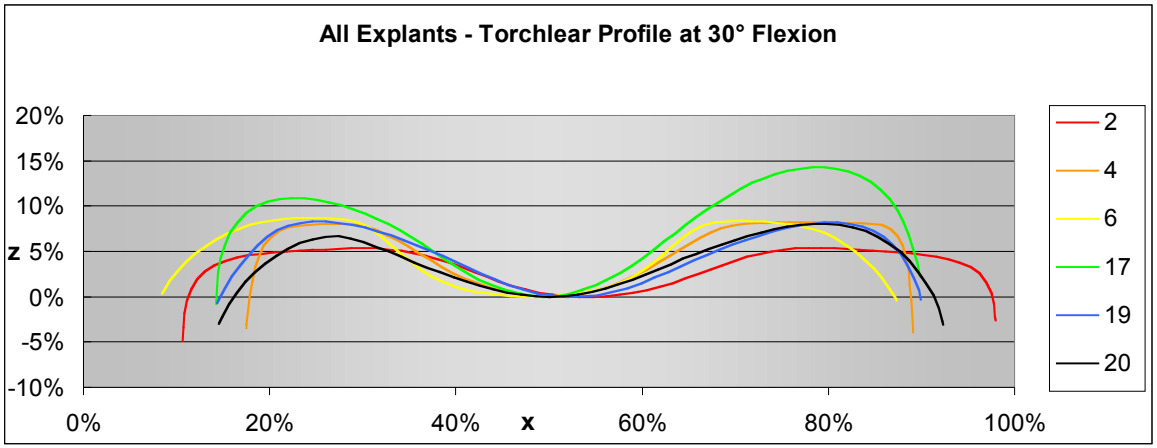
@ study
Seniois, Malekpour

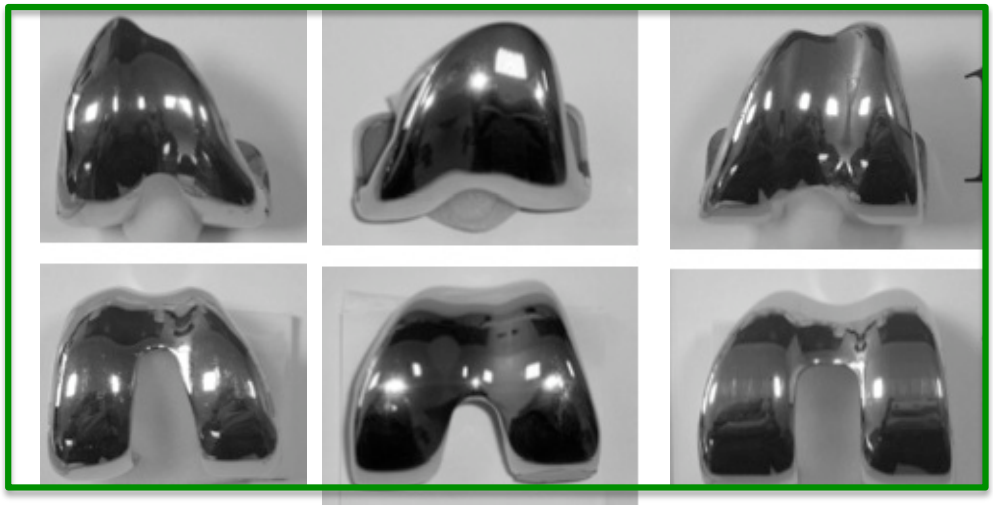
- 30 patients
- Arthroscopy at 30° flexion
- Without water

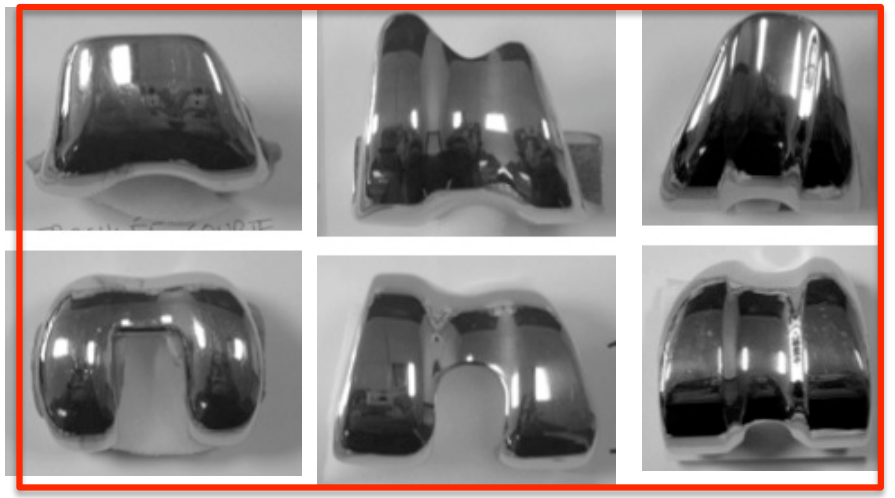


Trochlea shape



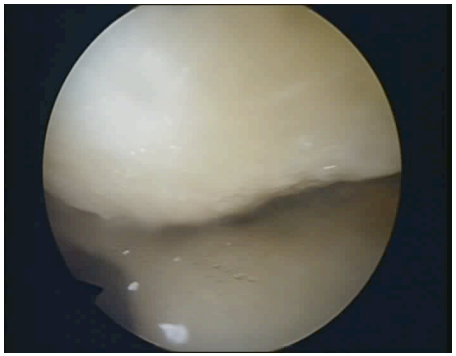
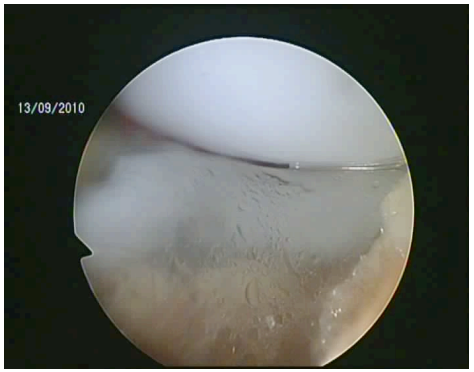


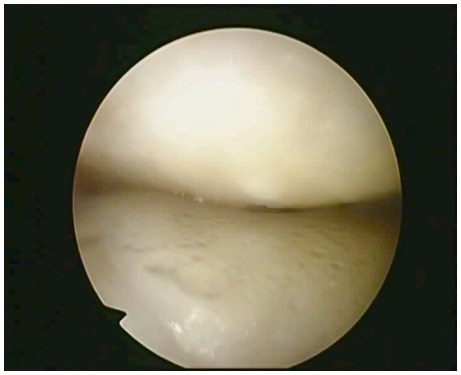




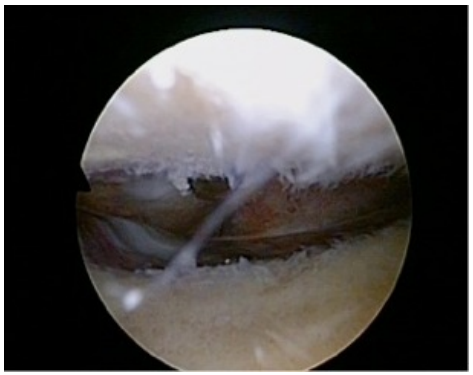
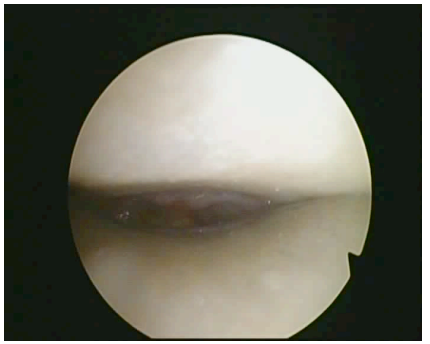
PF matching @ and X ray

- Good



- Poor

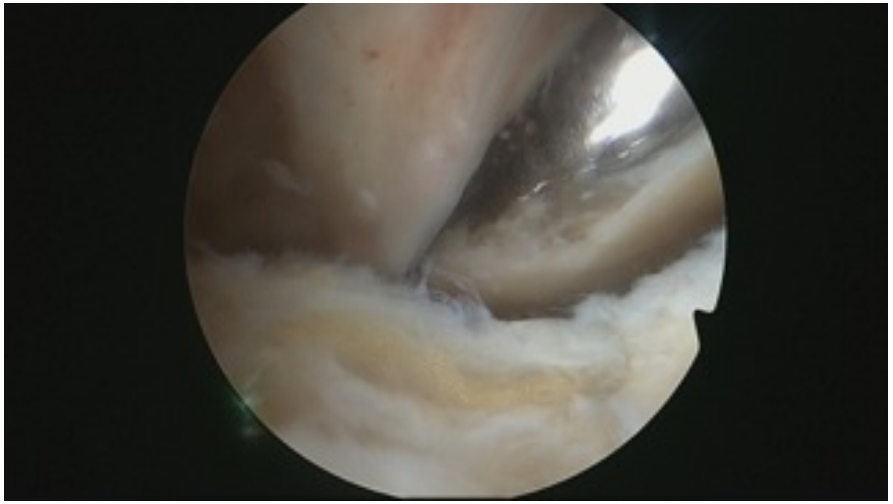




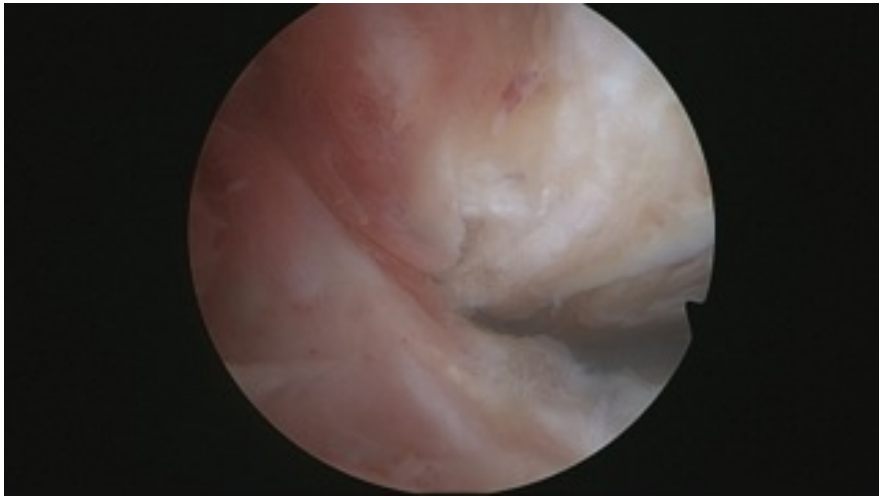
@ in Uni

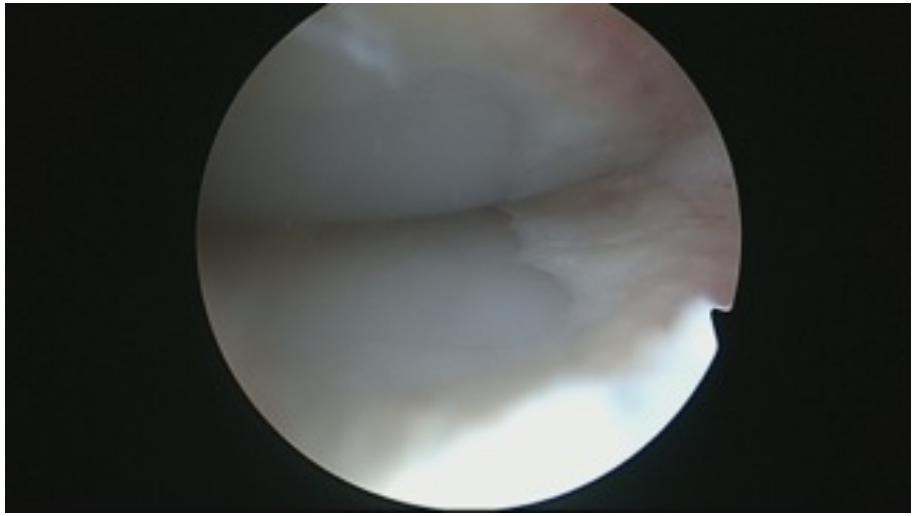
- Lateral bucket handle
- pseudo-meniscus
- Flap cartilage
- Same TKA

Arthroscopie après prothèse unicompartimentale du genou.
S. Hannaouib, S. Lustiga, E. Servien, T. Aït Si Selmia, P. Neyreta,
Revue de chirurgie orthopédique et réparatrice de l'appareil moteur (2008) 94, 678—684

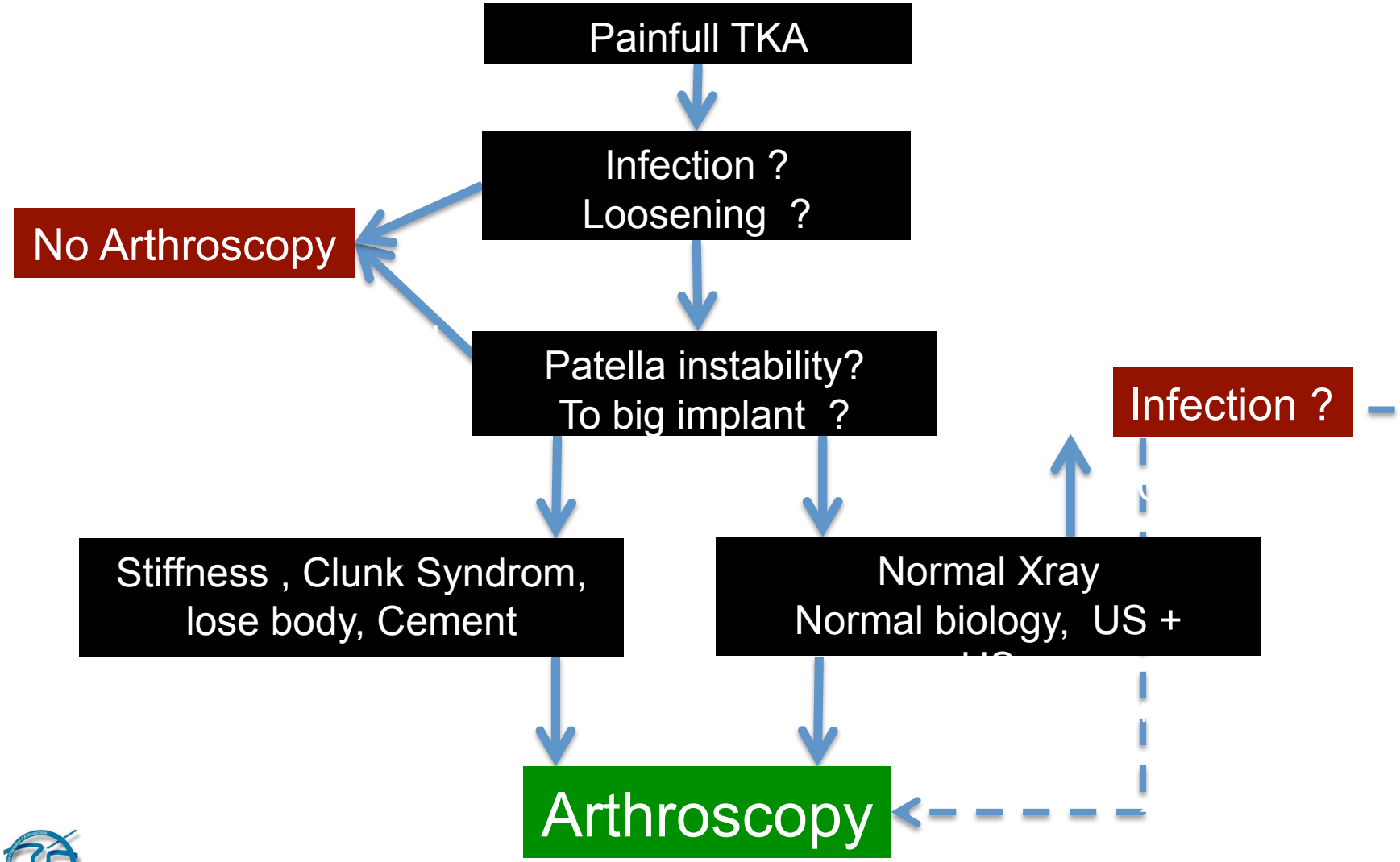
Un exemple

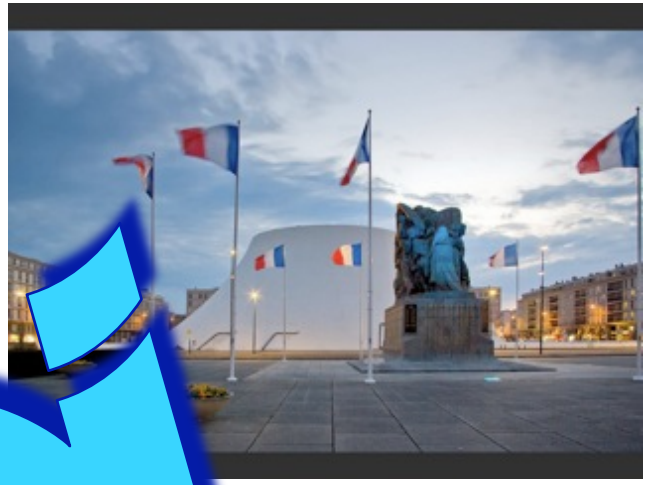






Decision tree





Merci