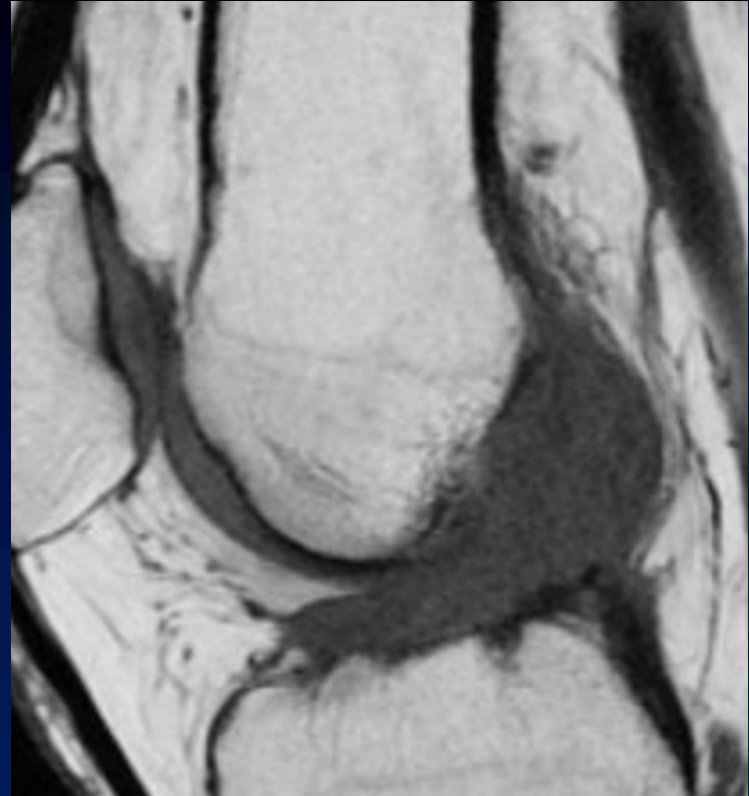
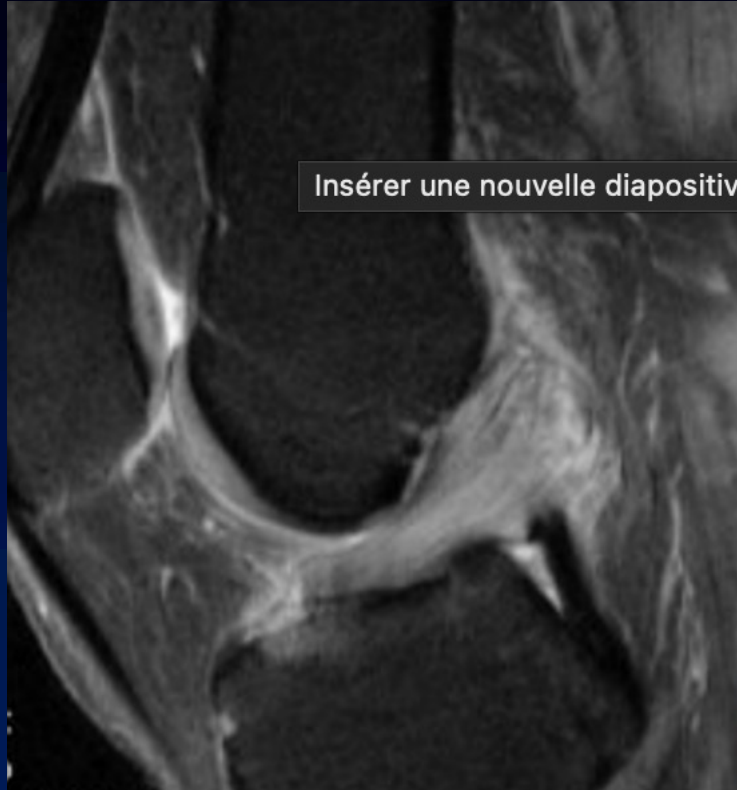


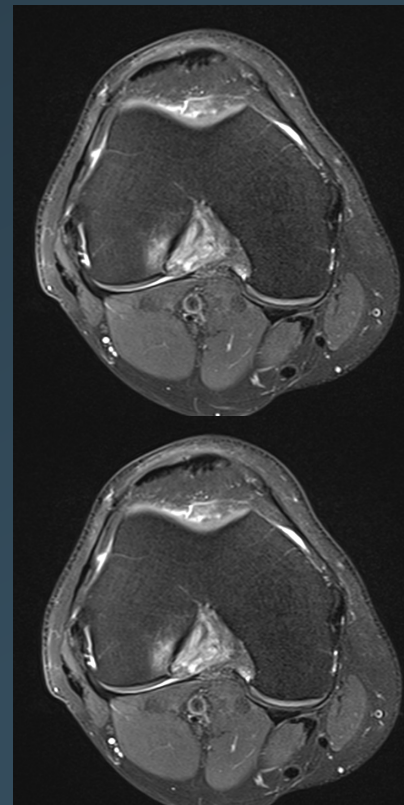
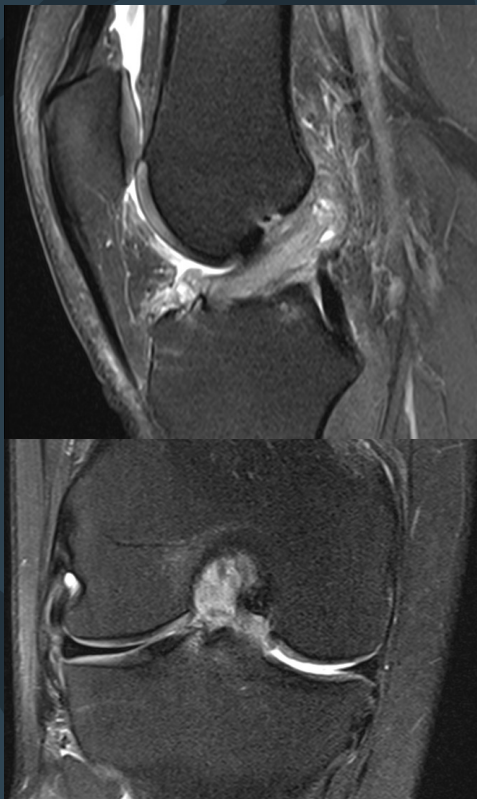
Clinical presentation

- ✓ 51 y.o. man
- ✓ Progressive onset since 2 years
- ✓ No trauma
- ✓ Swelling +
- ✓ Painful stiffness in EXTENSION
- ✓ AND painful stiffness in FLEXION
- ✓ Functional impairment
- ✓ Clinical exam :
 - no laxity
 - Pain in deep flexion and hyperextension

What do you need ?

MR Imaging





MR Imaging

- ✓ Bulky ACL
- ✓ White in T2
- ✓ No lig disruption
- ✓ Celery stalk like



Papadopoulou Radiology 2007
Melloni Skeletal Radiol 2004

ACL volume leads to ...
impingement with roof of the notch and PCL

Prevalence MRI 1 to 5,3%

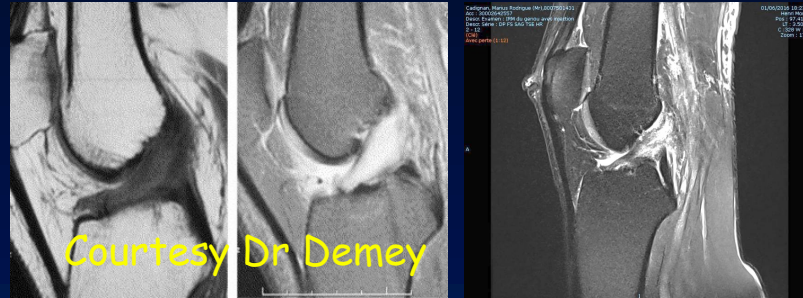
✓ Underestimated

Bergin Am J Roentgenol 2004
Salvati J Sports Med Phys Fitness 2008
Hotchen J Knee Surg 2019

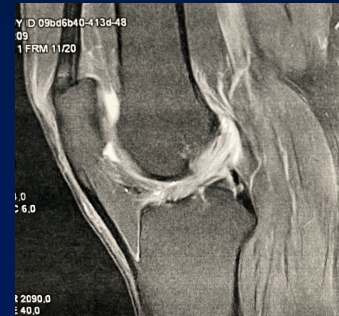
✓ Misdiagnosed

✓ ≠ ACL cyst

✓ ACL tear



✓ Non always symptomatic



Treatment proposal

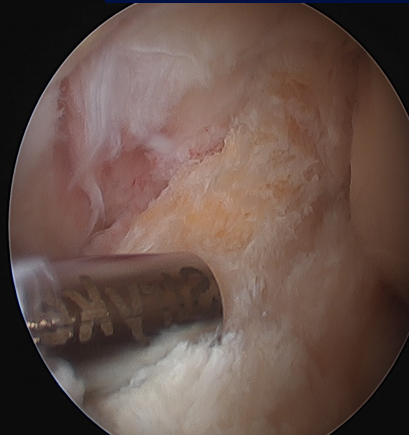
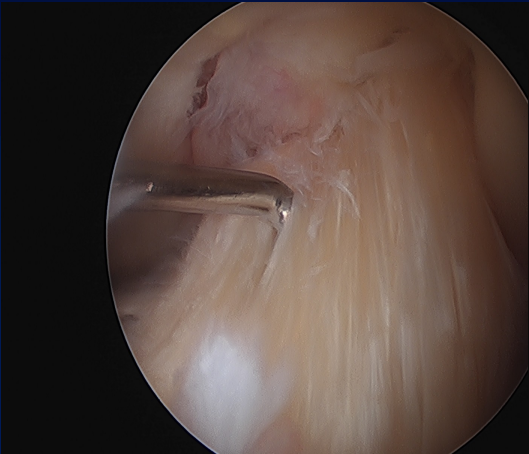
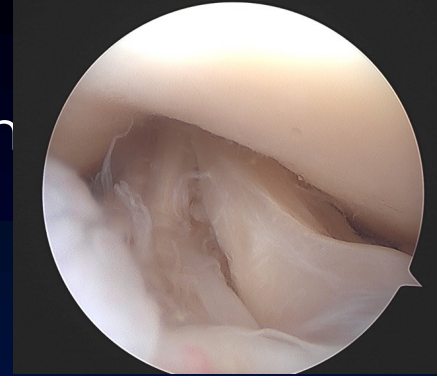
➤ Medical treatment

- As often misdiagnosed
- or Incidental discovery
- Corticoid injection : *US guidance / CT guidance ?*
- Physiotherapy

Preferred treatment = surgery

Arthroscopic diagnosis

- ✓ Swollen ACL impinging in extension
- ✓ w/o synovial membrane
- ✓ Soft @ probe
- ✓ Yellow degeneration (biopsy)

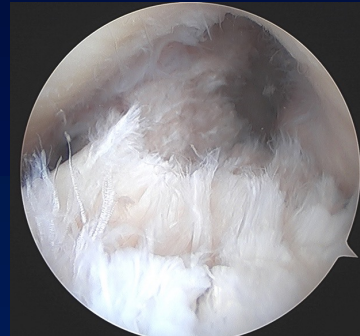


Arthroscopic Arthrolysis

- ✓ Debulking AM+/-PL bundles
- ✓ Shaver or radiofrequency device
- ✓ The whole pathologic tissue to healthy fiber
- ✓ = partial in 70% cases



*Vivekanantha
KSSTA 2023*

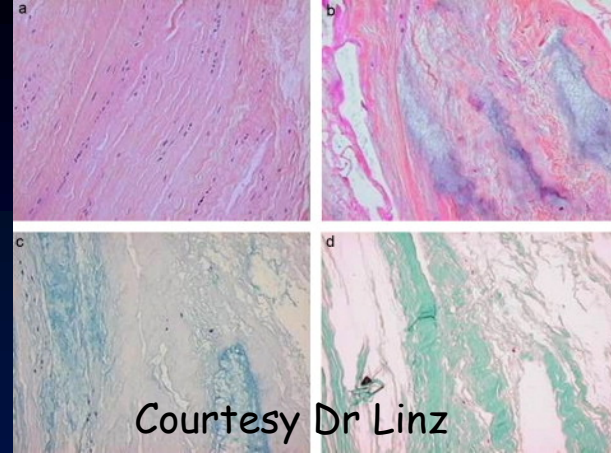


- ✓ Notch plasty no more useful

Linz OTSR 2010
Motman KSSTA 2009
Lee J Clin Med 2021

Patho anatomy Controversial

- ✓ Microtrauma
- ✓ Aging 24 (middle age)
- ✓ Ectopic synovium
- ✓ Metaplastic ACL



Mucinous infiltration within ACL

- ✓ Sick tissue infiltrates the connective tissue of ACL
- ✓ Muco & glycoproteins

Post arthrolysis care

- ✓ Mechanical testing per op
- ✓ No place for ACL-R at the same time
- ✓ Self rehab
- ✓ Warn patient / risk of instability

Ventura Clin Orthop Surg 2108
Sweed Knee Surg Relat Res 2021

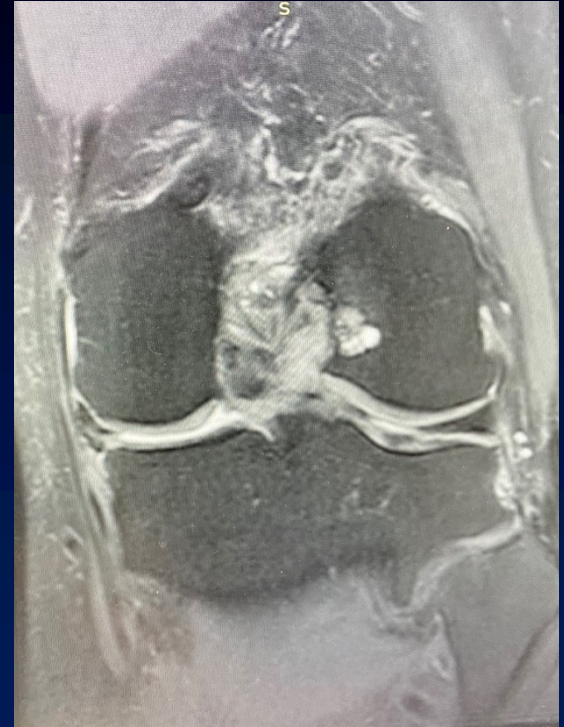
Ventura Clin Orthop Surg 2018
Sweed Knee Surg Relat Res 2021
Narvekar Arthroscopy 2004

François KELBERINE serie

- ✓ 27 patients 30 Knees (from 2013 to 2023)
- ✓ 20 males / 10 females
- ✓ Age 50 ± 9 y-o
- ✓ 12 had previous useless medical ttt due to unknown MD-ACL

@ surgery

- ✓ 23 Partial / 7 Total resections
- ✓ 1/3 meniscal tear
- ✓ 100% Biopsy = Mucoid degeneration



Functional results

FU 77 months (minimum 12 months)

✓ Simple Knee Value Marot *KSSTA 2021* 80,45 ($\pm$ 12,91)

(simple evaluation correlated to existing knee PROMs)

✓ IKDC Irrgang *AJSM 2001* 81,32 ($\pm$ 9,38)

Lintz 71 @ 6y

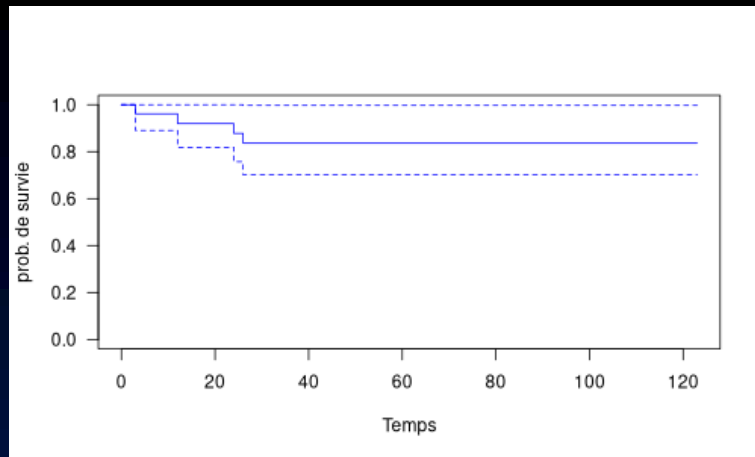
✓ Satisfaction rate 83,3%

Chudasama 73%
Haidar 71%

Survival K-M

73% w/o surgery

80% w/o ACL-R



- ✓ 2 meniscectomies

- ✓ 4 ACL-R

 - ✓ 4 male (*trauma / trail*)

 - ✓ 12 - 26 months of delay

Risk of Instability

Warn patient

✓ Linz *OTSR 2010*

29 pts 2 ACL-R @ 2 & 5 y

✓ Chudamasa *Indian J Orthop 2012*

40 pts 2 ACL-R @ 2y

✓ Haidar *Int Orthop 2023*

60 pts 7 ACL-R @ 15 mths

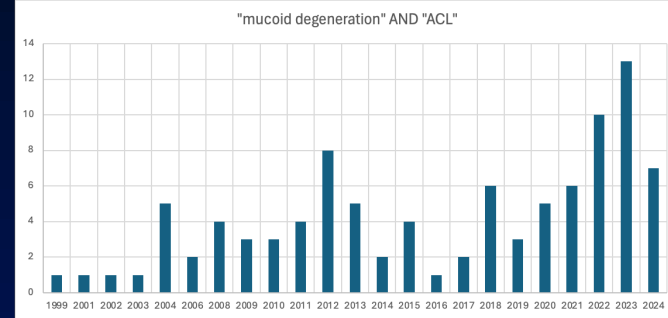
Conclusions

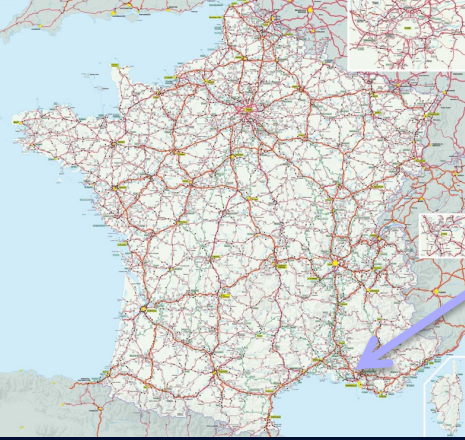
- ✓ Underdiagnosed disabling knee disease
- ✓ Mid age, painful stiffness, swelling
- ✓ Simple treatment / low risk of resurgery
- ✓ Many papers from India ??



Literature (retrospective, case report)

- ✓ Kumar *JBJS Br* 1999
- ✓ Narvekar *Arthroscopy* 2004
- ✓ Motman *KSSTA* 2009
- ✓ Linz *OTSR* 2010
- ✓ Chudasama *Indian J Orthop* 2012
- ✓ Cha *KSSTA* 2013
- ✓ Ventura *Clin Orthop Surg* 2108
- ✓ Hotchen *J Knee Surg* 2019
- ✓ Sweed *Knee Surg Relat Res* 2021
- ✓ Vivekanantha *KSSTA* 2023 (meta analysis 776 cases)
- ✓ Choukimath *Arthroscopy Techniques* 2024





Aix en Provence



*Thanks to
Henri Peuchot, François Kelberine*

Aix en Provence - France

