« Menu à la carte »
Technique ligament patellaire

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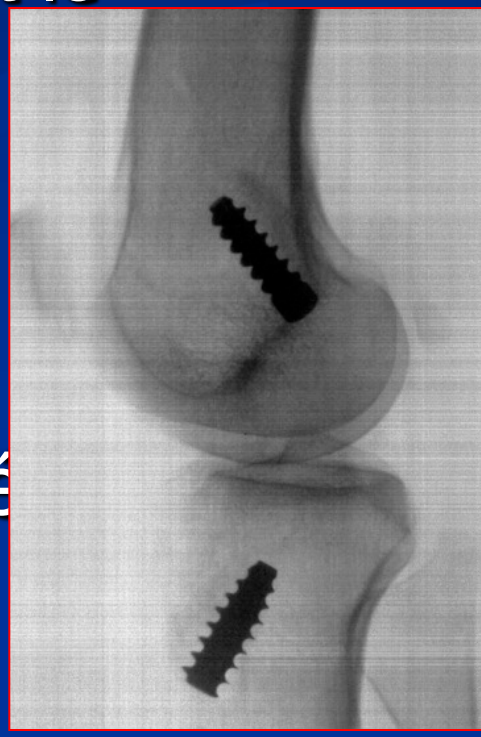
Clinical Indications criteria in favor of « Surgery a la carte » Menu

Technique actuelle ‘ ‘TP’ ’

- 1.Prélèvement de la greffe
- 2.Temps arthroscopique :
  - L’exploration complète du genou et le traitement des lésions méniscales
  - La réalisation des tunnels (voie antéromédiale)
  - Mise en tension et fixation greffe
- 3.Rééducation-reprise des activité sportives



Installation-Setting

- Depending on surgeons habits
- Patient in supine position
- All surgical solutions and situations
- Enough Flexion 110 to 130°

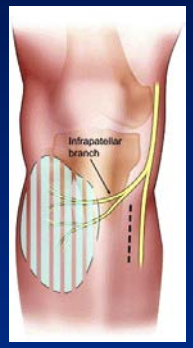

Extension

Flexion 90°

Flexion 130°

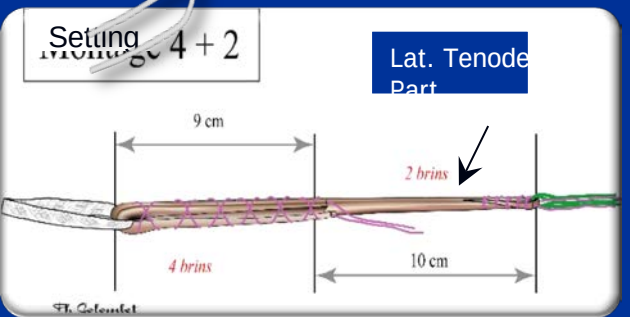
Graft choice

- Length, traction thread, measurements
- Calibration
- Modularity
- T Quad et TFL also



Baguette rotulienne : 22x10 mm

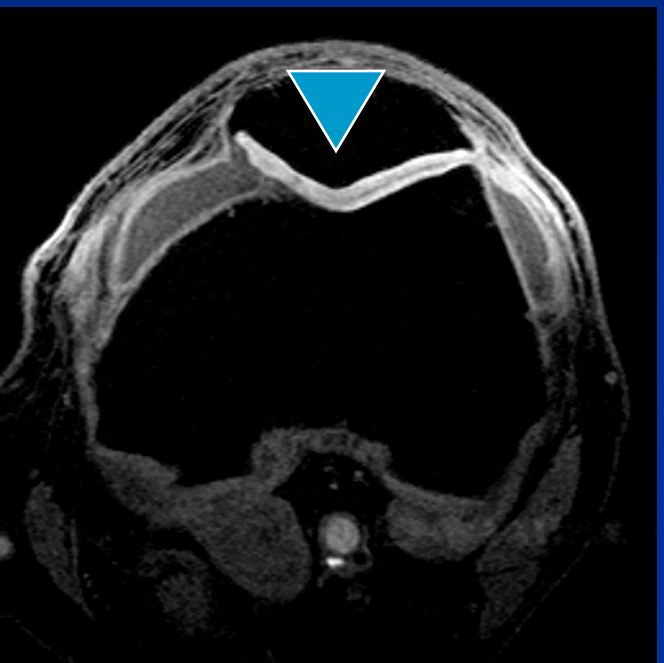
4ST

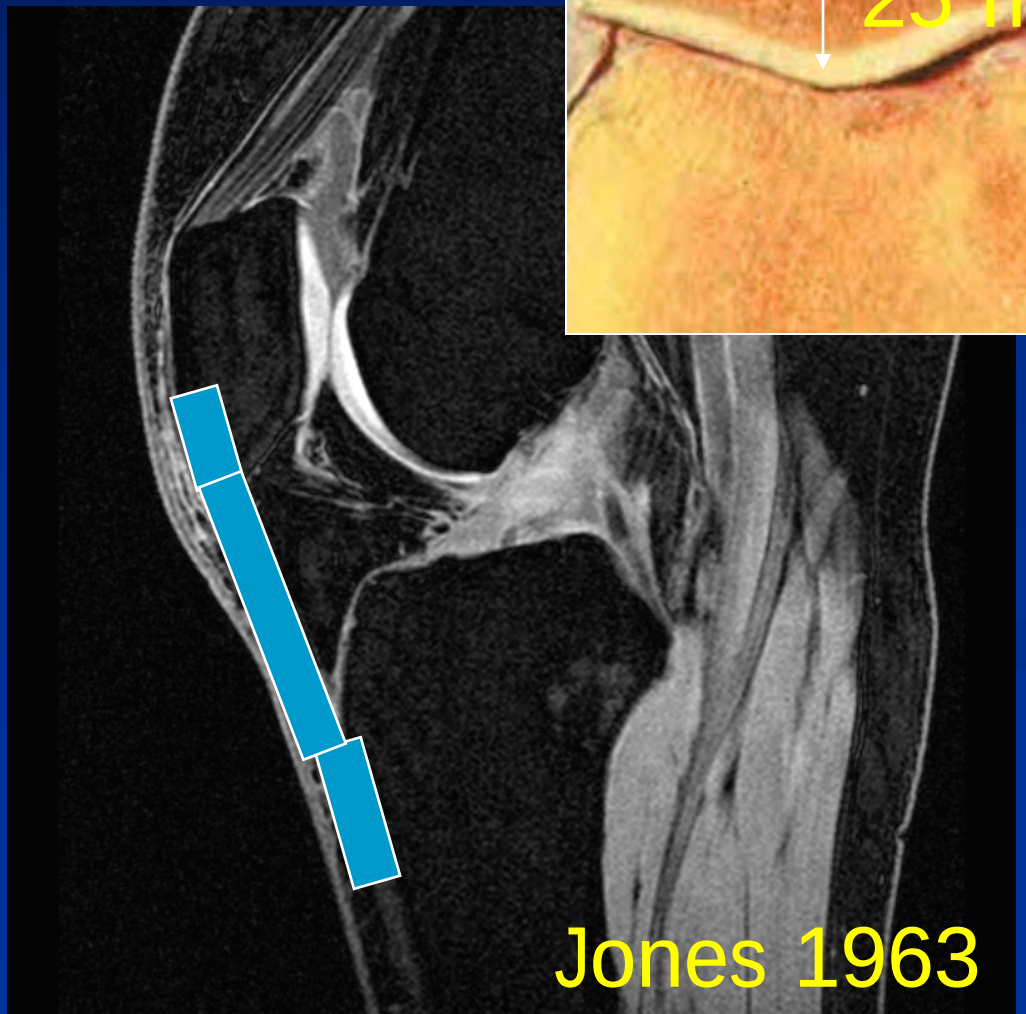


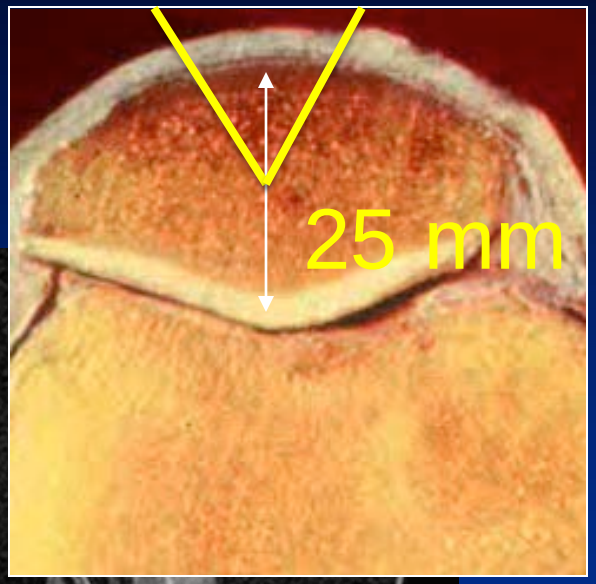
Baguette tibiale : 25x10 mm

Le prélèvement: tendon rotulien

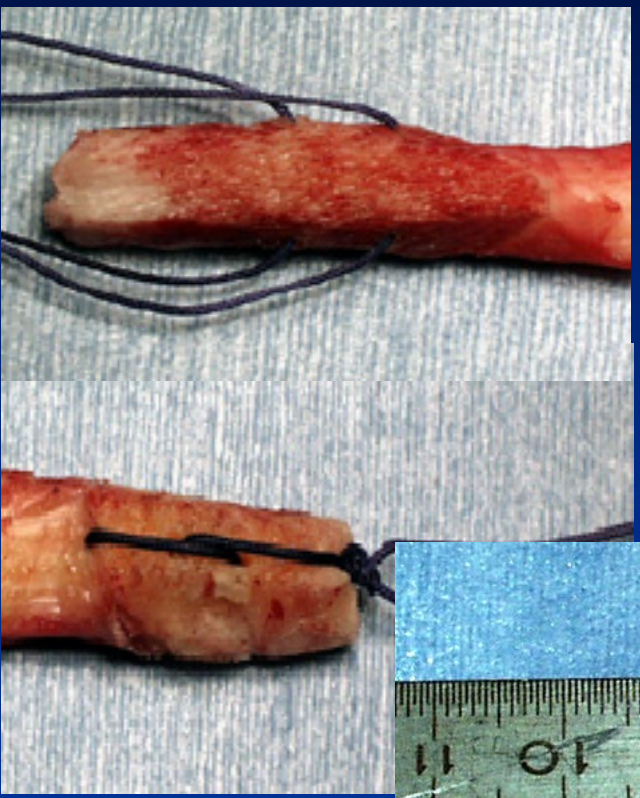
Une incision antérieure
verticale décalée en dd
Largeur 10 mm,
2 baguettes osseuses
Longueur 20-25 mm
Fils de traction

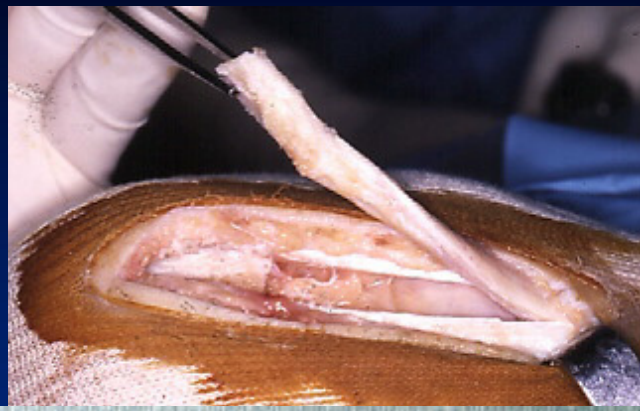






Le prélèvement: tendon patellaire



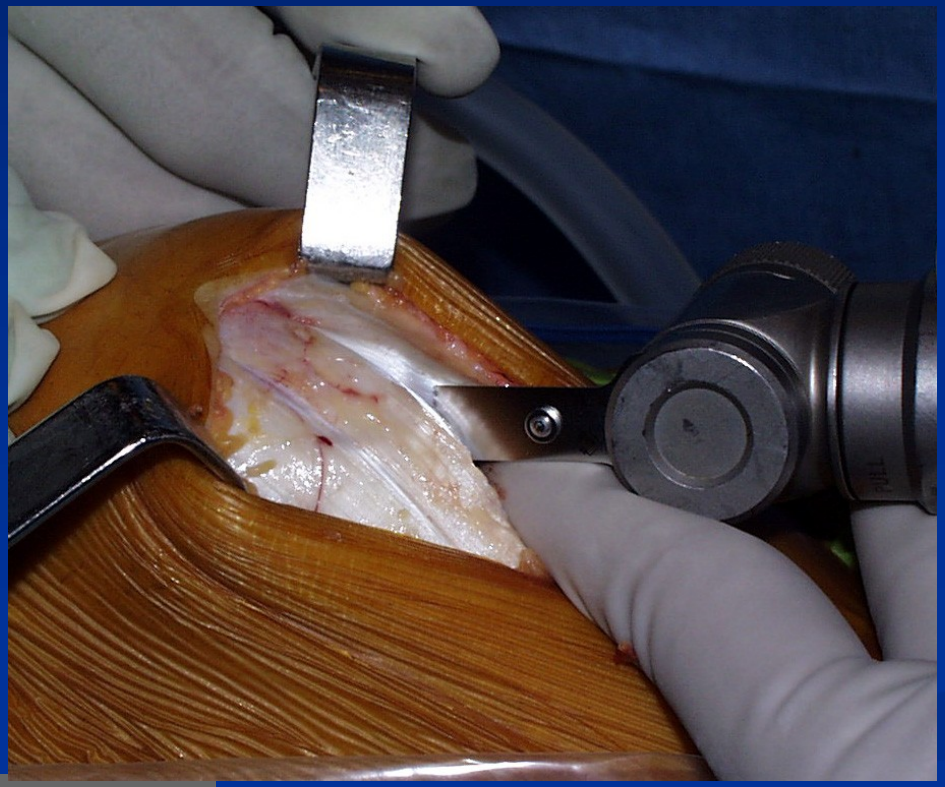


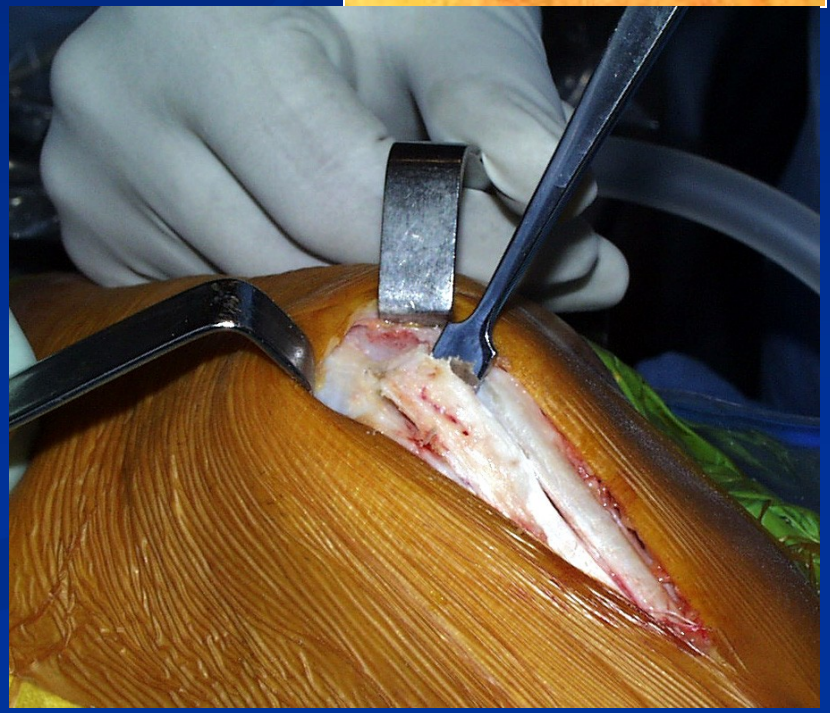
Morbidité site prélèvement

TP

Fractures de la patella (per et post-opératoires)

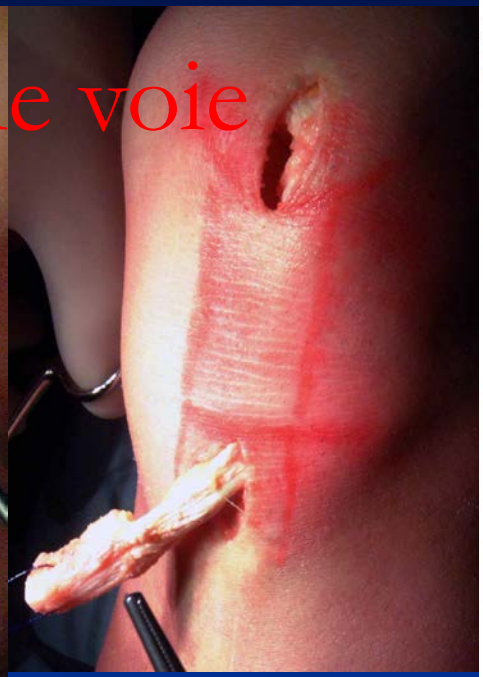
Prévention : prélèvement triangulaire

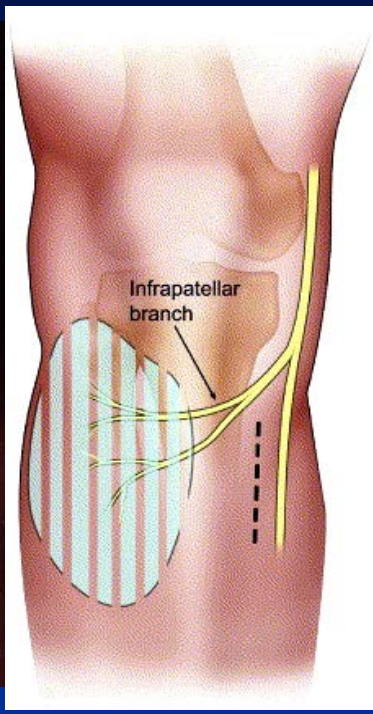


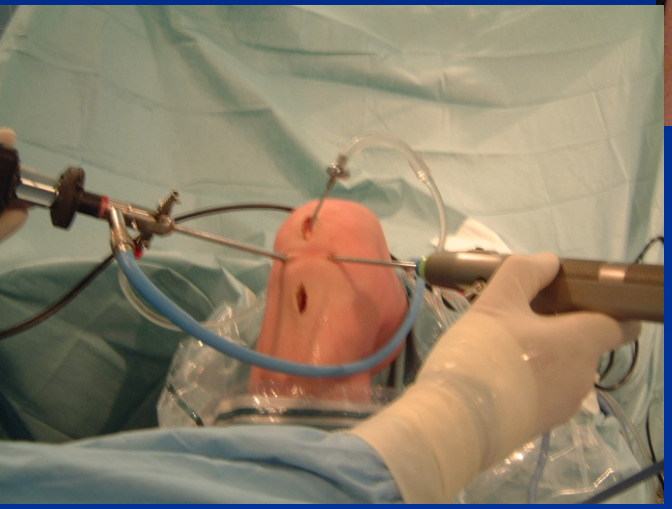


Une solution pour le Tendon patellaire ?

Prélèvement double voie







Douleur passe de 58% à 19%(p=0,01)

Amélioration sur troubles sensitifs 89% à 42% (p=0,002)

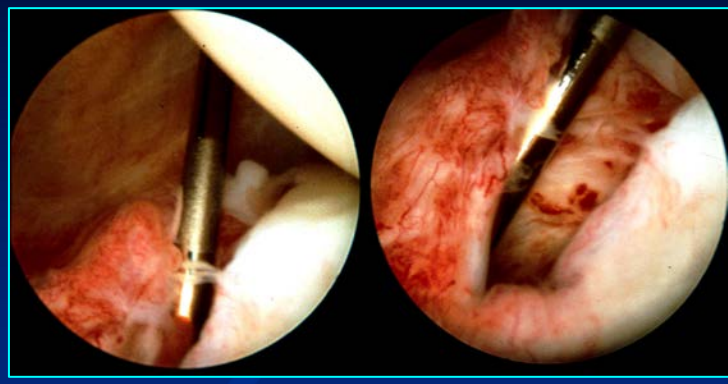
N= 44, prospectif.

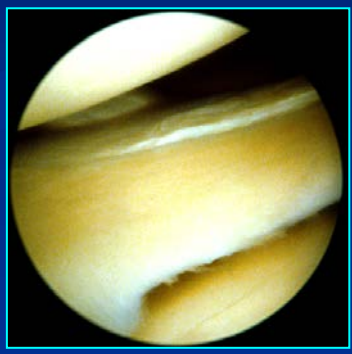
Morbidité

Courtoisie P Beaufils, Gaudot, Thévenin, RCO04 et 08

Arthroscopic step: Meniscal tears and Cartilage

- Exploration
- Palpation (hidden lesions)
- Meniscus PRESERVATION again and again
  - IRM pré-op
  - Surgical material
  - Take a chance

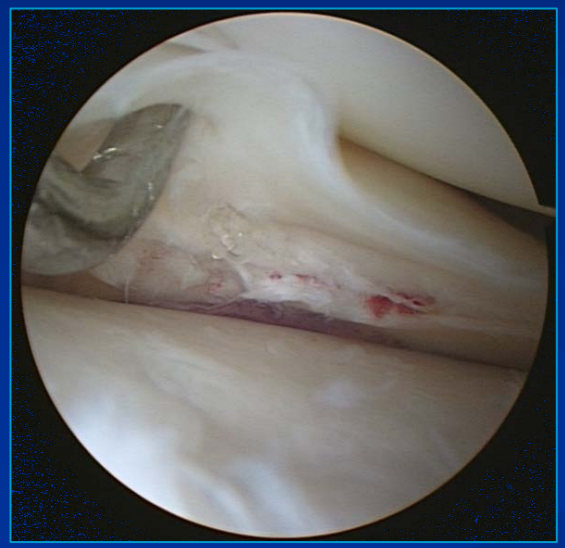


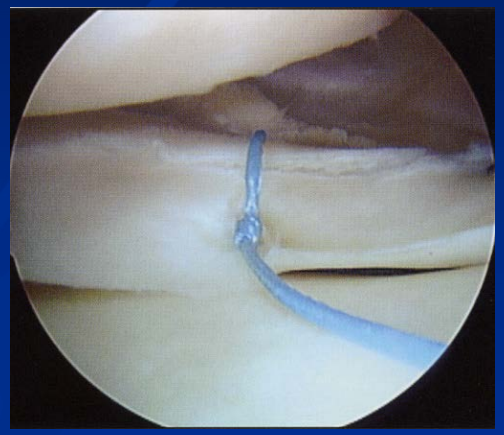


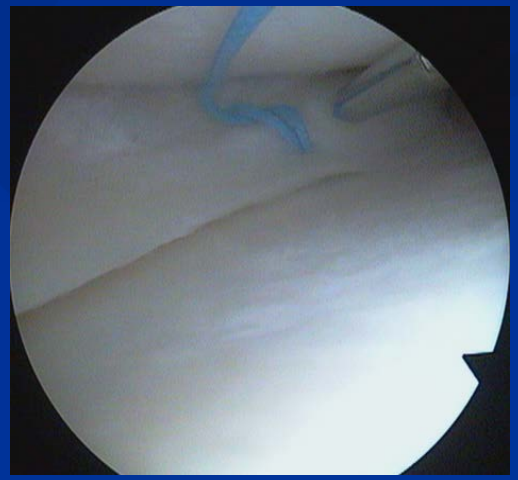
SOS ménisques

Meniscal TEARS

- Repair …….. REPAIR and REPAIR
- Take a chance for preserving the mesnicus







Profils…….Knee OA

Best

10 y.

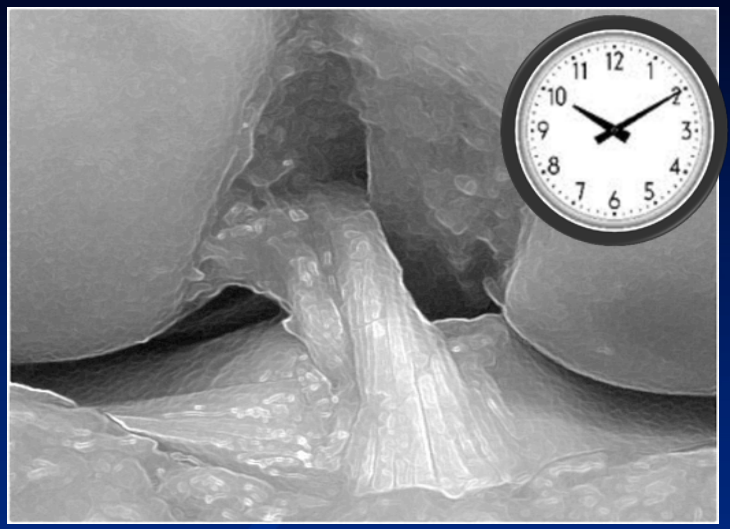
20 y.

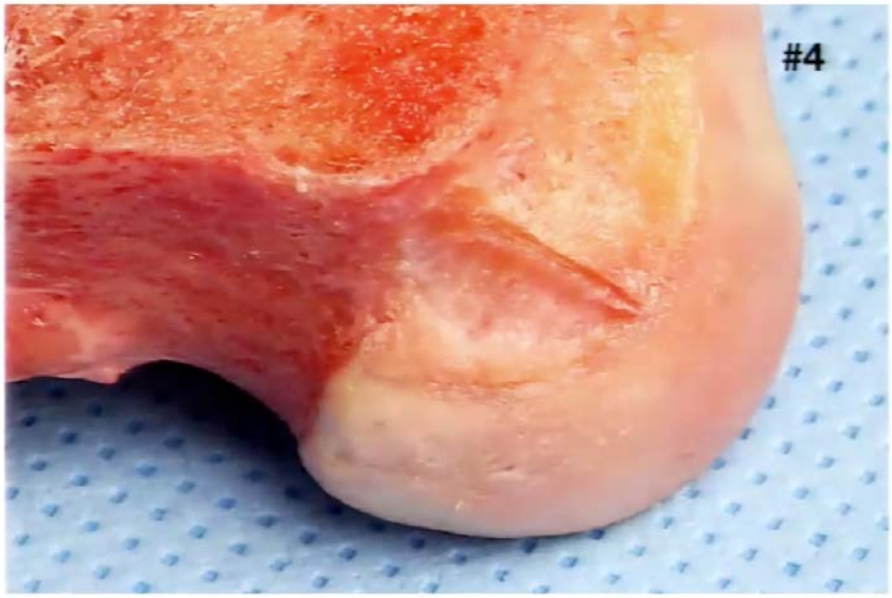
	10 y.	20 y.
ACL And Intact Meniscus Suturé ou Lep	11%	17%
ACL and Meniscectomy	31%	46%
ACL and Cartilage lesion	38%	
ACL, Meniscectomy and Cartilage	45%	

Worse

Arthroscopic step

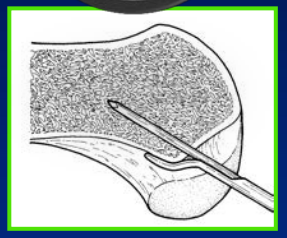
- Landmark for tunnel position
- Fémur

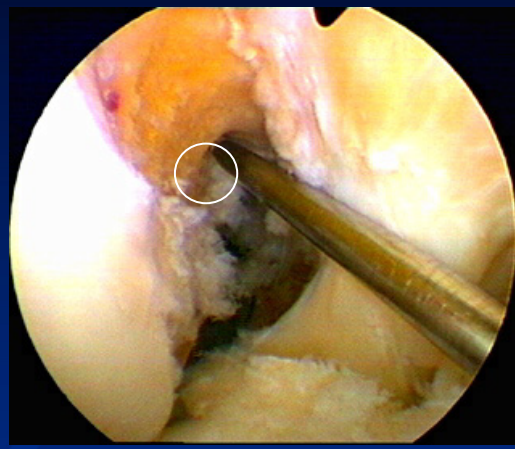




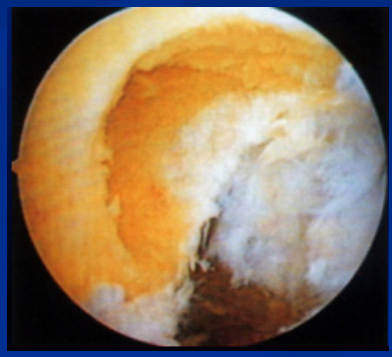
Arthroscopie: Tunnel fémoral using AM Portal

- Fémoral point
  - Burr, Aimer, Clock Viseur,
  - Double concavity



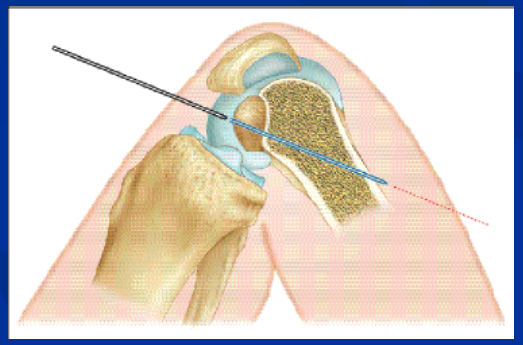


- Guide pin
  - AM Portal
  - Knee at 120° flexion°

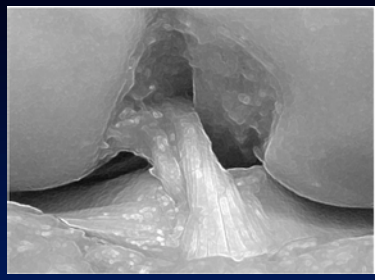


- Independant tunnels

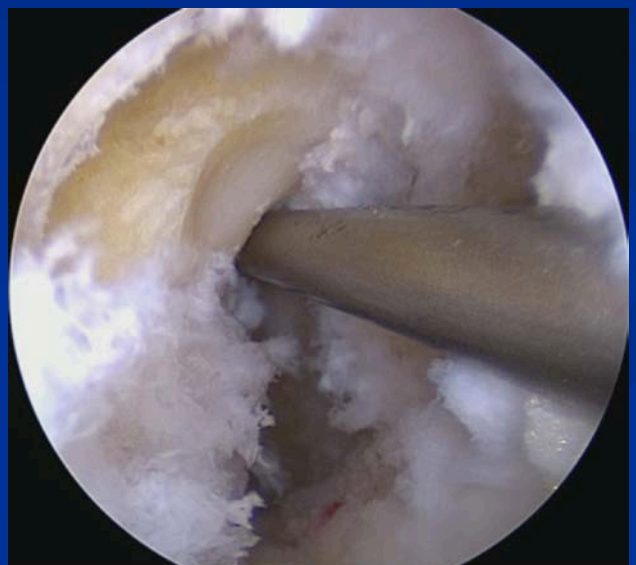
(Locker 95)

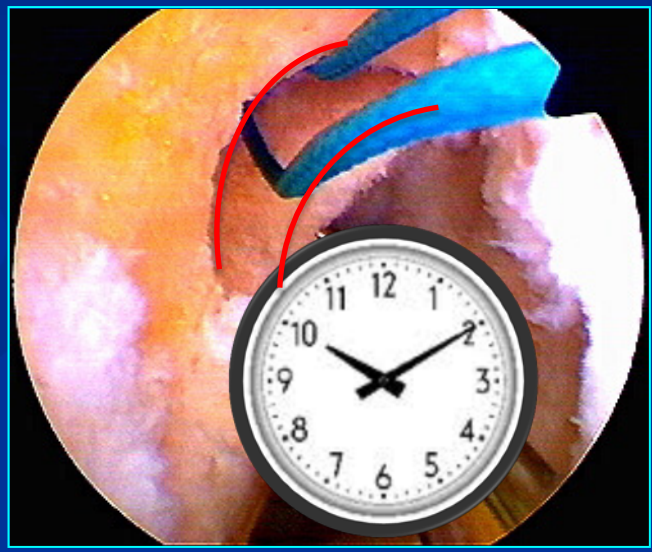


Arthroscopie: Tunnel fémoral



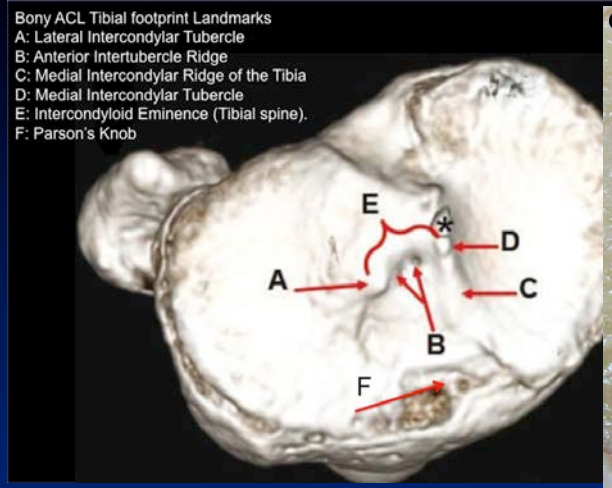
- Voie antéro médiale (91)
- Tunnel borgne de 25 mm/ diamètre adapté

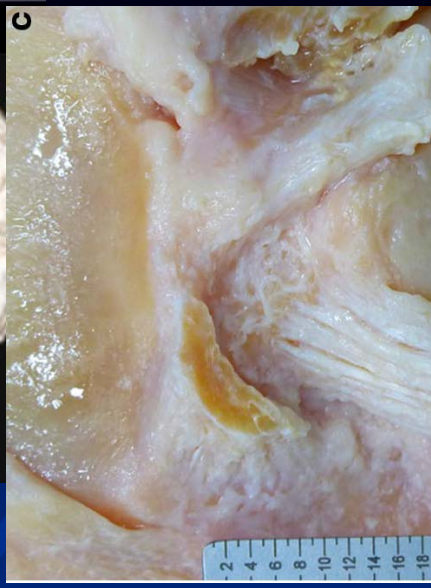


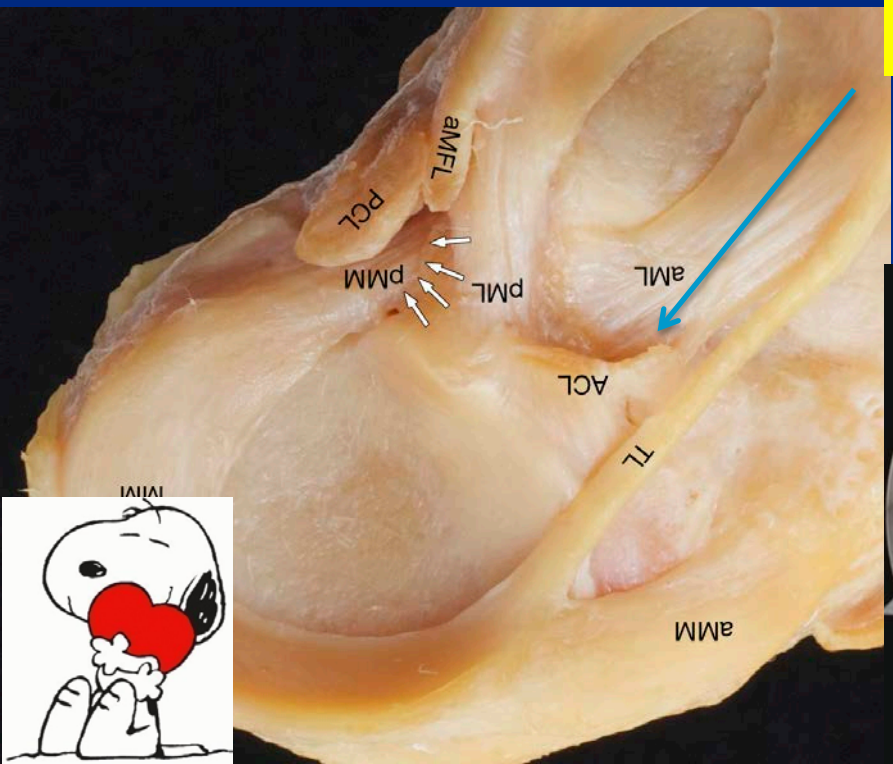


Arthroscopic step

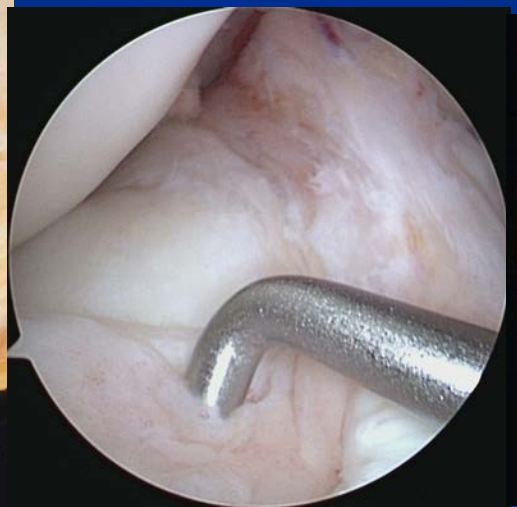
- Tibia ++++
- Plus antérieure que l'on croit, Forme de « C »





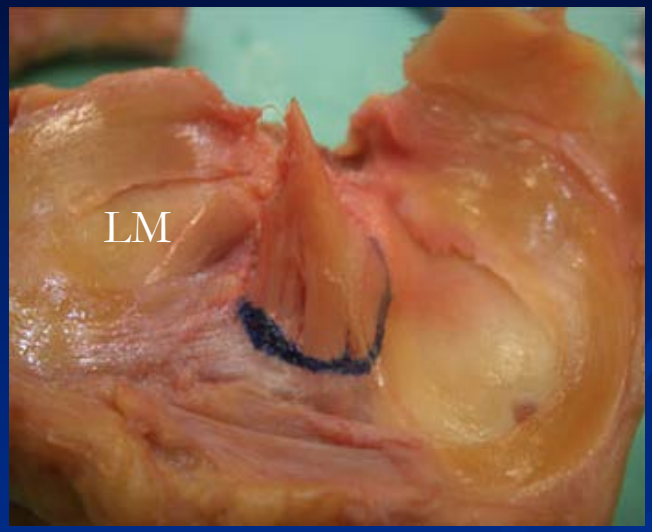


Kiss from the Acl to the LM

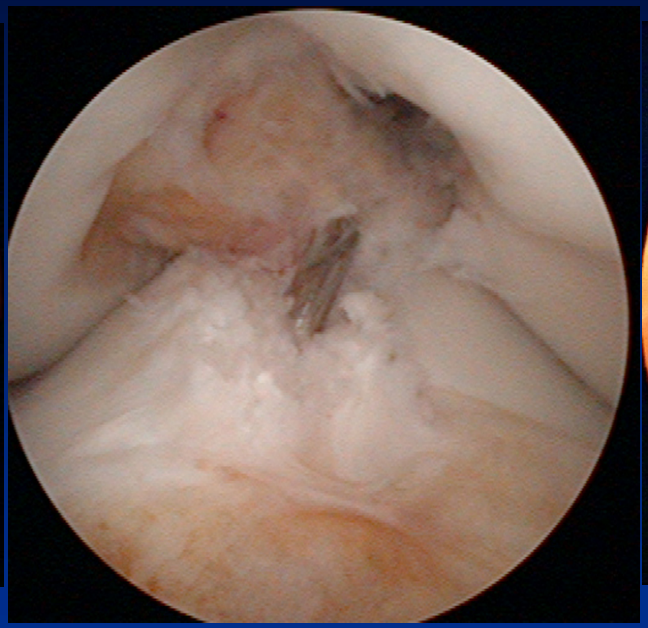


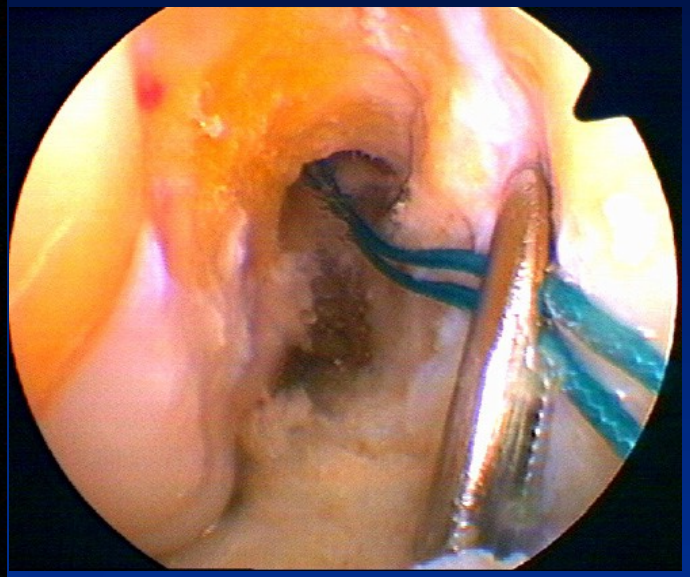
Arthroscopie: Tunnel tibial

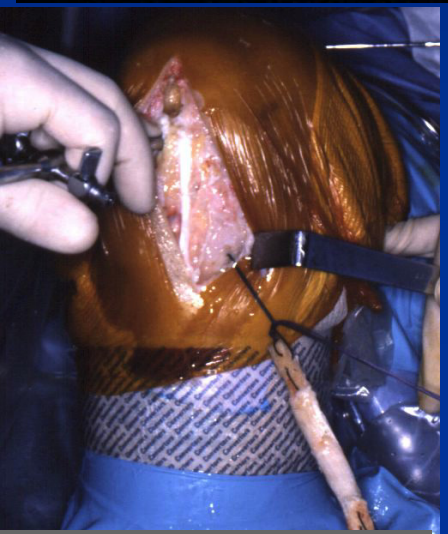
- Tibial Landmark
- Aimer
- Remnants
- Extension conflict



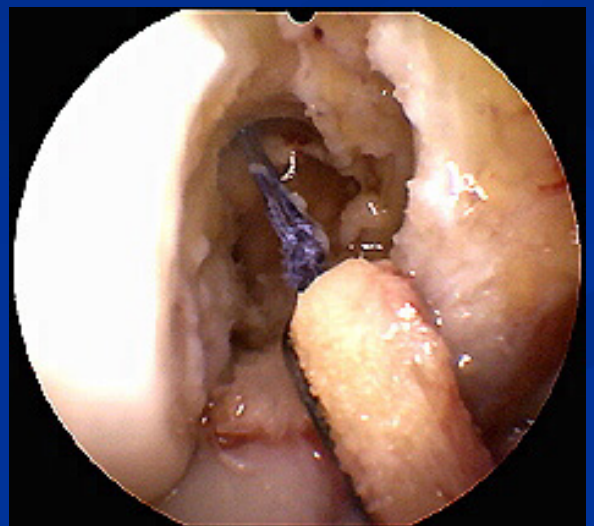
Arthroscopie: Réalisation des tunnels

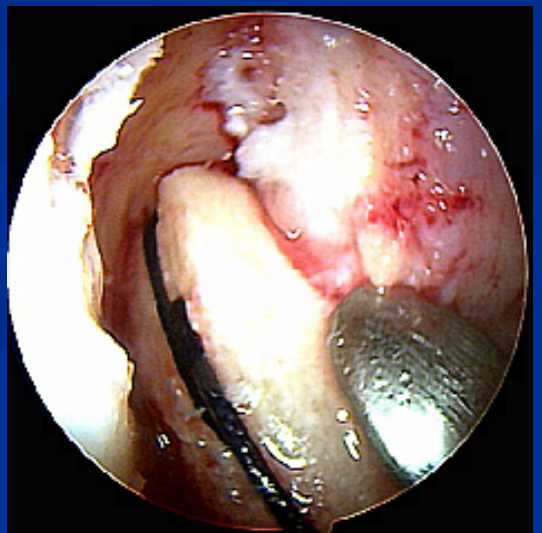






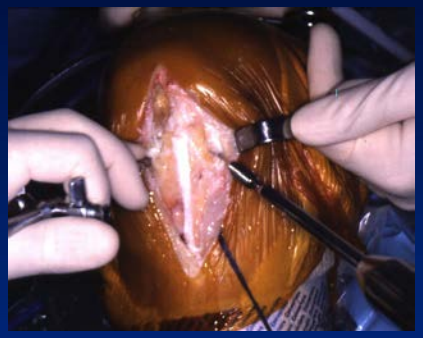
Ma technique

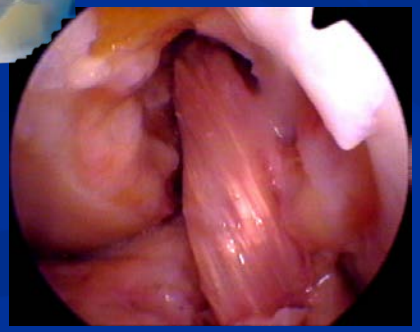


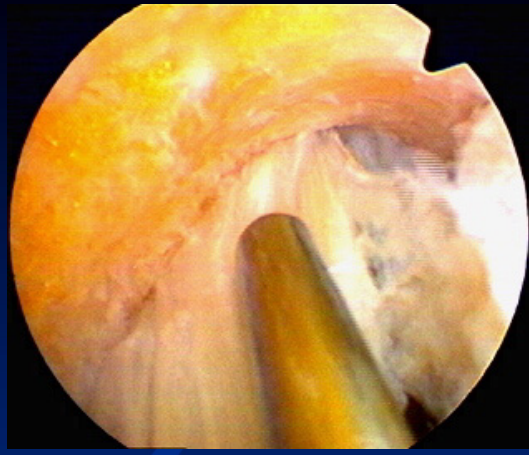


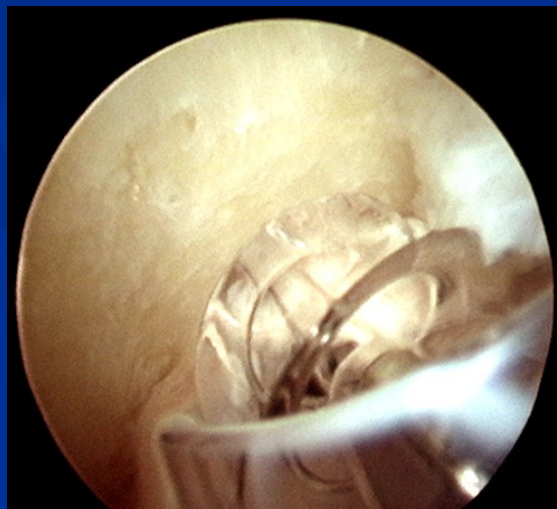
Femoral fixation SCREW

- Pin guide/ Anterior part of the bone
- Knee in max flexion
- Absorbable Ligafix 60 interference screw.
- Protection of the graft



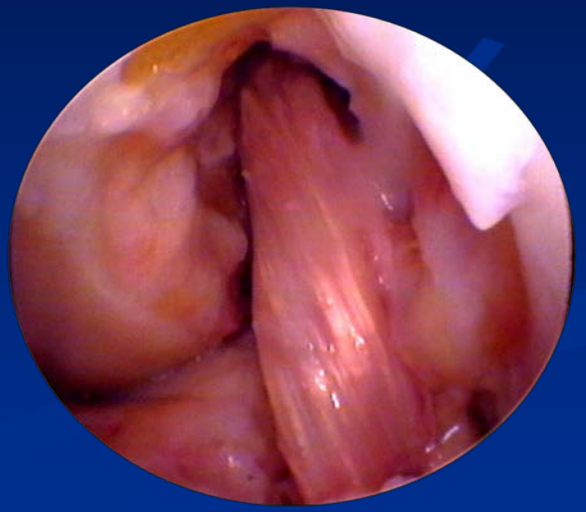




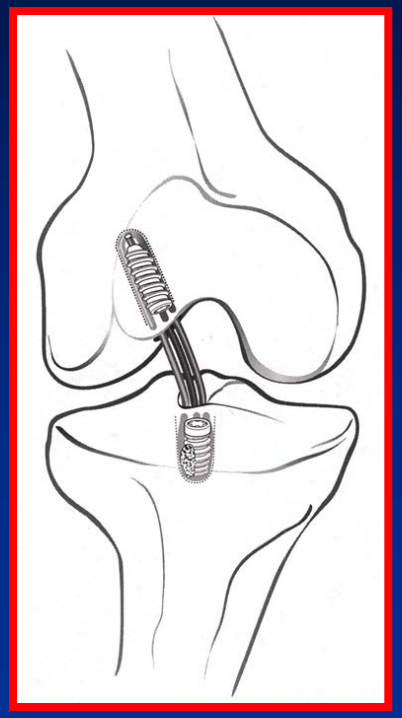


Graft dynamic

- Extension through flexion
- Conflict in extension
- Intra articular control

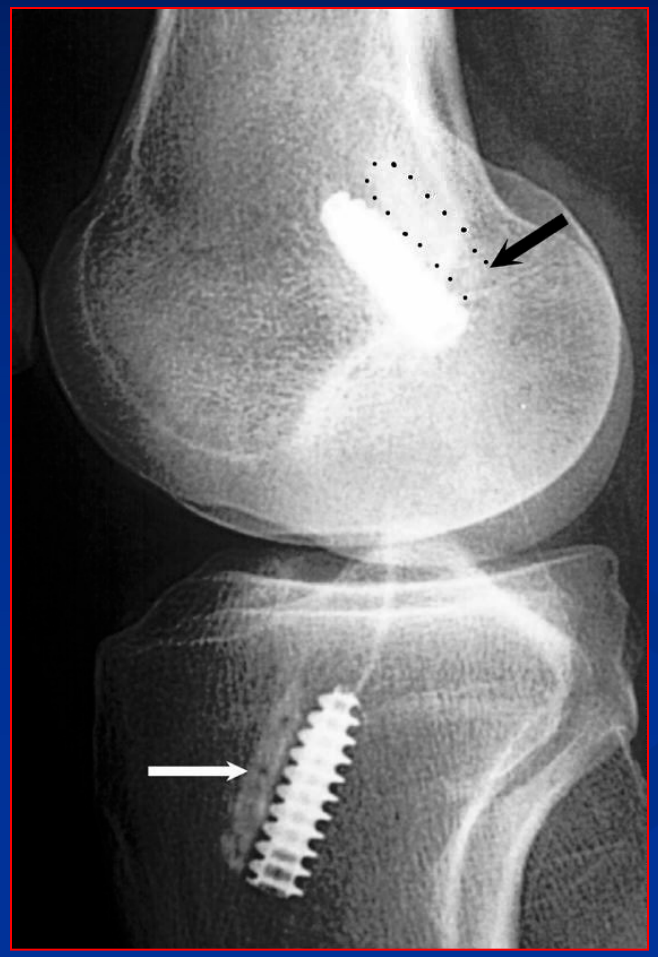


Fixation de la greffe



Fixation directe anatomique

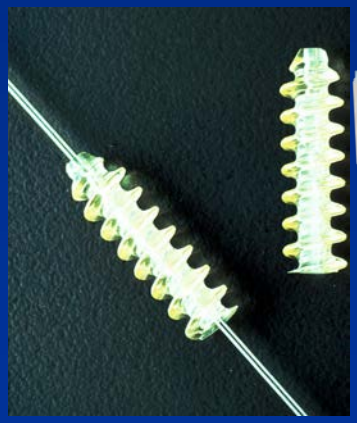
Vis d'interférence : Fémur et tibia

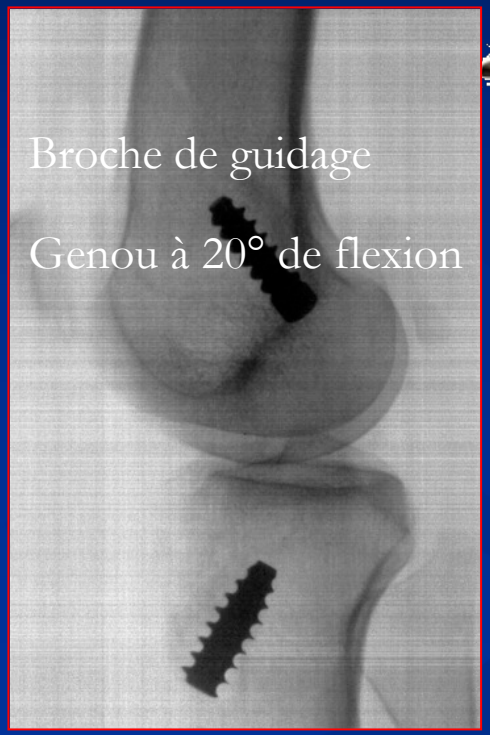


DEXA :Tibia < Fémur (Brand, Arthroscopy 99)

Tibial Fixation

Bone -Bone

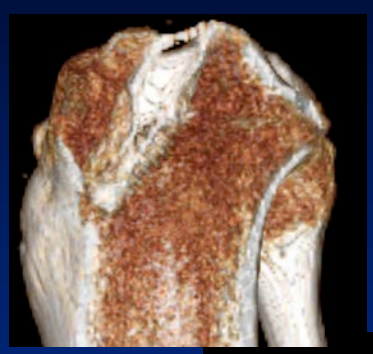


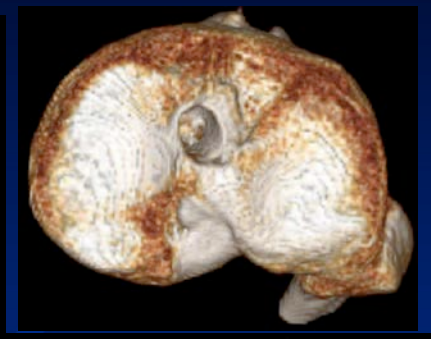


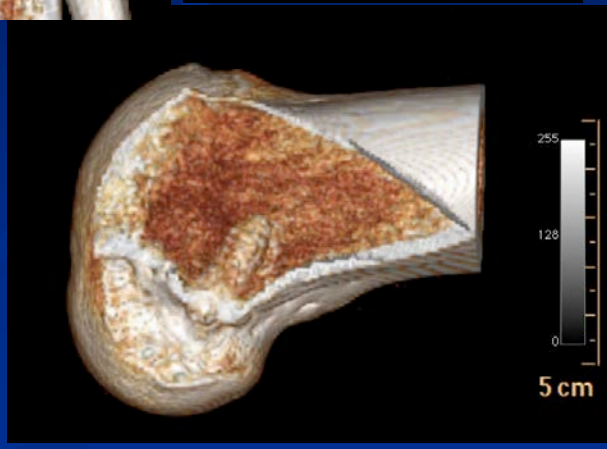
Fixation directe anatomique

Surveillance

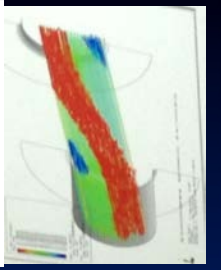
- Evaluation
  - Residual laxity
  - Tunnel Position
  - Clinical results with long term
- Each patient is a specific situation



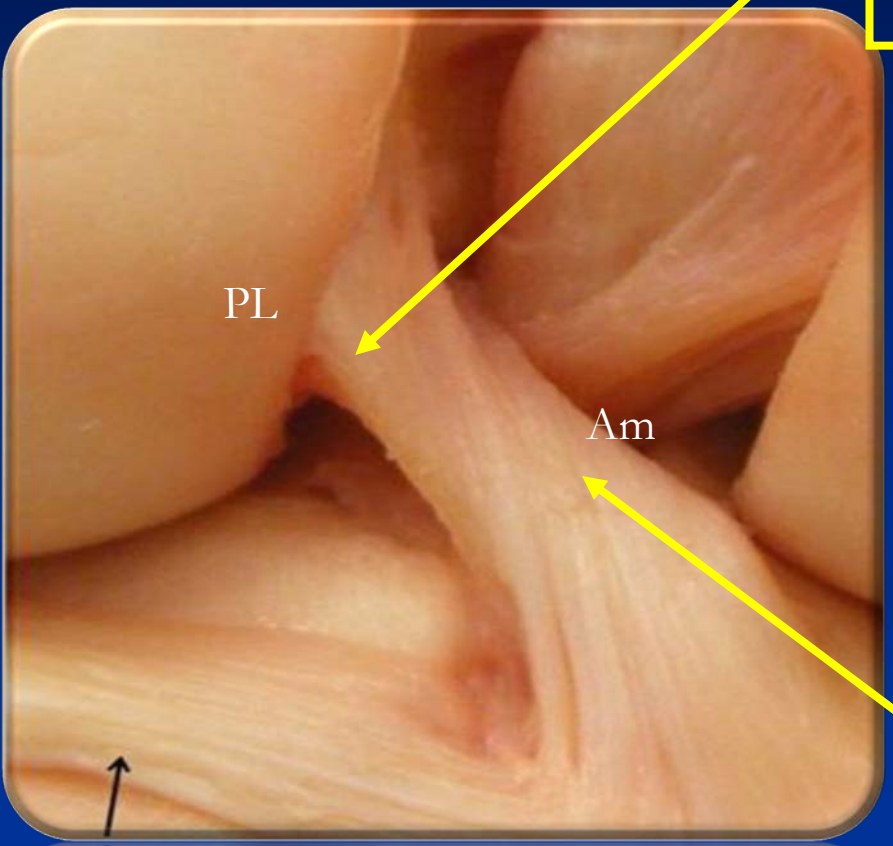


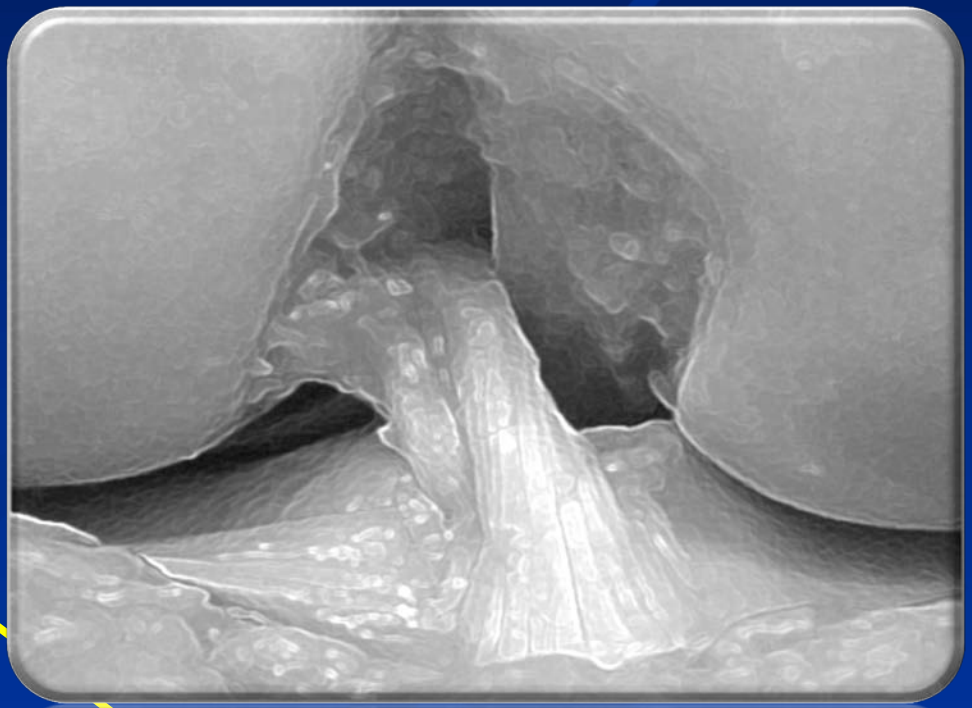


ACL Surgical Anatomy : Cylinder ? Bundle (s)?



Postérolateral
Loose in flexion

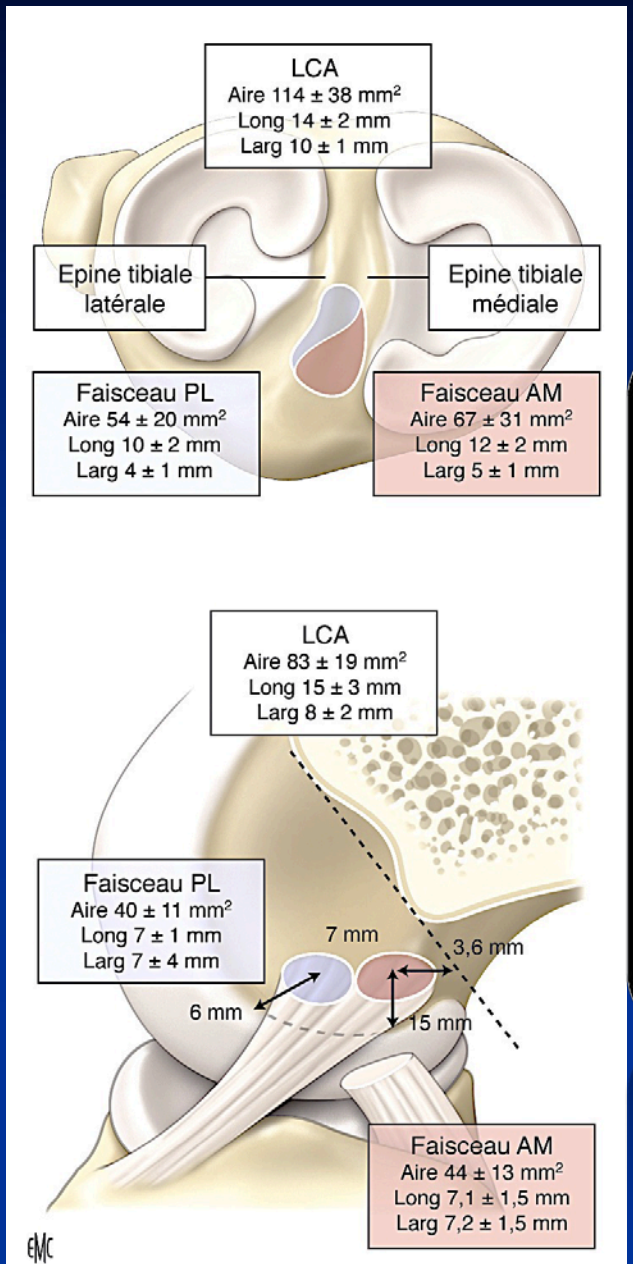


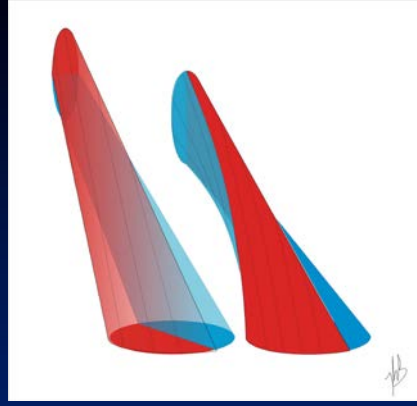


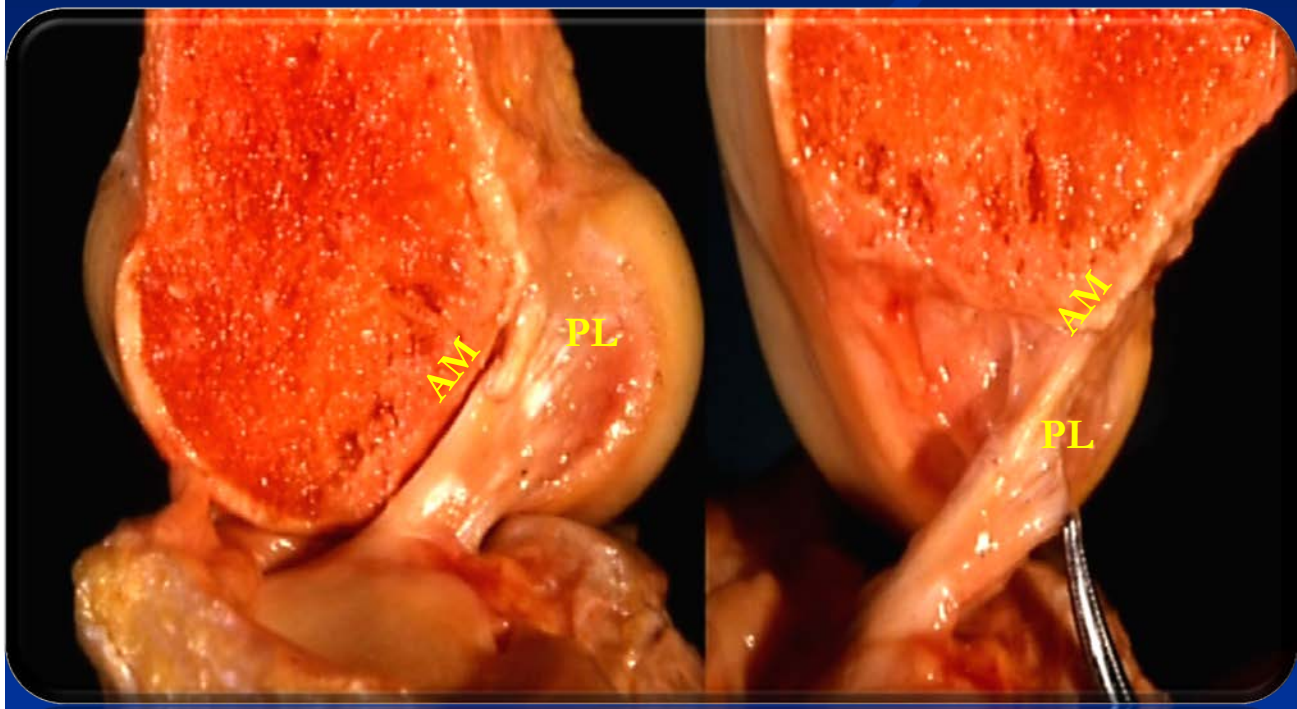
Antéromedial
Tight in flexion

Courtesy of J. Menetrey, Genève
(ESSKA DVD anatomie du genou)

ACL Surgical Anatomy : Cylinder ? Bundle (s)?





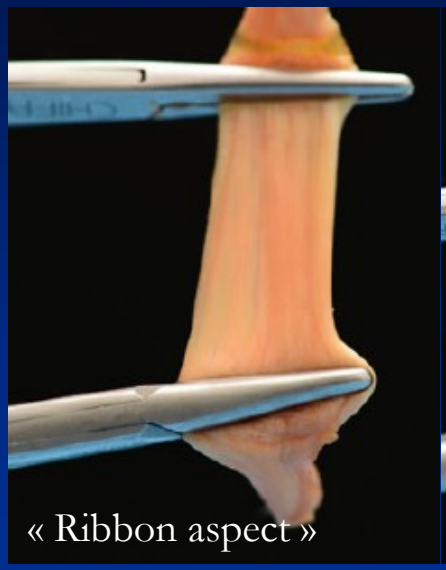


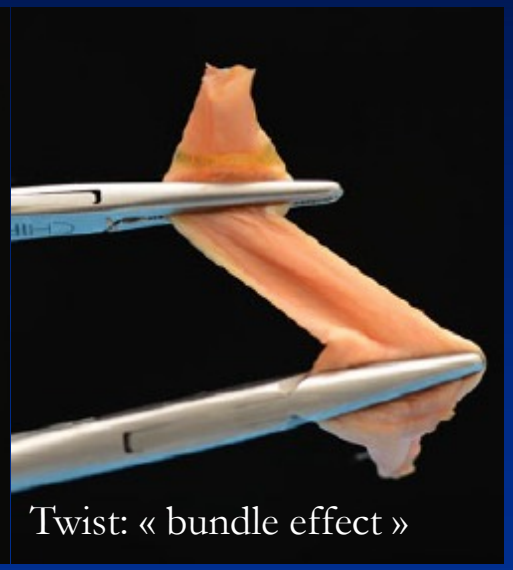
New Approach « Ribbonlike ACL »

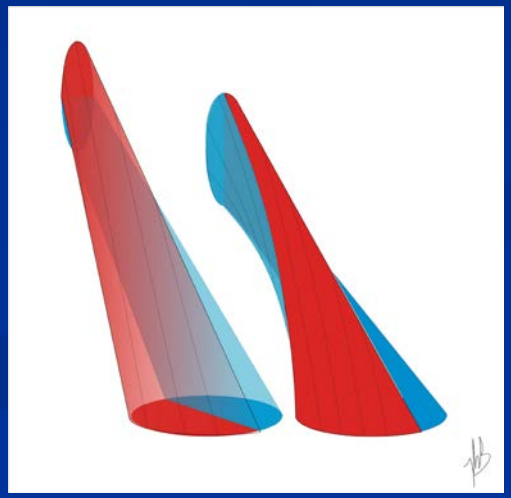
- Travaux anatomiques de Smigielski et coll.
- Siebold et coll.
- Noailles (2014)

- LCA is a« ruban »

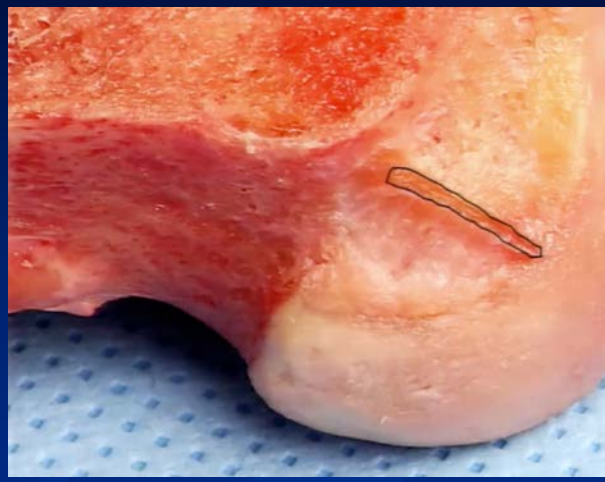
- The torsion of the Ribbn is equivalent to two functional bundles
- A Ribbon is Flat Cylinder

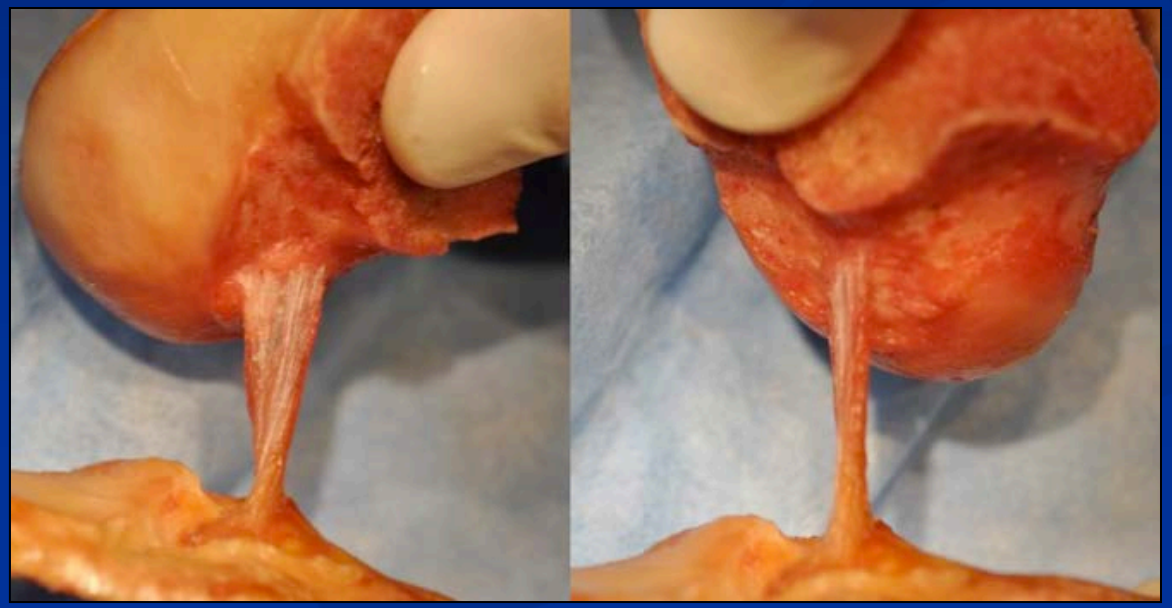

« Ribbon aspect »


Twist: « bundle effect »



ACL is a Ribbon!!!!!!

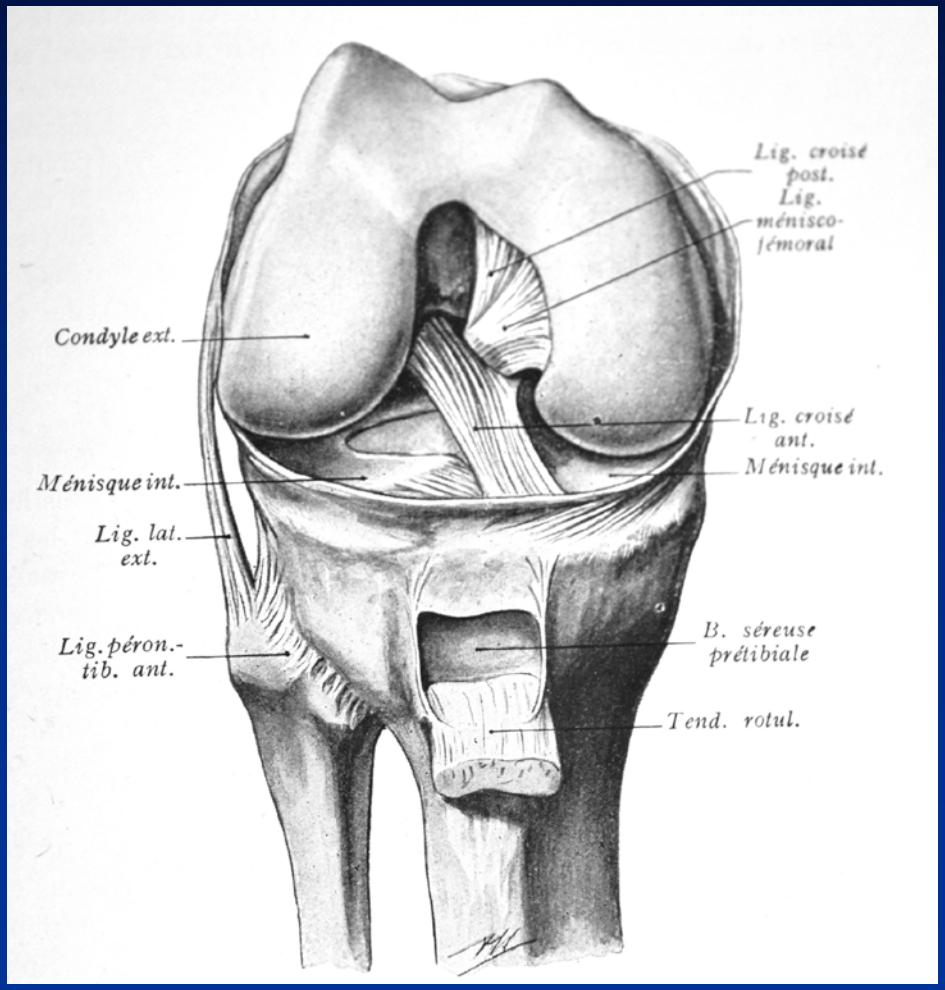


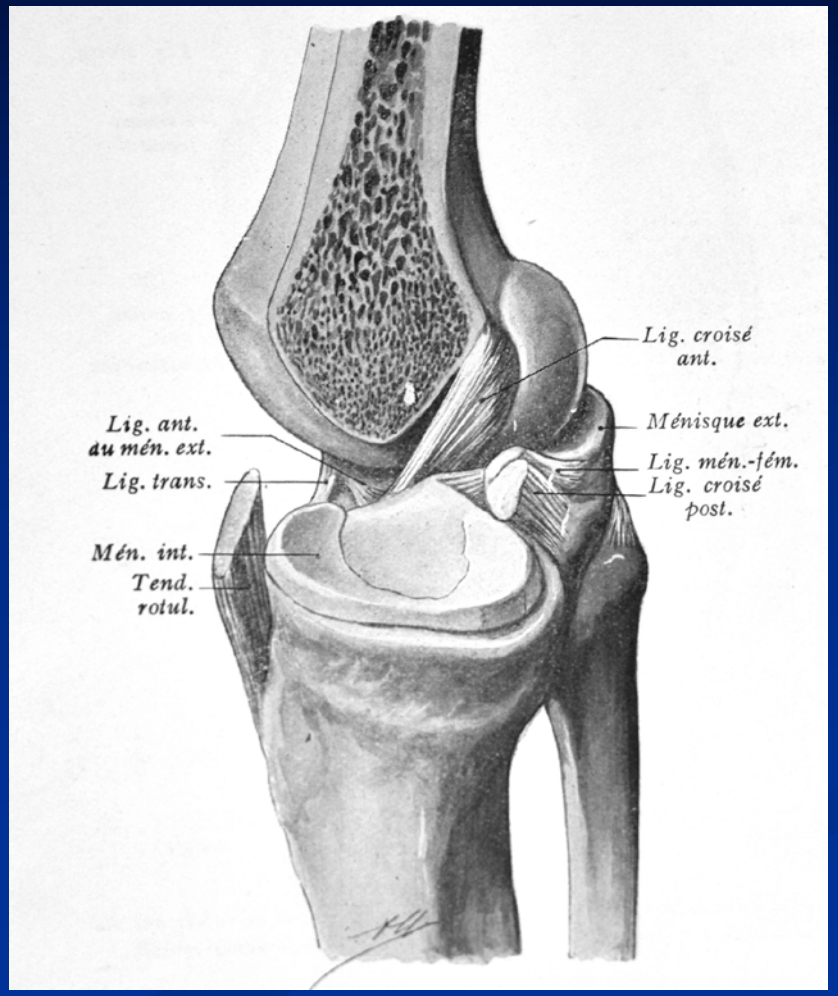


if the cylinder is flattened, its becomes a ribbon ?

Courtesy Dr. Noailles

Rouvière 1932





Traitement chirurgical des lésions du ligament croisé antérieur

C. Hulet, B. Lebel, P. Colombet, V. Pineau, B. Locker

Les évolutions techniques et scientifiques dans le domaine de la chirurgie du ligament croisé antérieur (LCA) ont été nombreuses au cours des dernières décennies. L'arthroscopie, le choix du transplant, les moyens de fixation ainsi qu'une meilleure interprétation anatomique ont permis aux techniques de reconstruction du LCA de devenir fiables et reproductibles. Les différentes expérimentations in vitro ainsi que les résultats cliniques à moyen et long terme disponibles actuellement ont également participé à la généralisation de ces techniques. Néanmoins, tant pour la chirurgie de première intention que pour les reprises, il est essentiel de connaître tous les éléments qui interviennent dans la réalisation d'une reconstruction du LCA et de maîtriser plusieurs techniques afin d'adapter au mieux la chirurgie au patient, à sa laxité et aux événements peropératoires. Nous ne traitons que la reconstruction du LCA de première intention chez l'adulte à physes fermées. Dans ce domaine, la reconstruction du LCA monofaisceau sous arthroscopie est actuellement la référence de traitement. Les reprises de chirurgie du LCA posent d'autres difficultés, tout comme le traitement des lésions du LCA chez l'enfant qui n'est pas abordé. Le traitement des ruptures partielles n'étant qu'au stade de démembrement n'est pas développé. Cette motivation constante d'optimisation des résultats, une connaissance approfondie de la biomécanique du genou, ainsi que l'analyse des échecs des reconstructions du LCA ont conduit à l'émergence de nouvelles techniques de reconstruction dites « bifaisceau ». Les bons résultats in vitro et cliniques à court terme nécessitent d'être confirmés, et les indications nécessitent d'être précisées.

Mots clés : Articulation du genou ; Ligaments croisés ; Laxité ; Ménisque ; Arthrose

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