Genou LCA

Anatomie

- Montpellier F. Bonnel

LES LAXITÉS CHRONIQUES DU GENOU

Sous la direction de

F. BONNEL J.H. JAEGER Ch. MANSAT

avec la collaboration de

G. ASENCIO J.H. AUBRIOT J. BAHUAUD F. BLOTMAN
B. BOUZIGUES J. CLAUSTRE A. DIMEGLIO P. FEDOU
R.M. FERRO H. MARY Y. MERRIEN B. MOYEN
G. NAKACH J.J. PICARD J.L. ROUVILLAIN J.M. VIALLA

préface du Pr. Freeman

MASSON

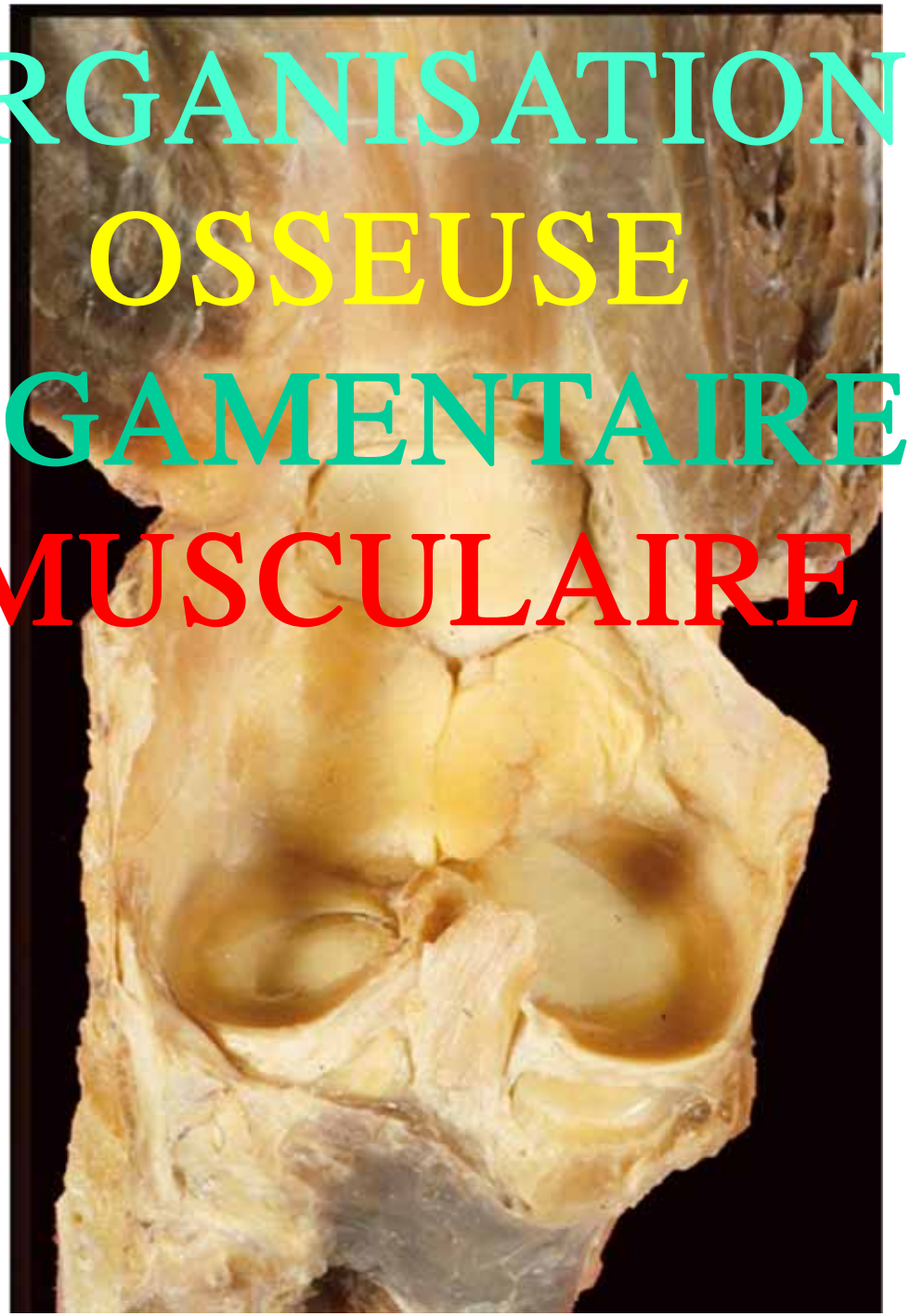
Programme Fonctionnel

Comprendre pour Remplacer

30 inconnues

- Montpellier

ORGANISATION OSSEUSE LIGAMENTAIRE MUSCULAIRE



, Montpellier

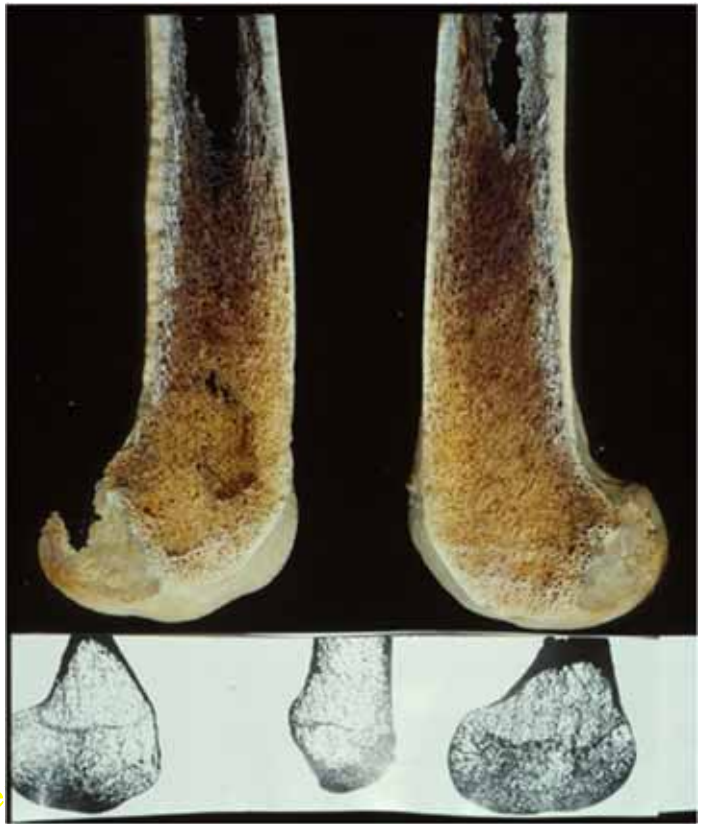
STRUCTURE OSSEUSE

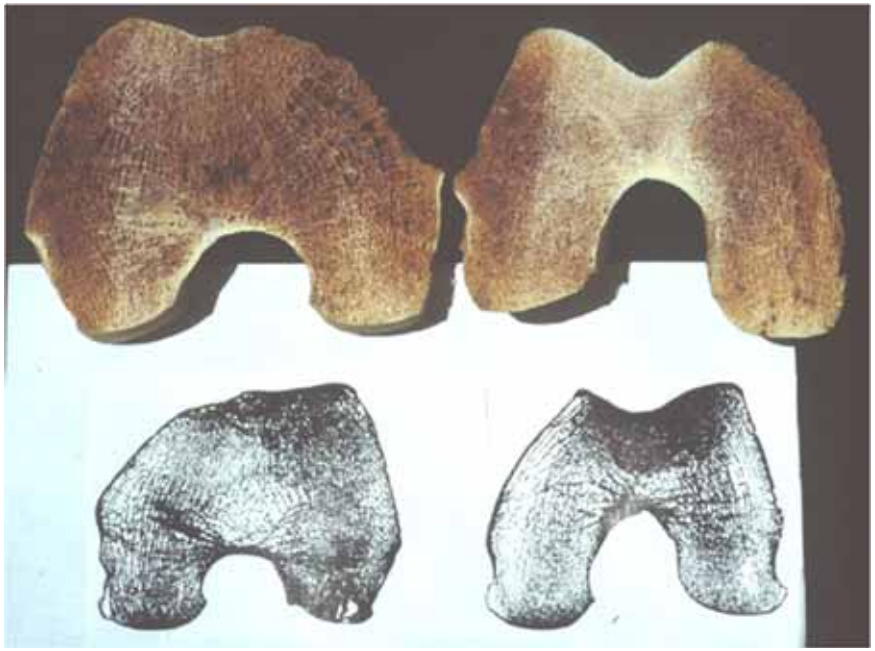
, Montpellier

Morphologie
Os
Ligaments

, Montpellier

FEMUR SPONGIEUX

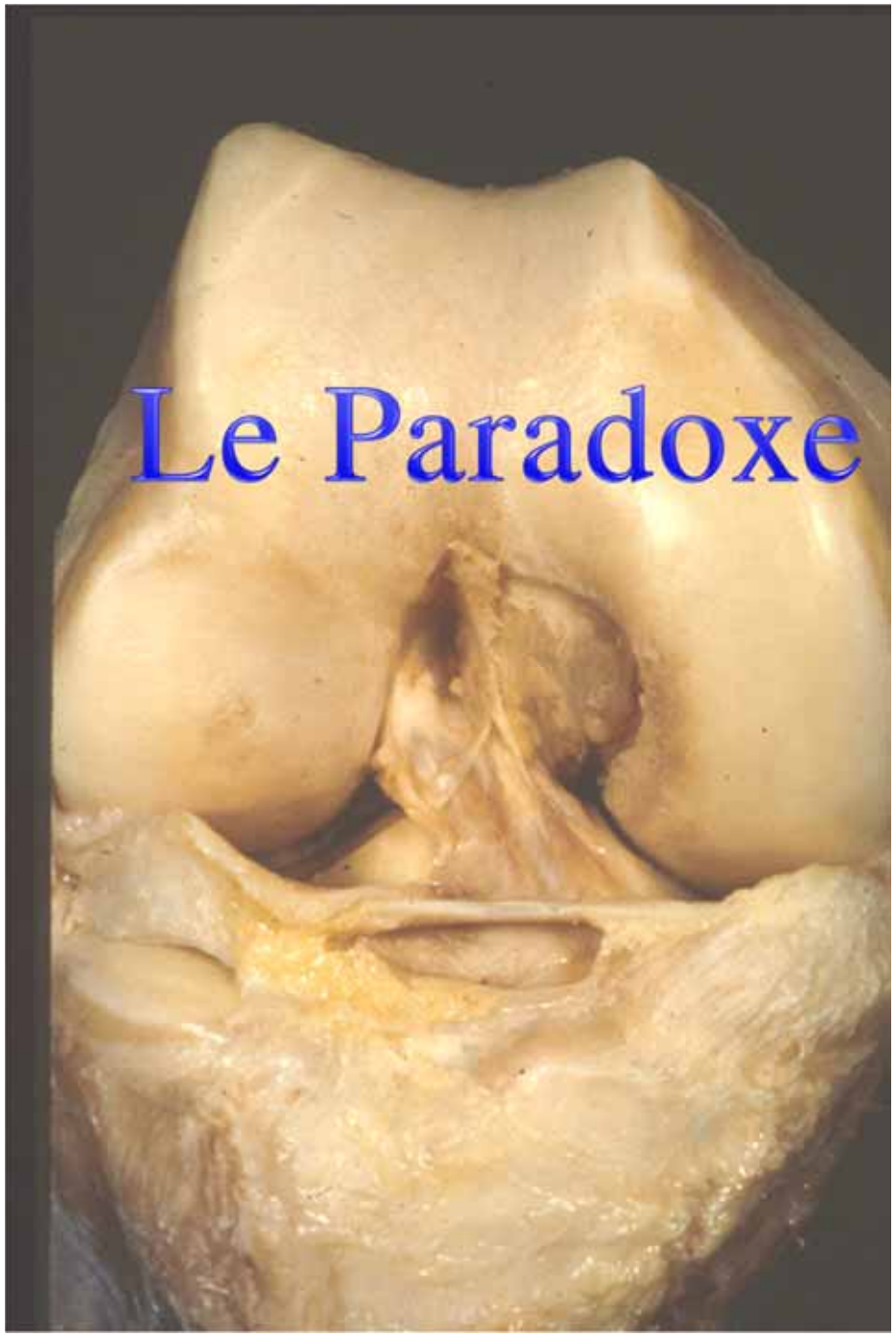


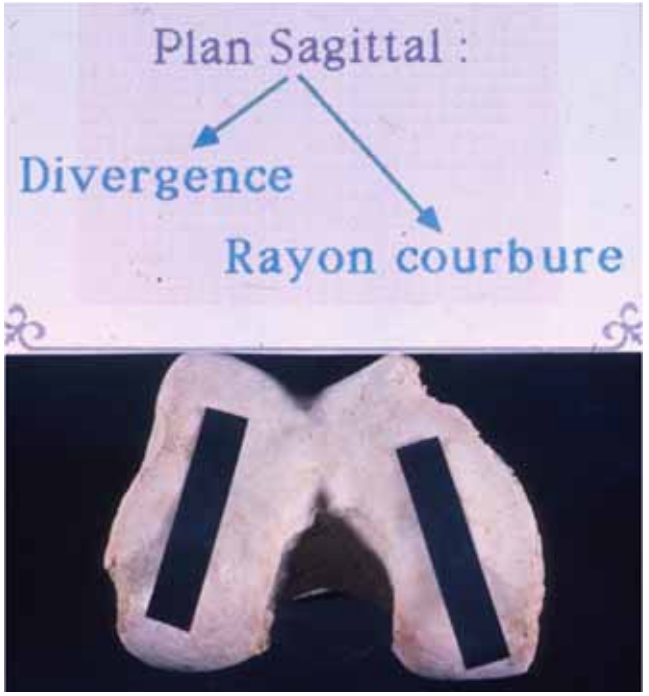


FEMUR

TROCHLEE

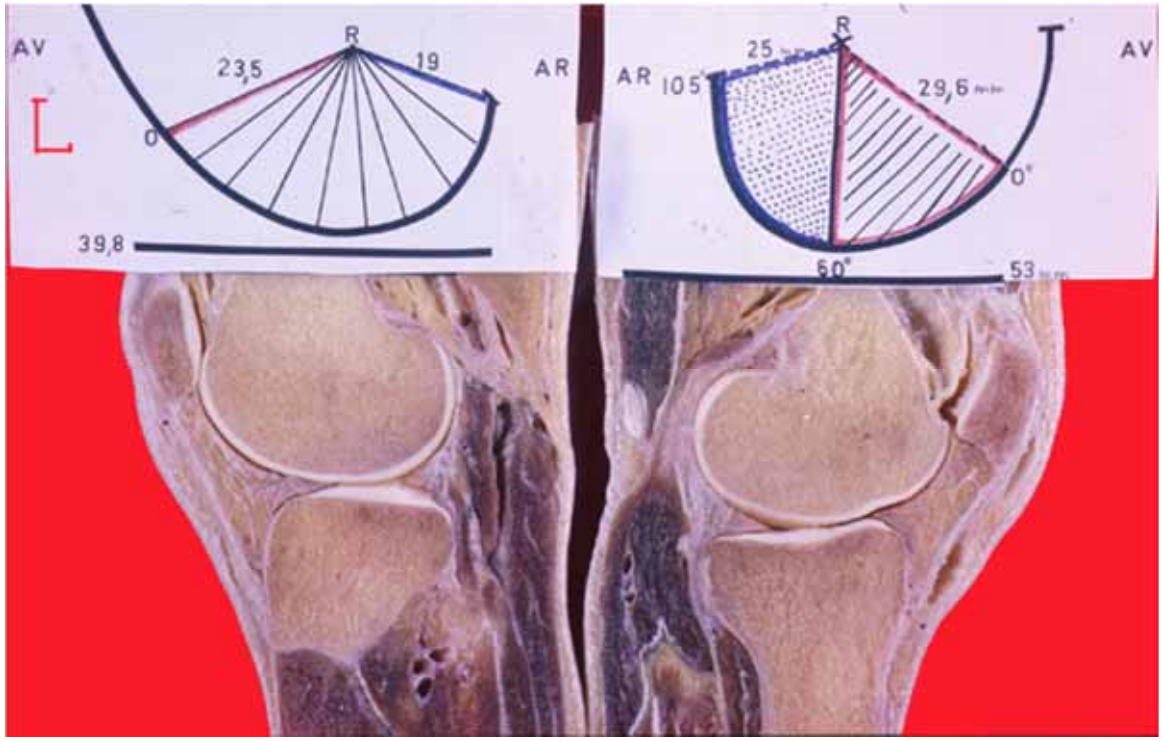
CONDYLES


Le Paradoxe


Plan Sagittal :
Divergence
Rayon courbure

FEMUR
BIOMETRIE

Rayons Courbures Asymétriques

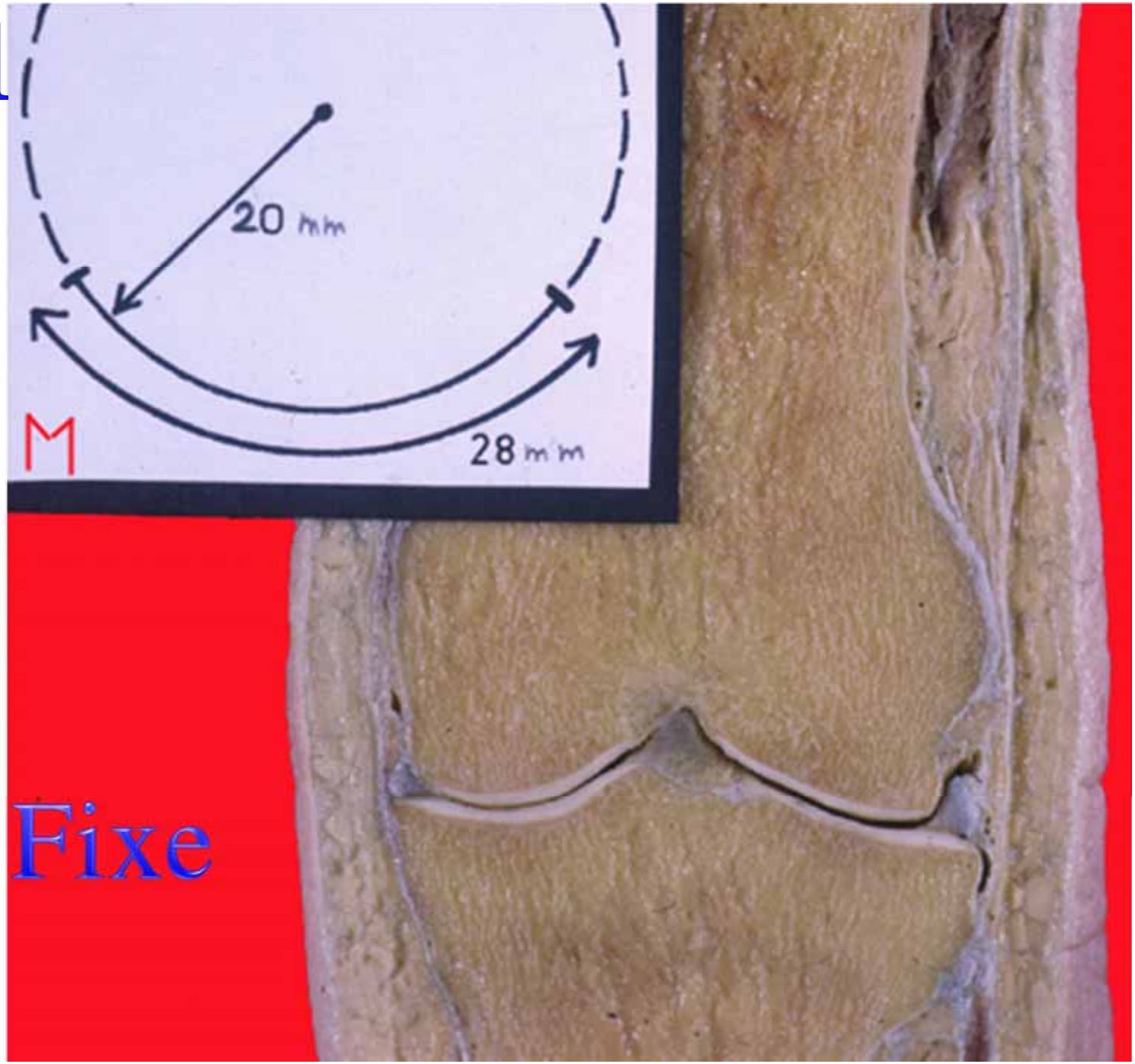


Objectifs

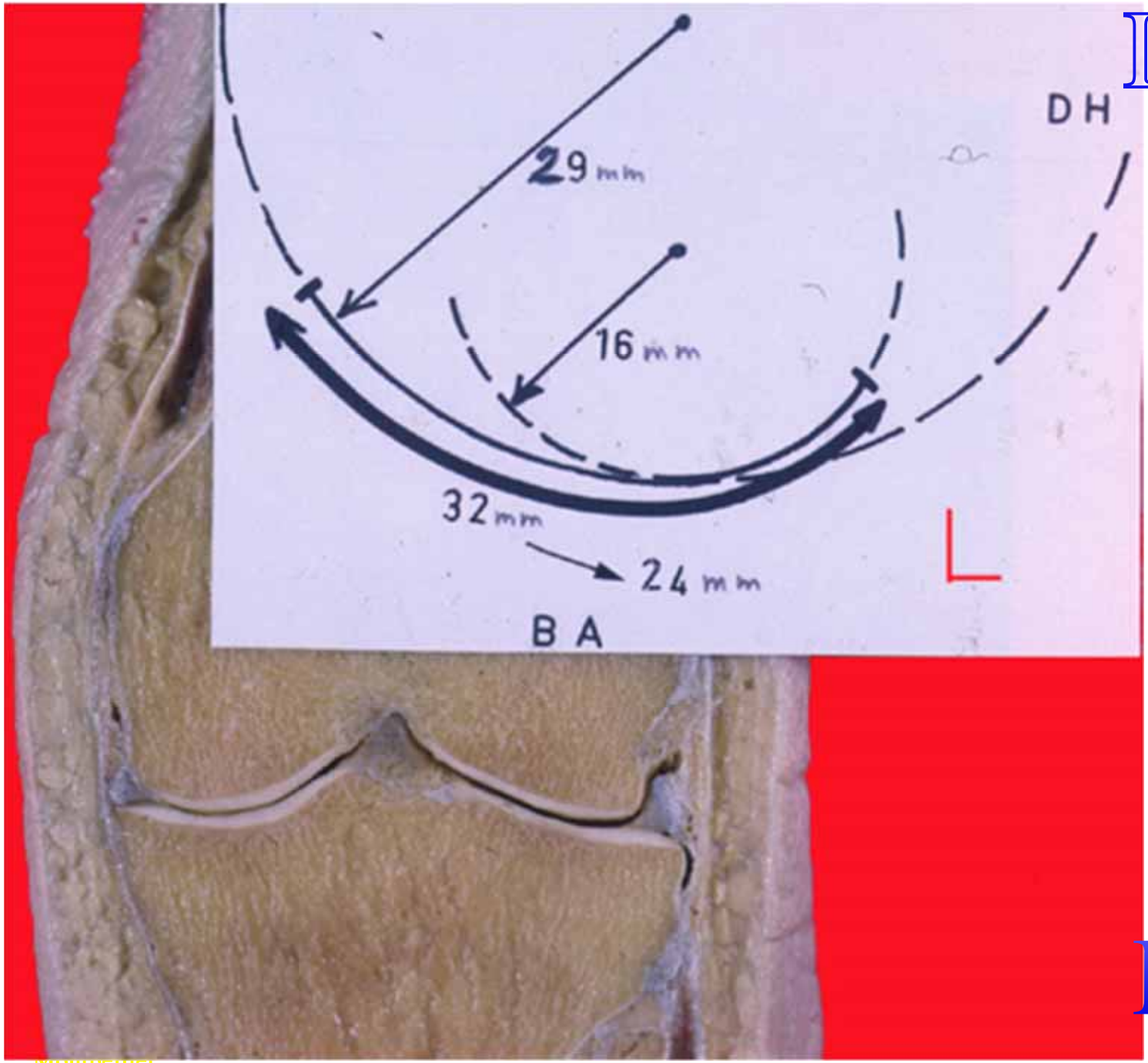
VERROUILLAGE

, Montpellier

Médial



Point Fixe

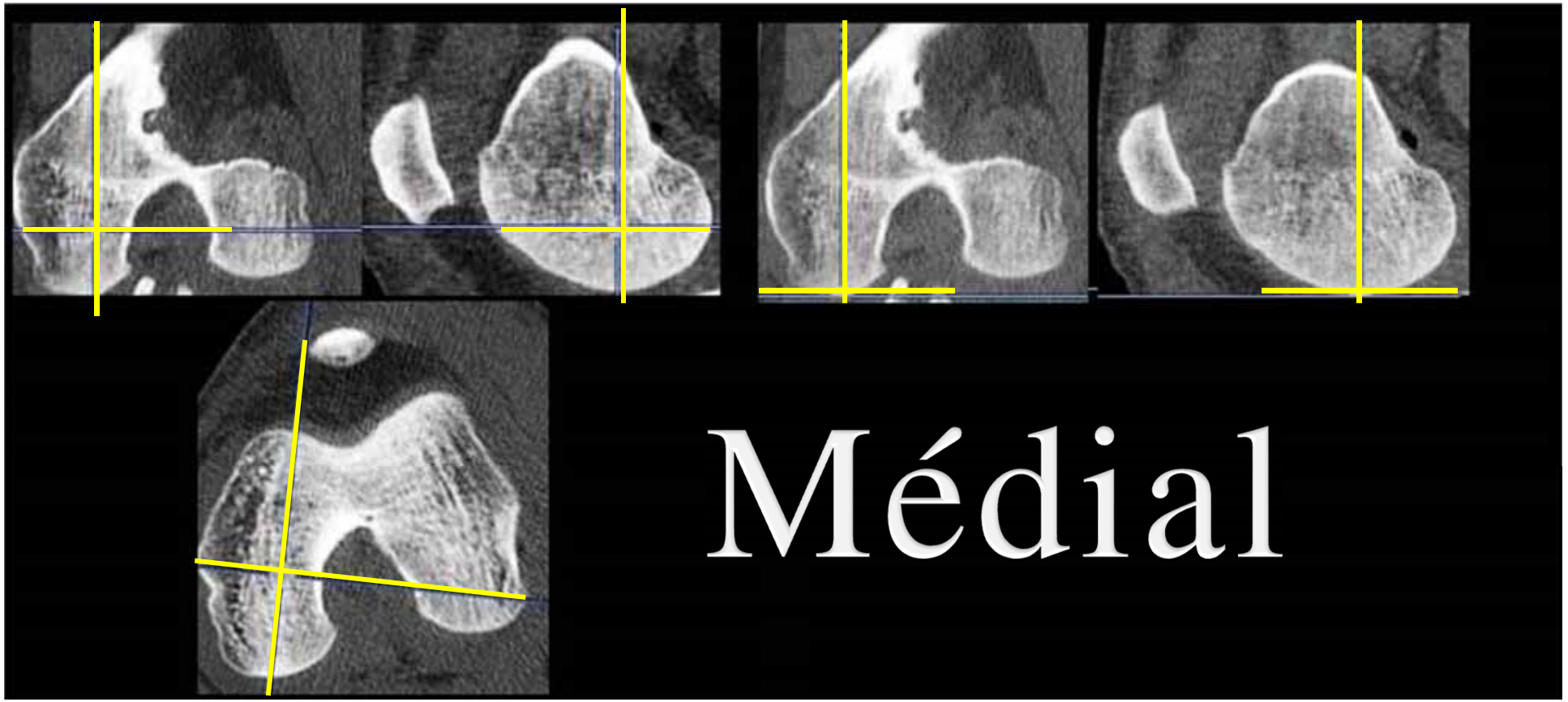


Latéral

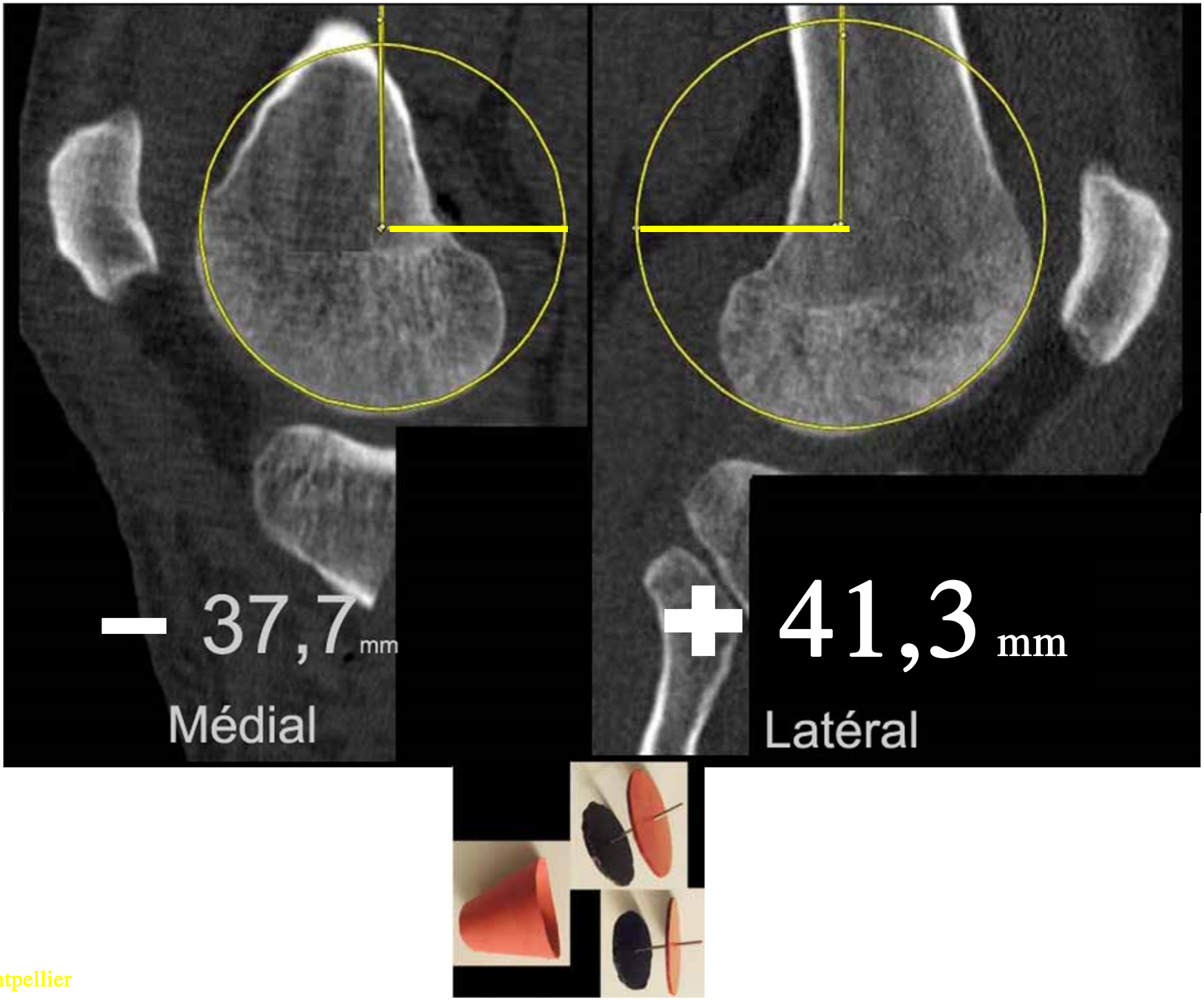
Mobile

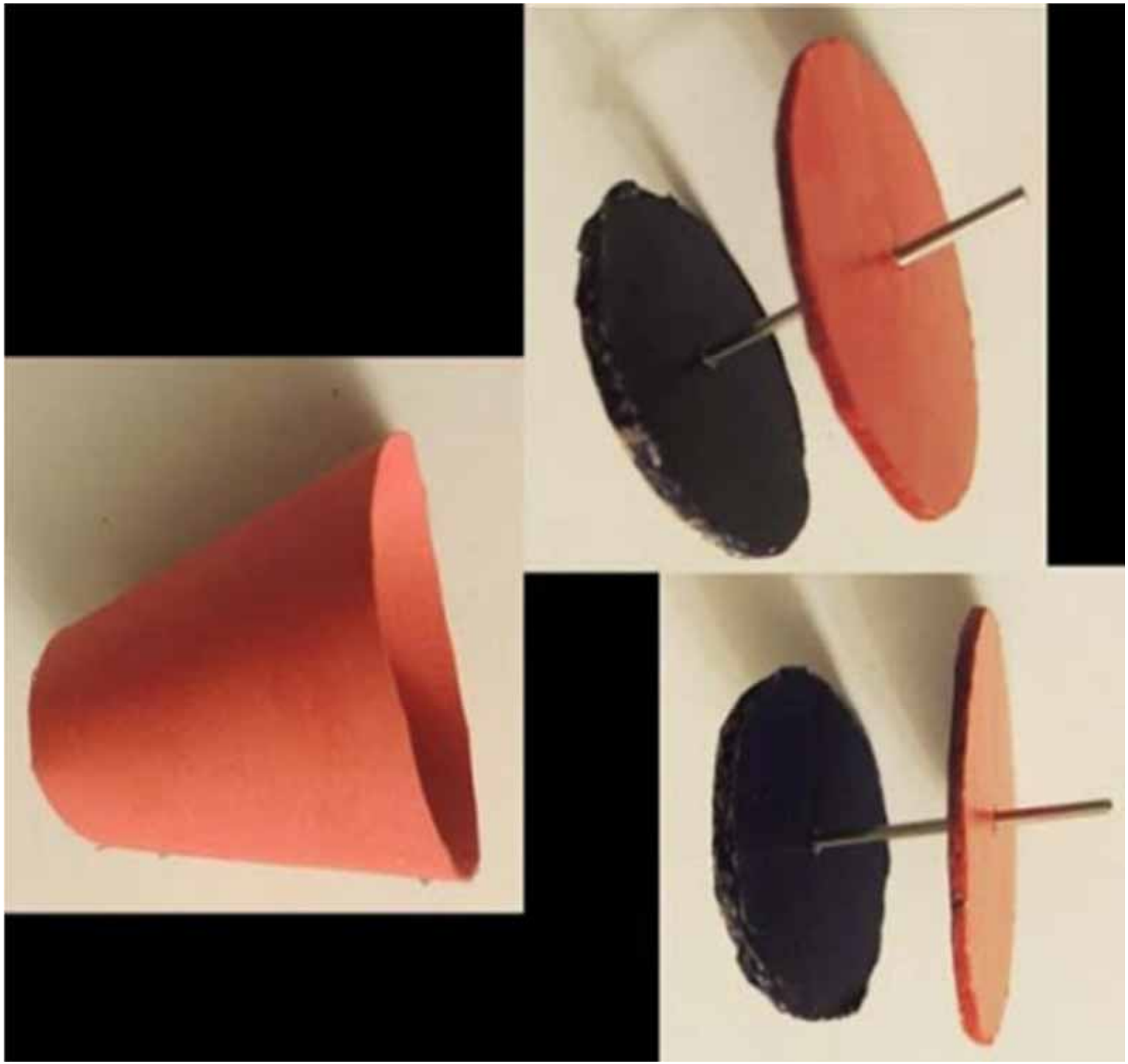
, Montpellier

Nouveaux Concepts
RAYONS COURBURES

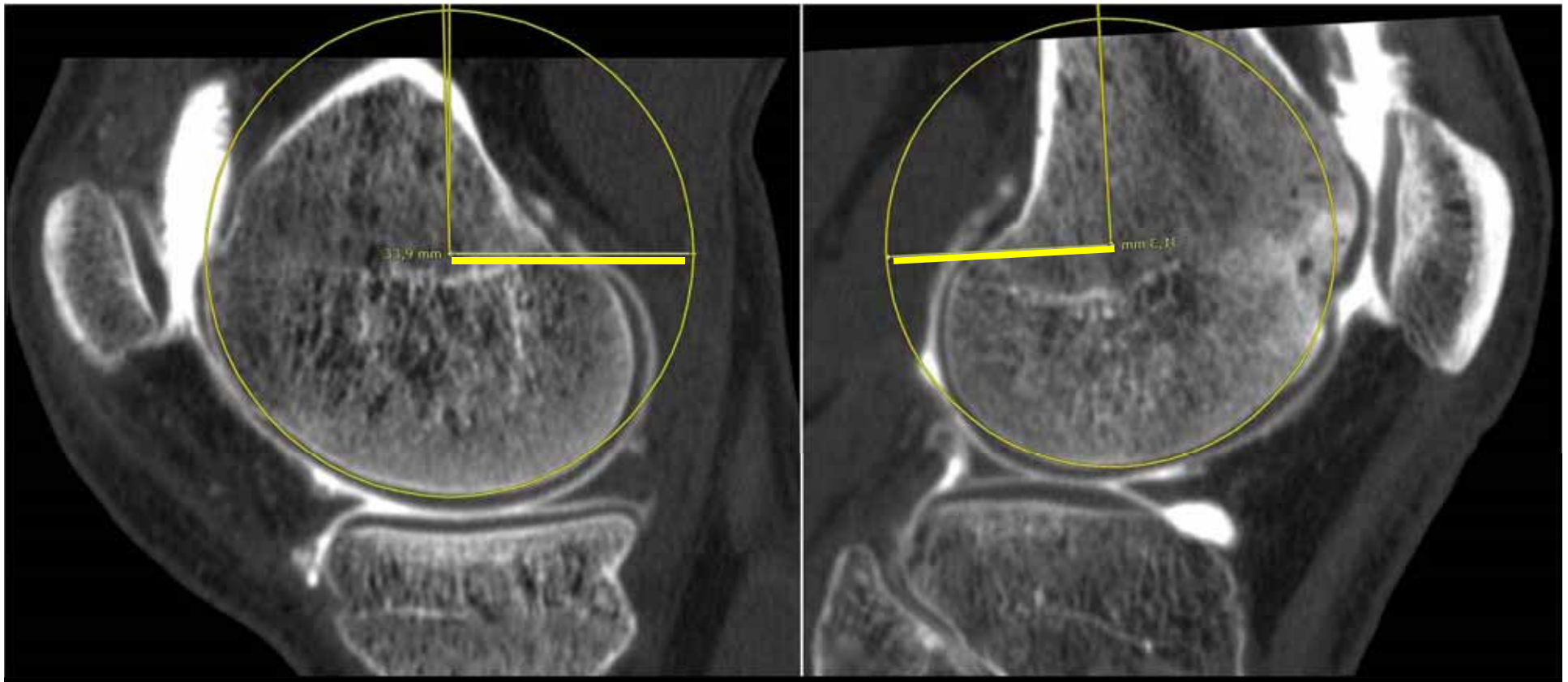


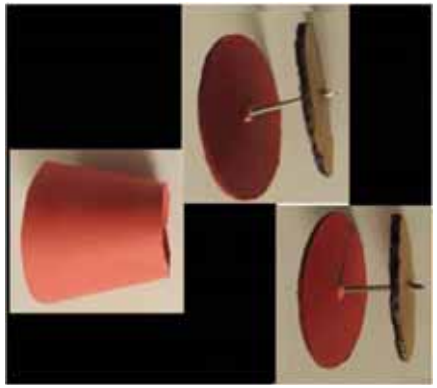

Latéral

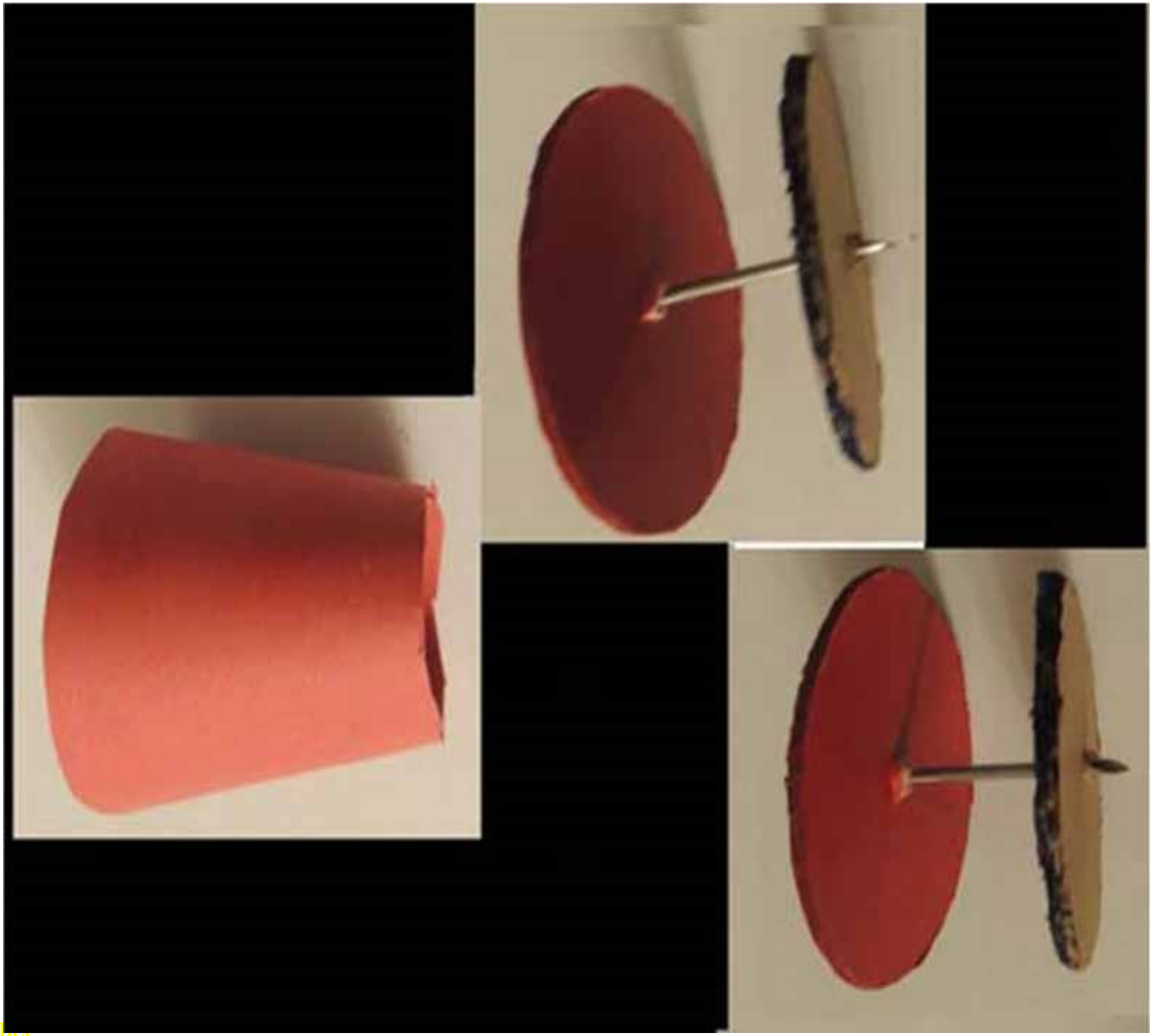

– 37,7 mm
Médial
+ 41,3 mm
Latéral



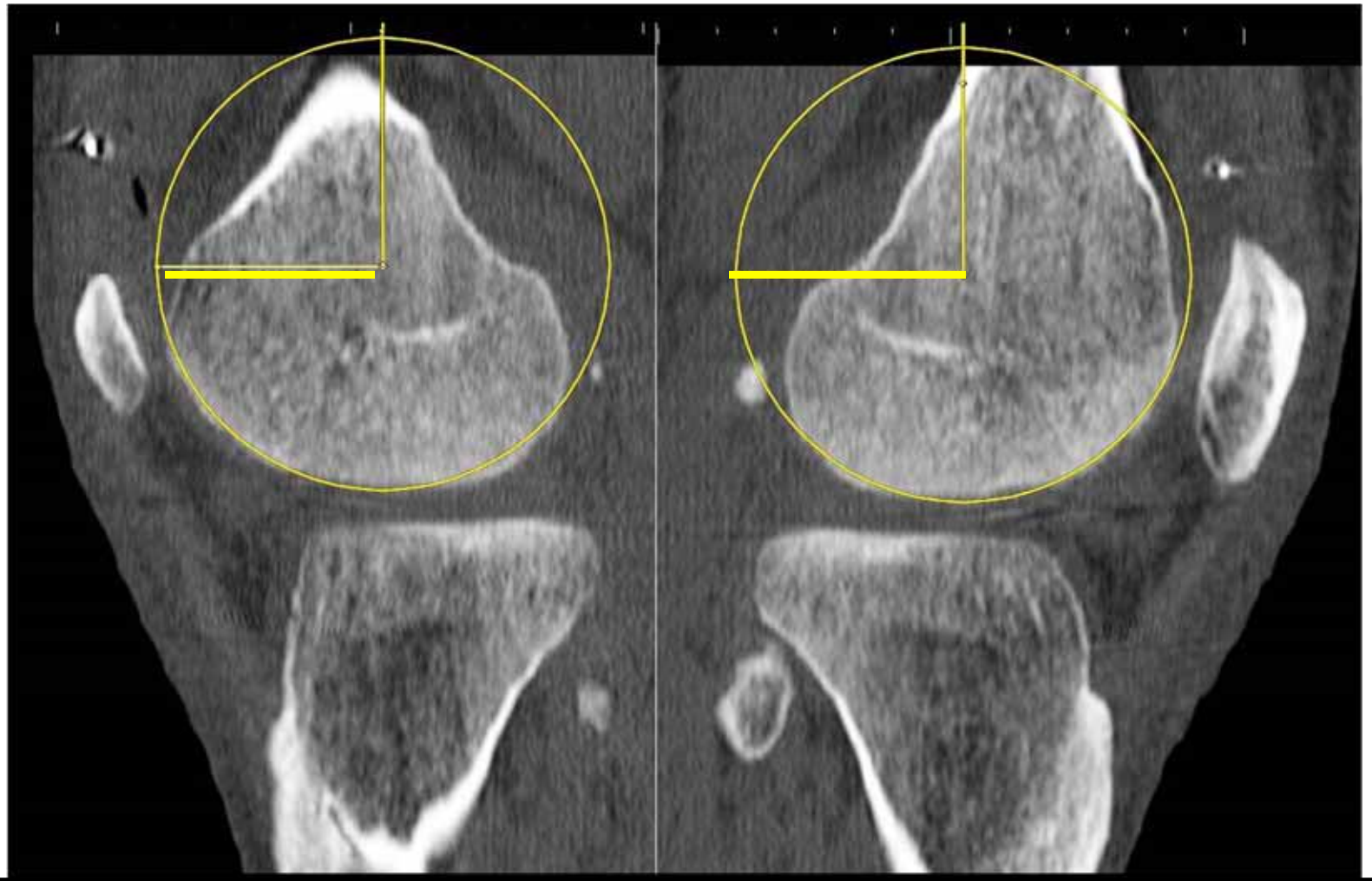
, Montpellier


33,9 mm
Médial + 33,9 mm
Latéral − 31,3 mm



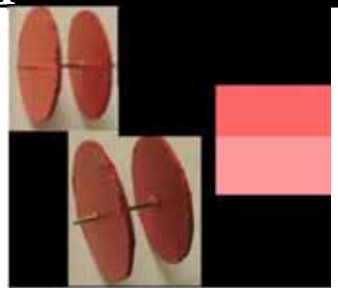


, Montpellier



Médial 38.4 mm

Latéral 38.4 mm



L.C.A. lésé

LAXITÉ

+ -

INSTABILITÉ ROTATOIRE

RAYONS COURBURES OSSEUX

Rayons Courbures

L M

L M

L = M

Tension

L.C.A.

Ménisques

Concordance Articulaire

Transmission Pressions

Orientent Déplacement

- Montpellier

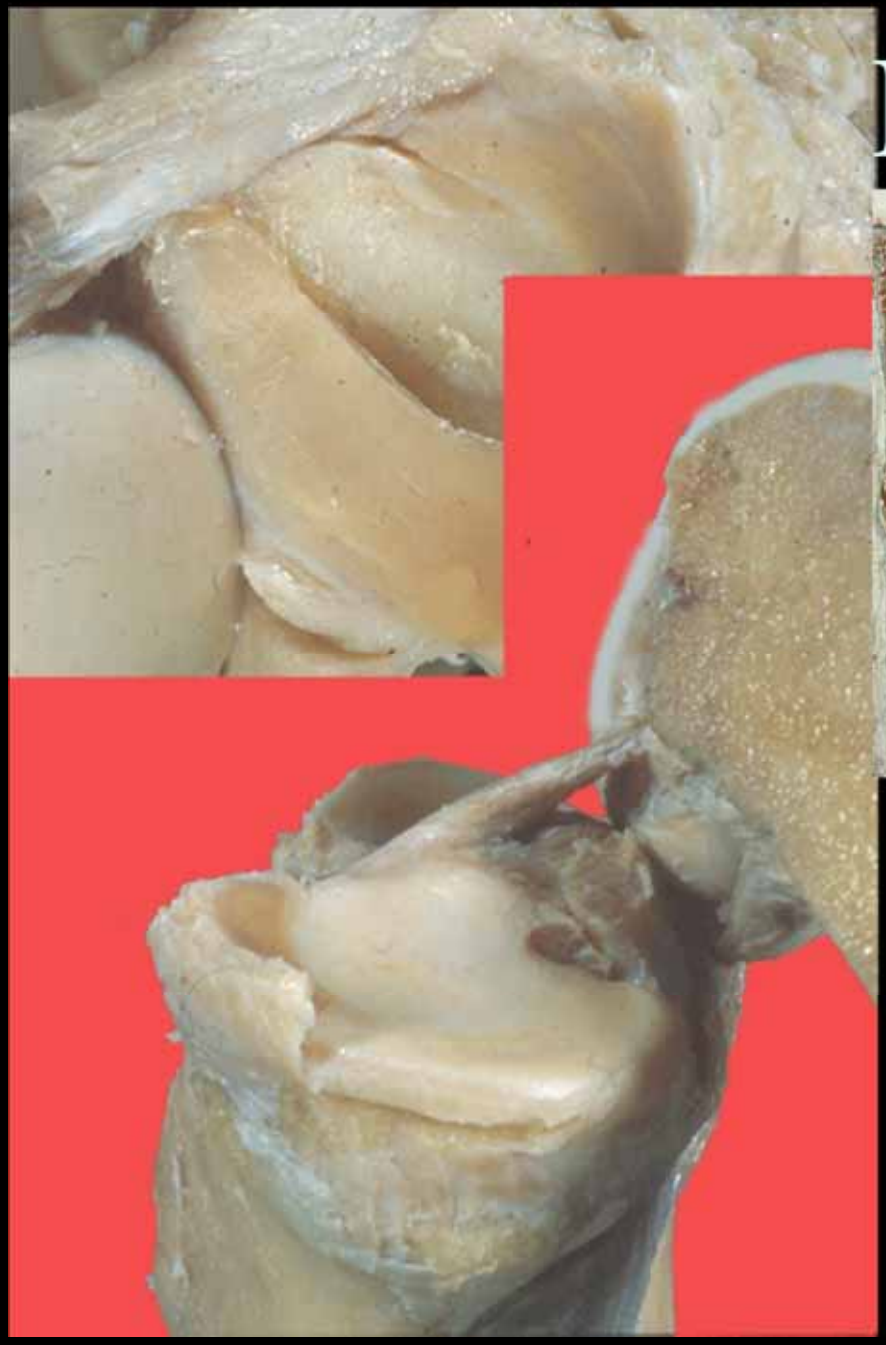
Ménisque Médial est au Tibia

Ce qu'est le

Ménisque Latéral au Fémur

Dysfonction

- Montpellier



L

M

Mobile Fixe

- Montpellier

- Montpellier

Ménisques

Déplacement

Témoins

L

12 mm

M

6 mm

Malheureux

- Montpellier

Contraintes Tridimensionnelles

Stabilité

Ligaments Muscles

29 couples

- Montpellier

Pivot Central

Ligaments Croisés

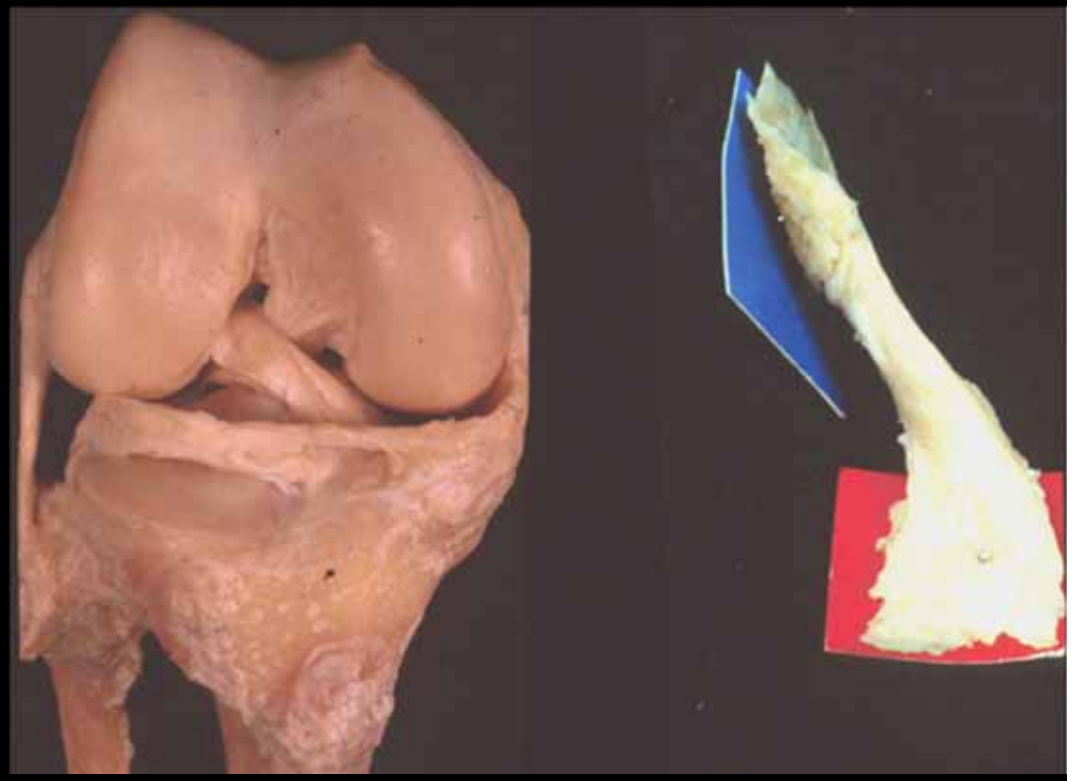
Antérieur

Postérieur

- Montpellier

Pivot Central

Ligament Croisé Antérieur



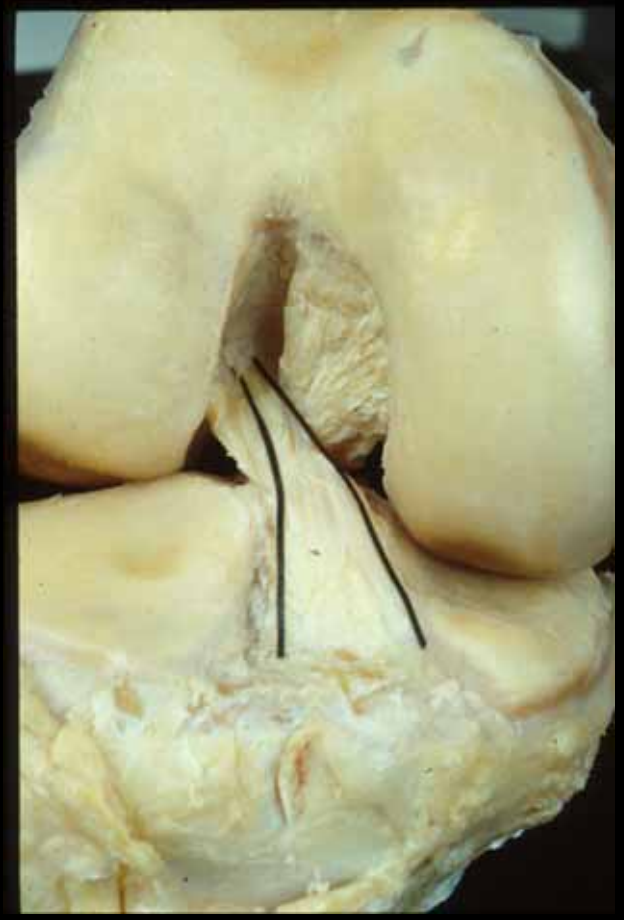
- Montpellier

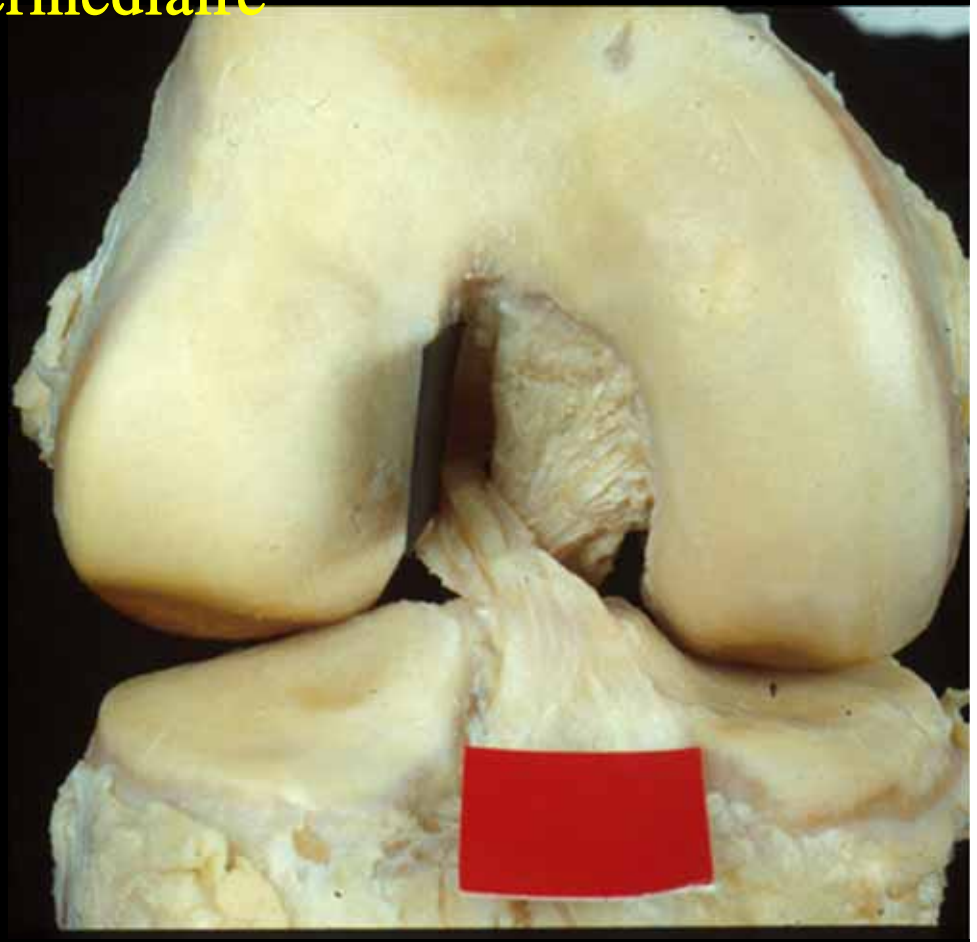
Ligament Croisé Antérieur

Postero lateral

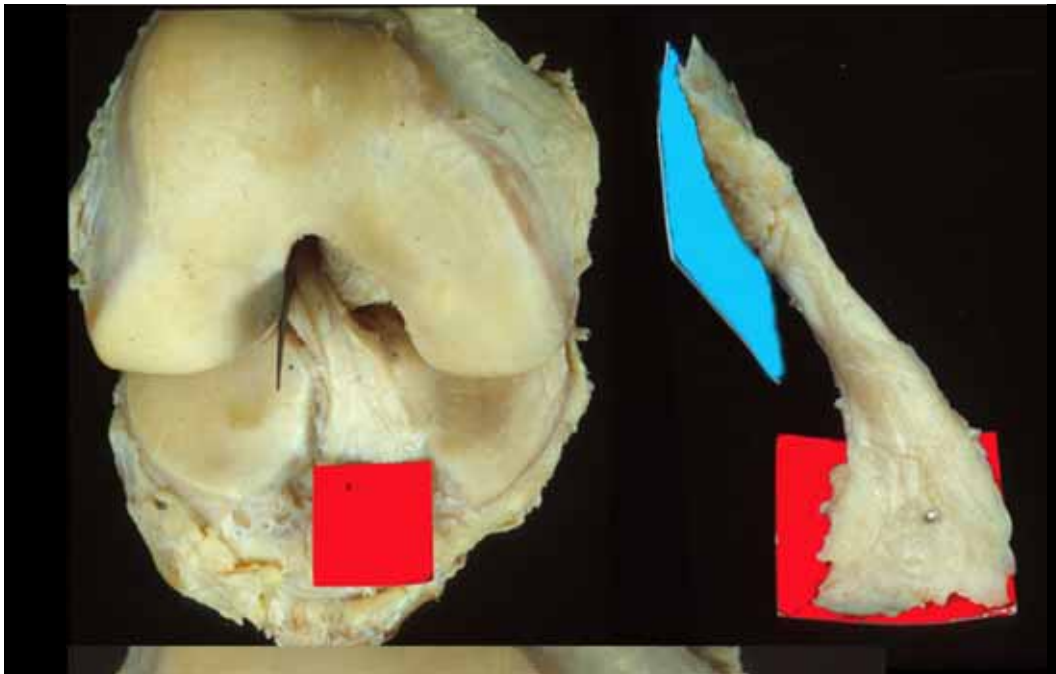
Intermédiaire

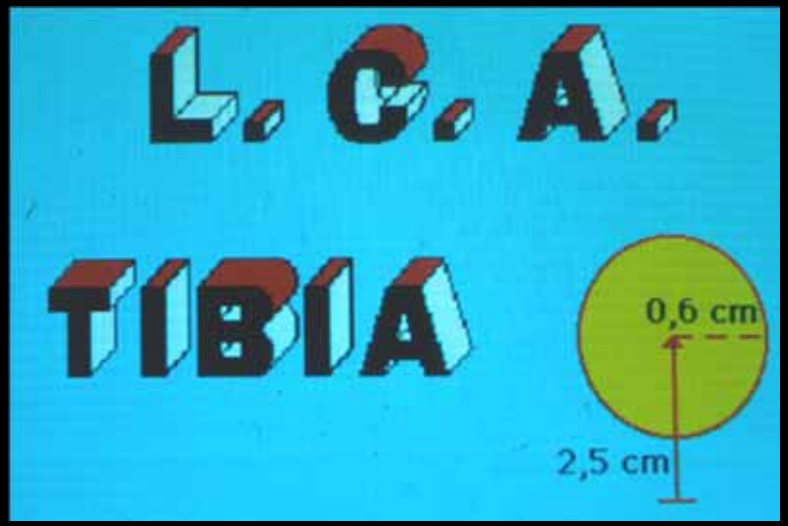
Antero Medial

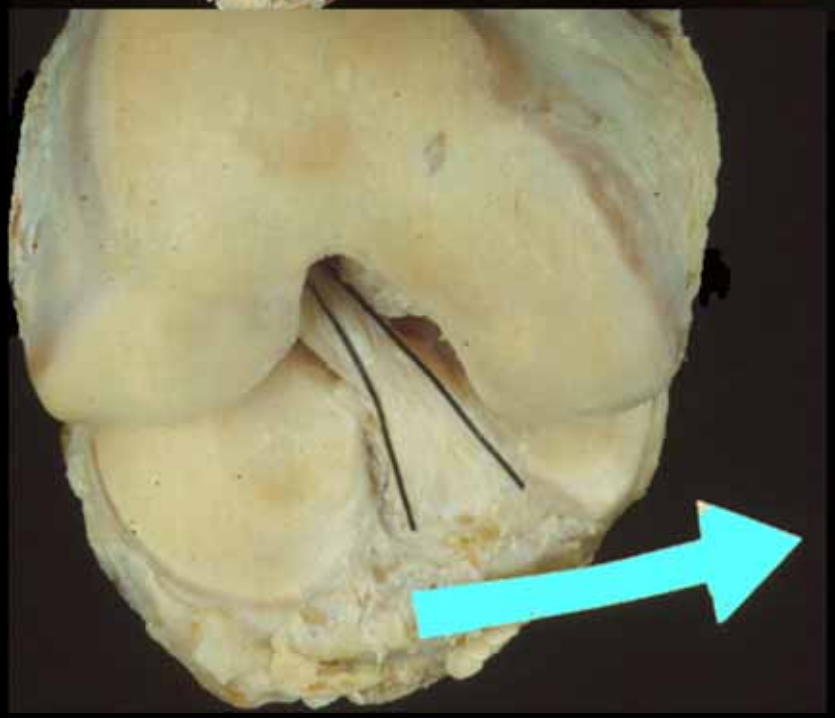




- Montpellier





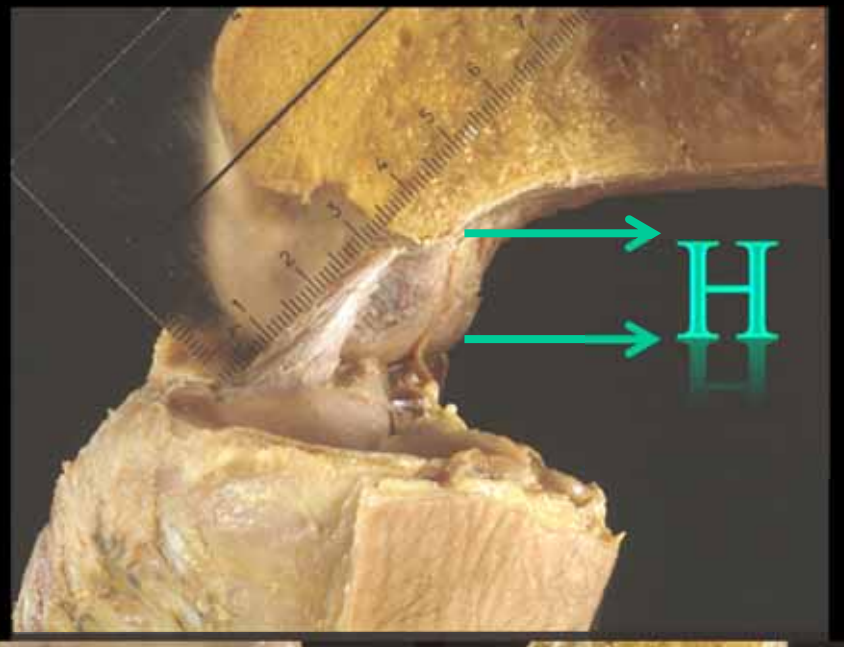


- Montpellier

L. C. A.

Face 62°

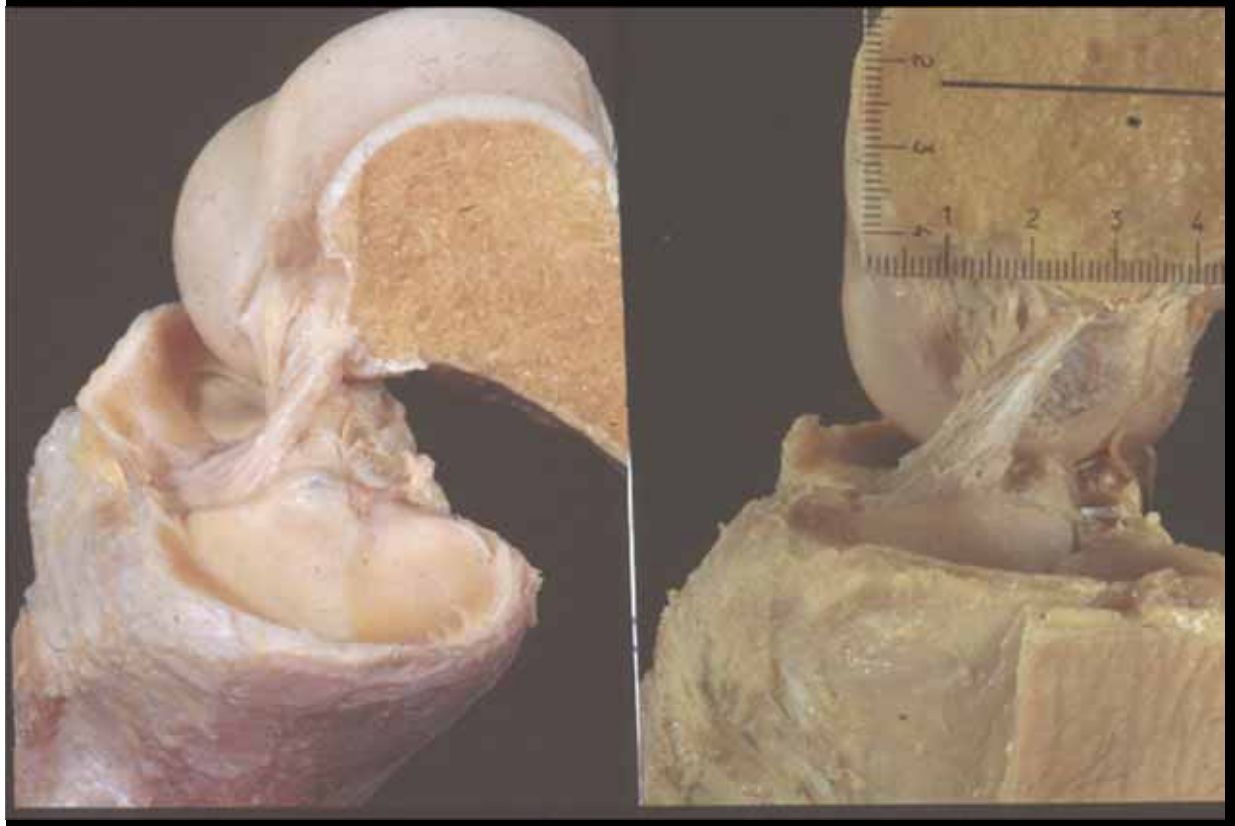
Profil 43°

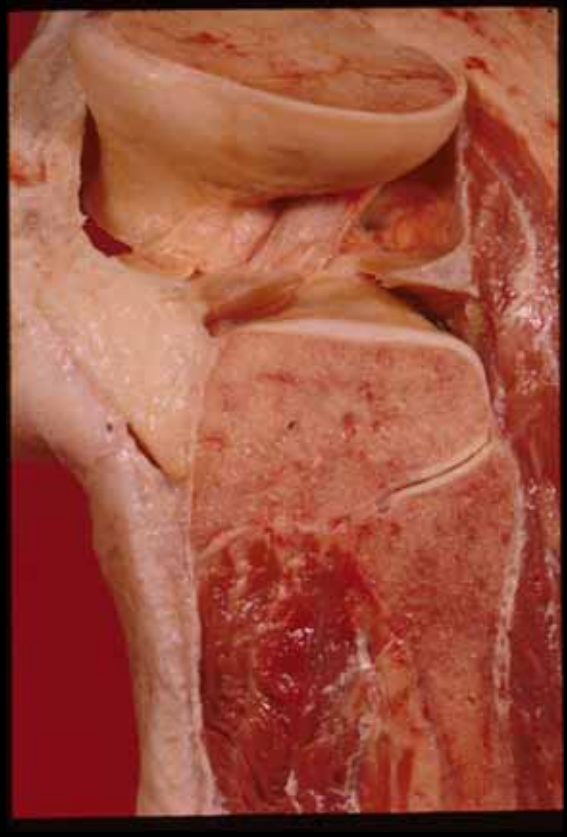


- Montpellier

L.C.A. condyle : Minimum : 1,6 cm -

Maximum : 2 ,3 cm

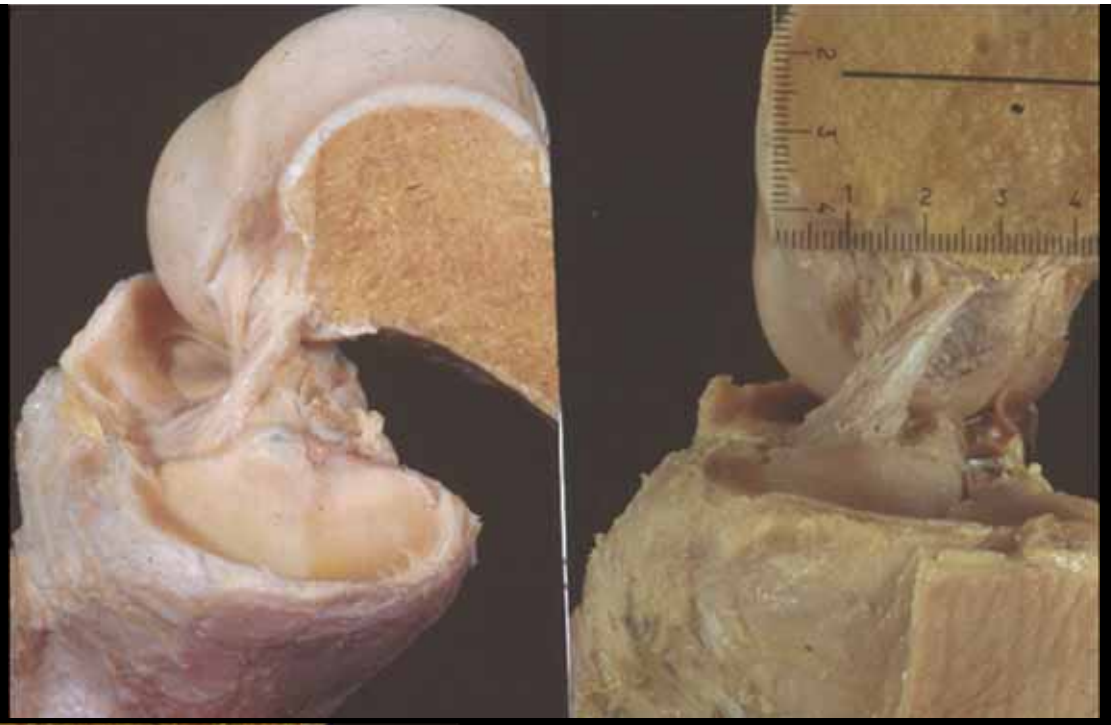




- Montpellier

L. C. A.

ISOMETRIE

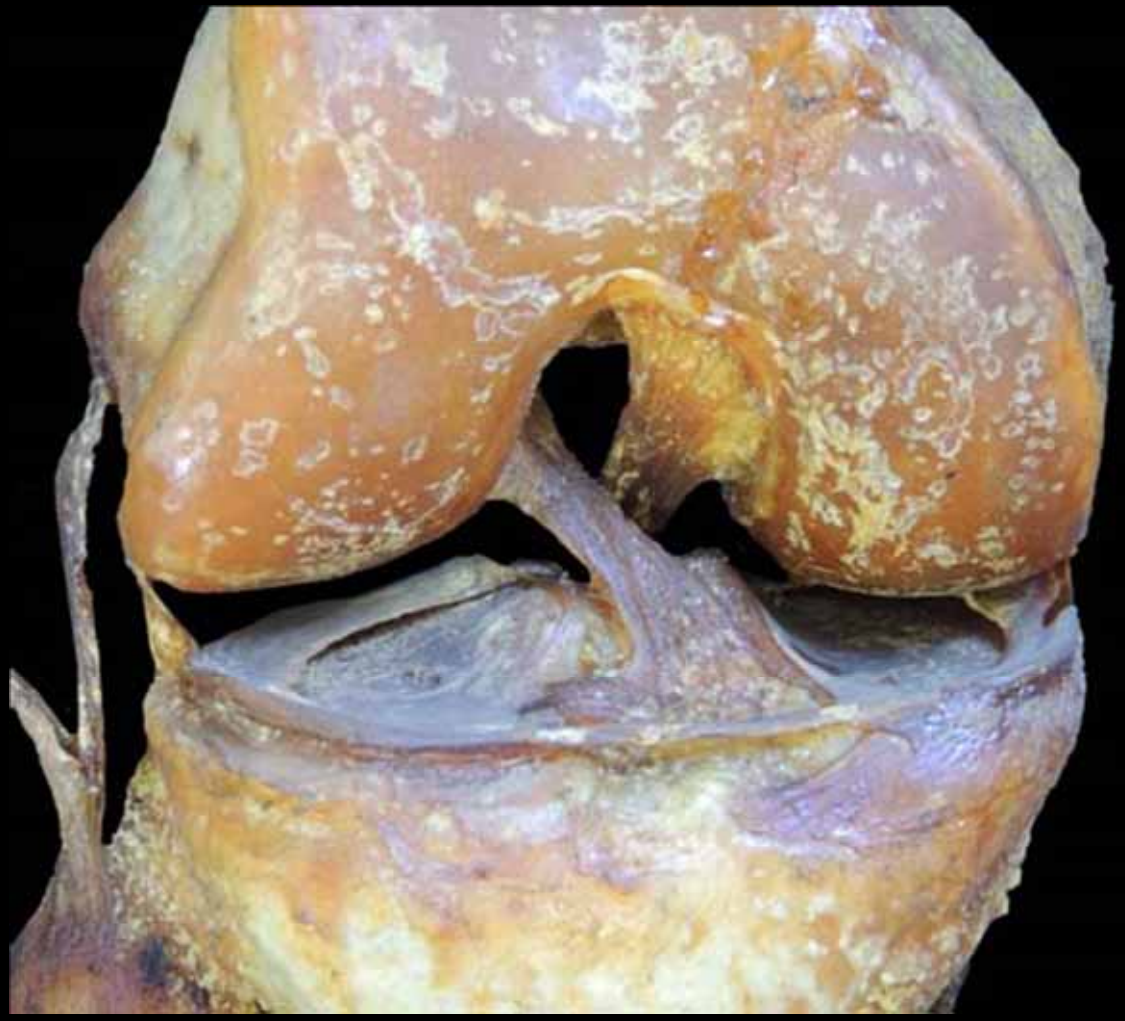


H

- Montpellier

- Montpellier

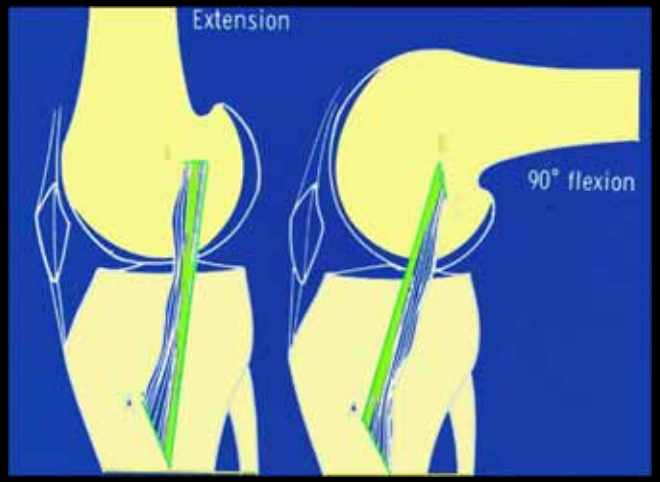
Formations Périphériques Complément Stabilité

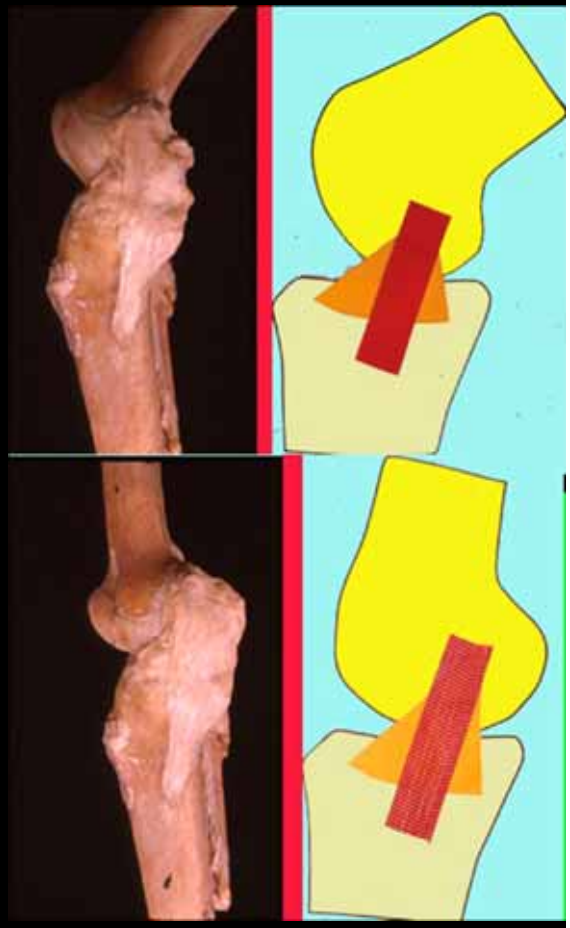


Médial

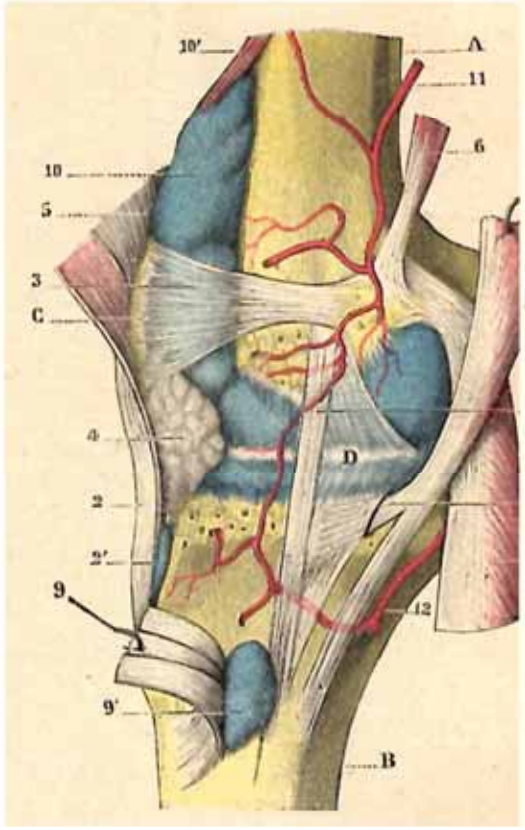
- Montpellier

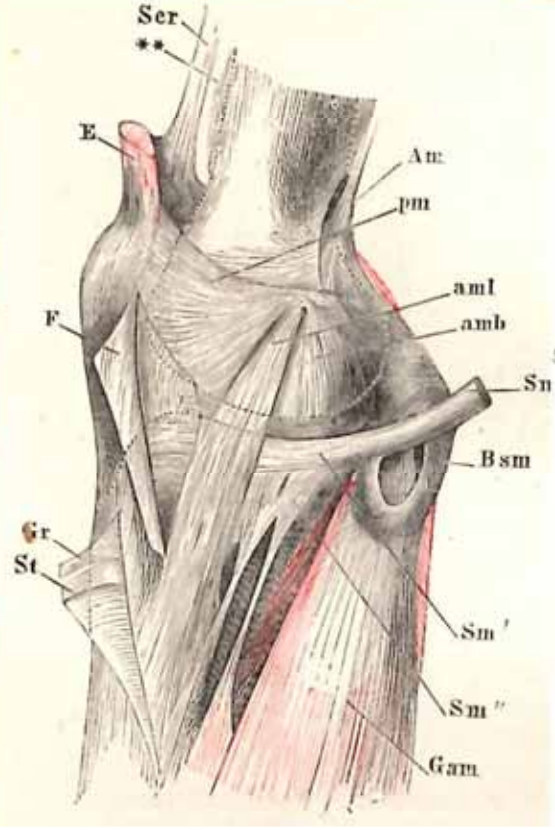
Ligament Collatéral Médial





- Montpellier


10'
A
11
6
10
5
3
C
4
D
2
2'
9
12
9'
B


Ser
**
E
Am
pm
aml
amb
F
Sn
Bsm
Gr
St
Sm'
Sm''
Gam

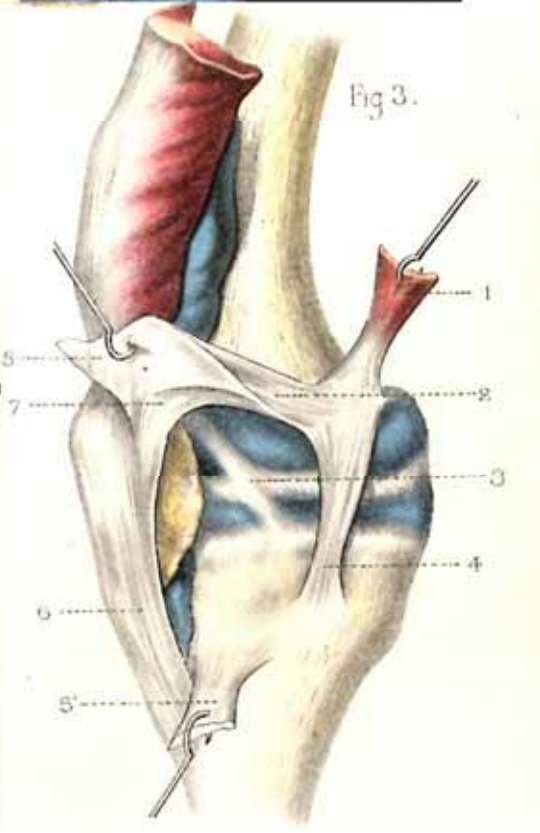


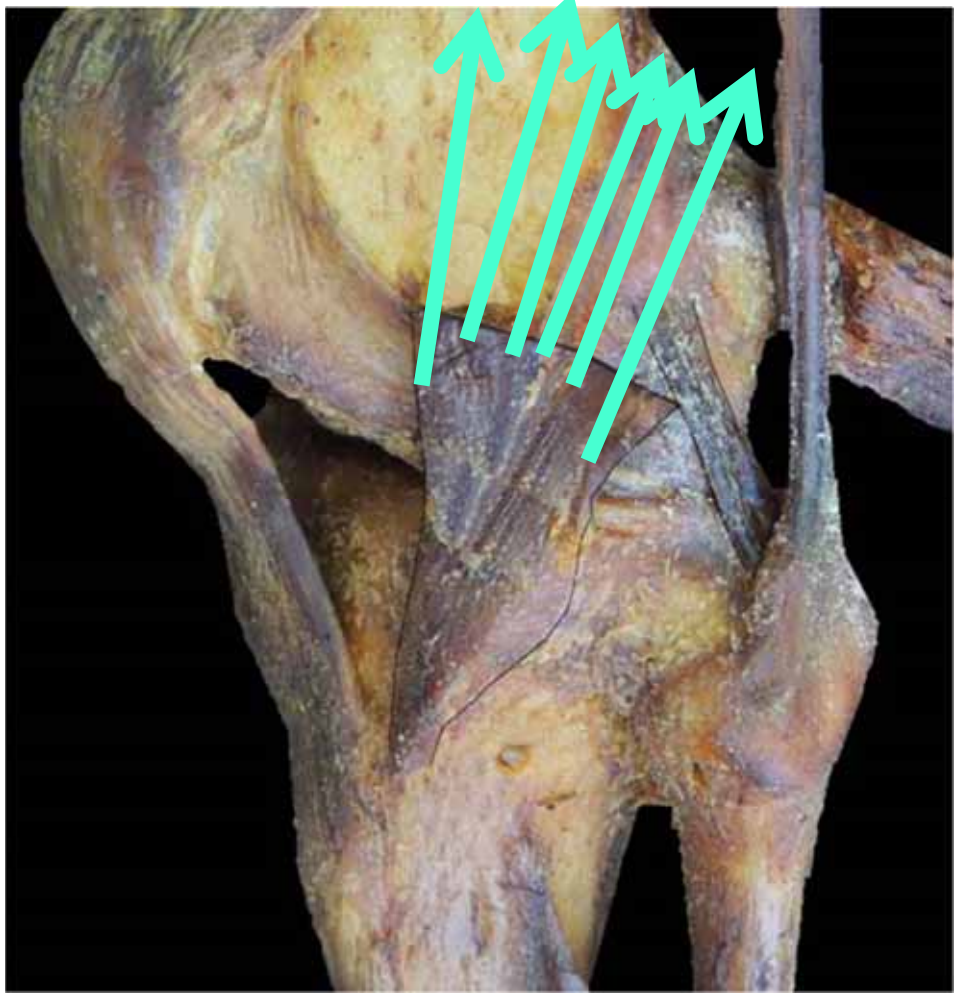
Fig 3.
1
5
2
7
3
4
6
5'

Formations Périphériques
Complément Stabilité
Ligament Collatéral Latéral

UNE
CERTITUDE

- Montpellier

Tractus Ilio Tibial

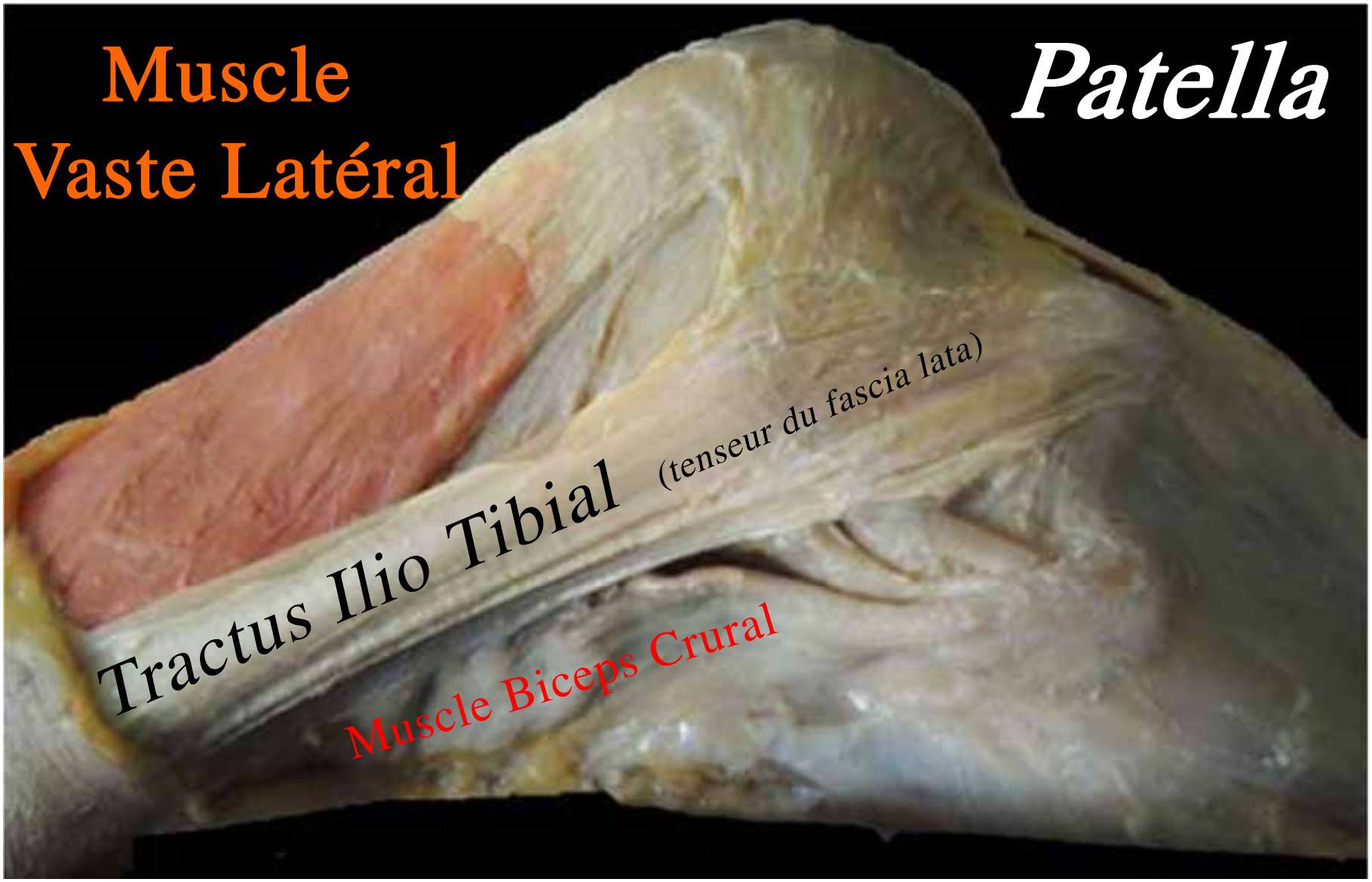


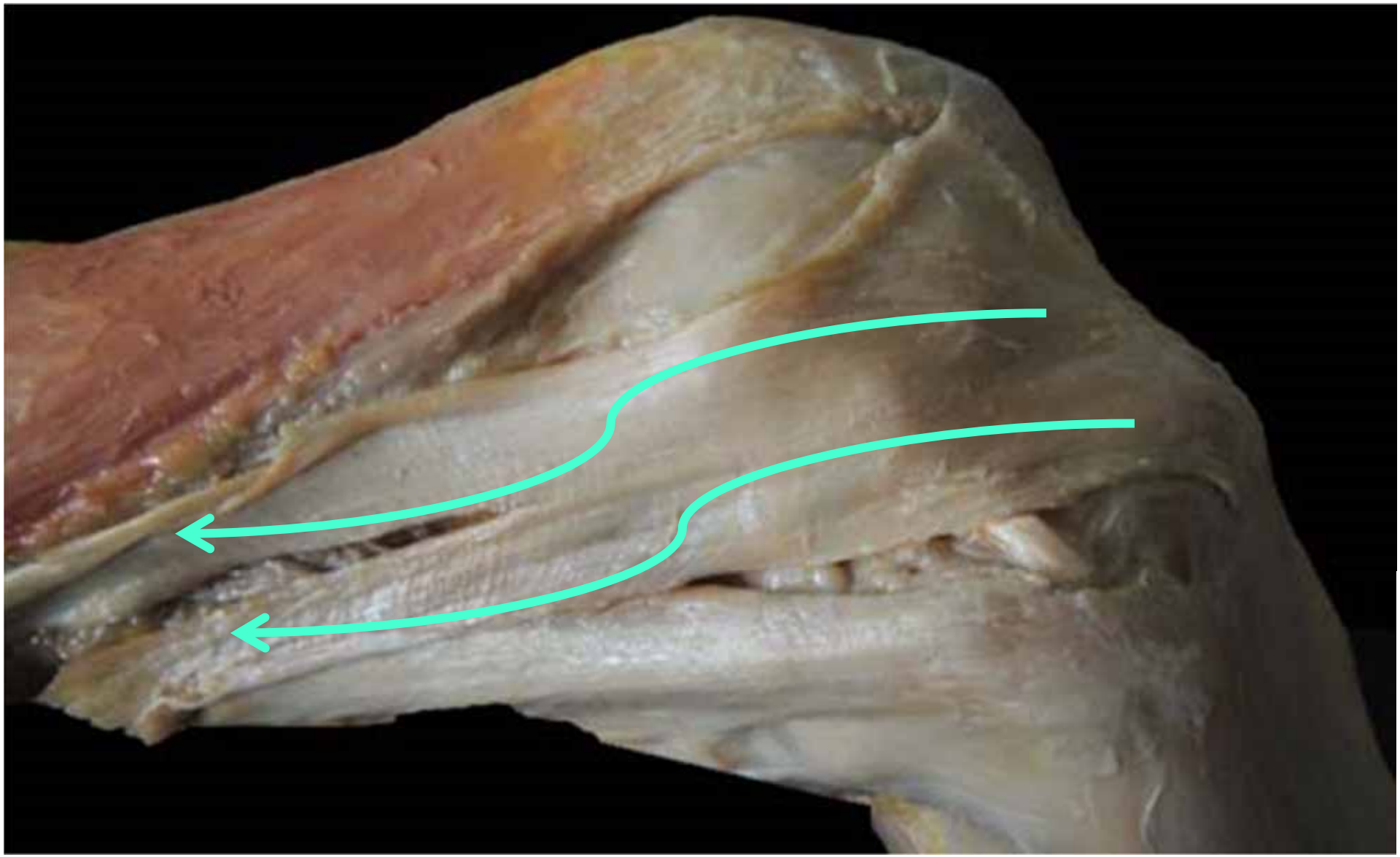
Un Artéfact de Dissection

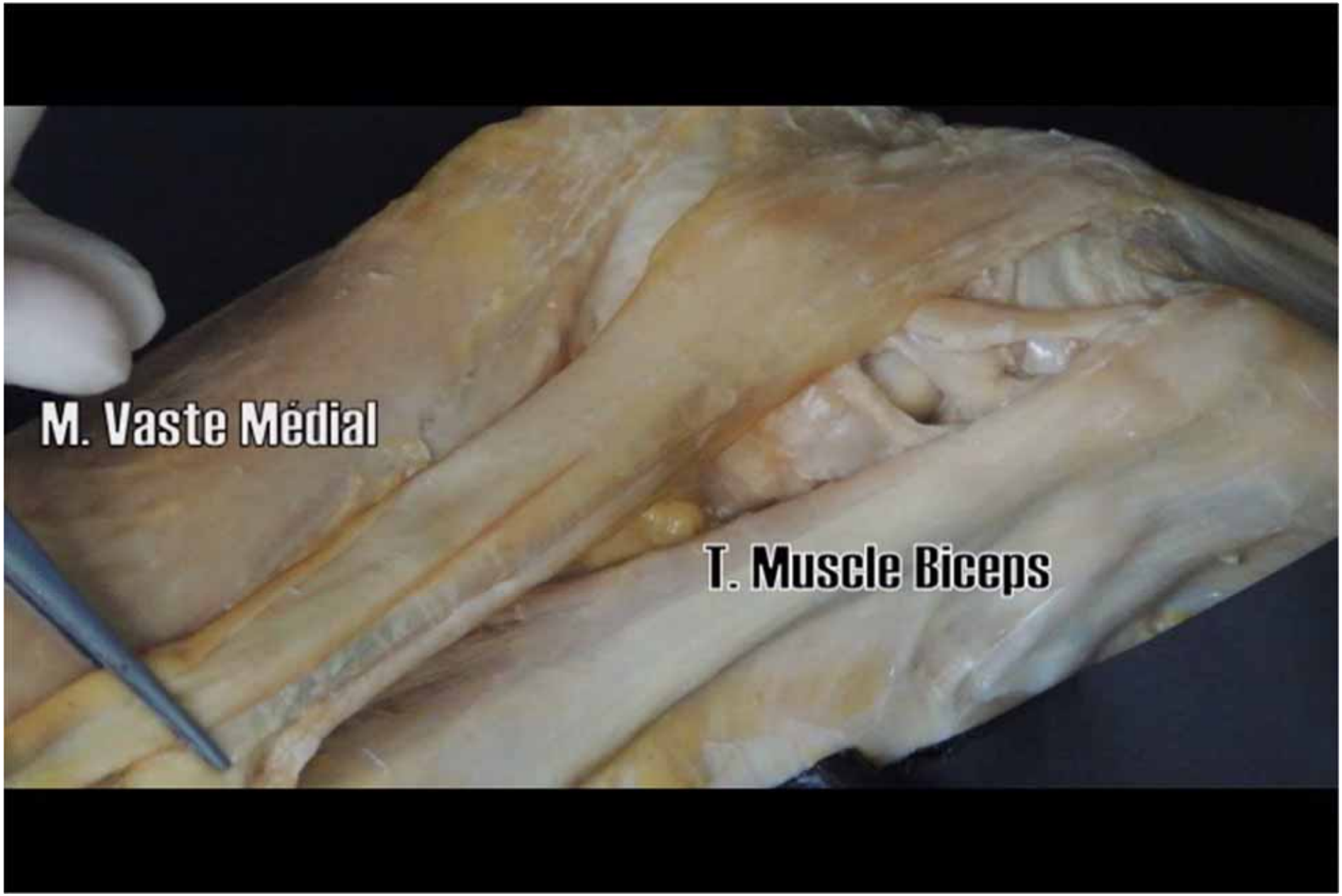
Formations Périphériques

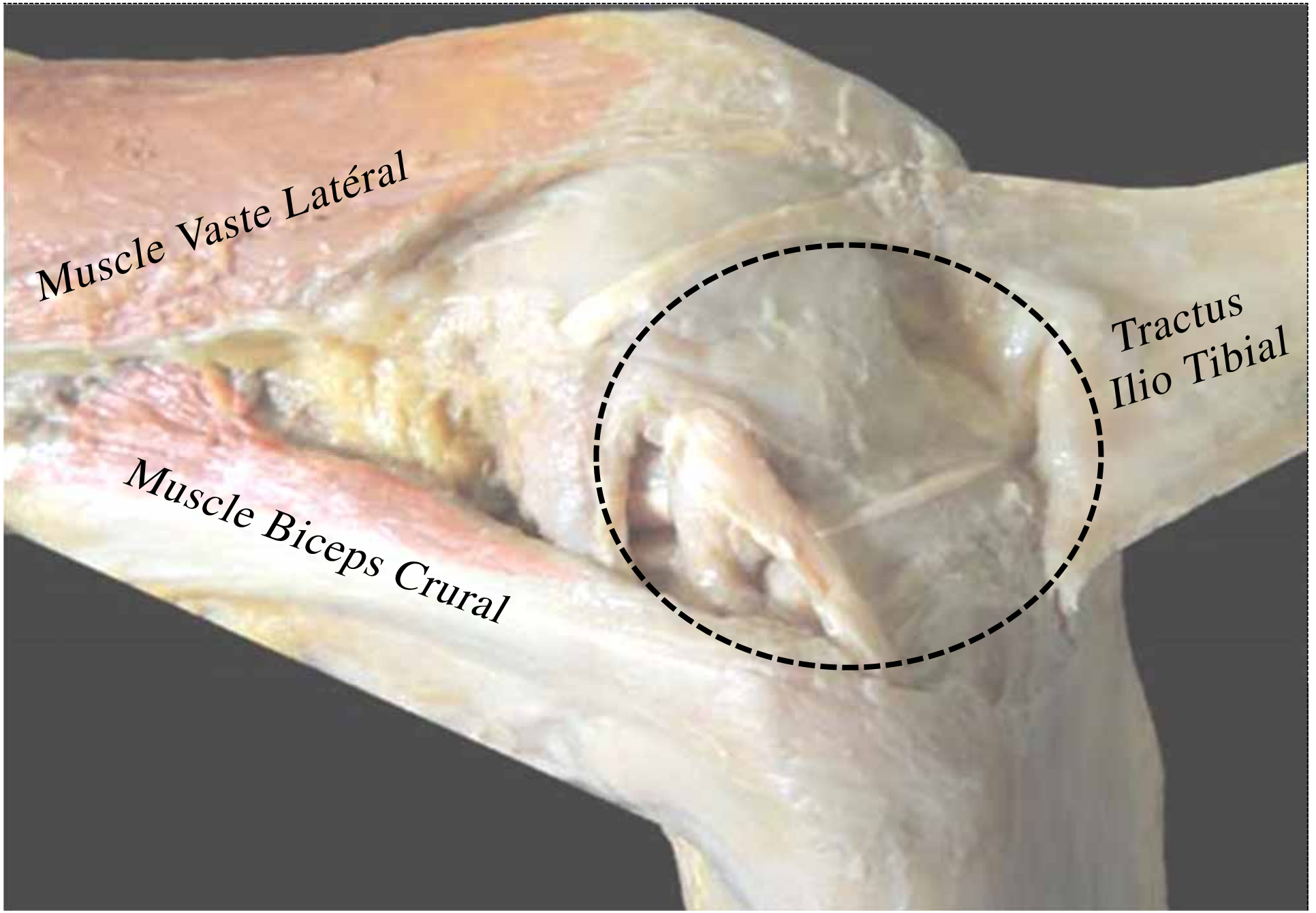
UNE POLÉMIQUE

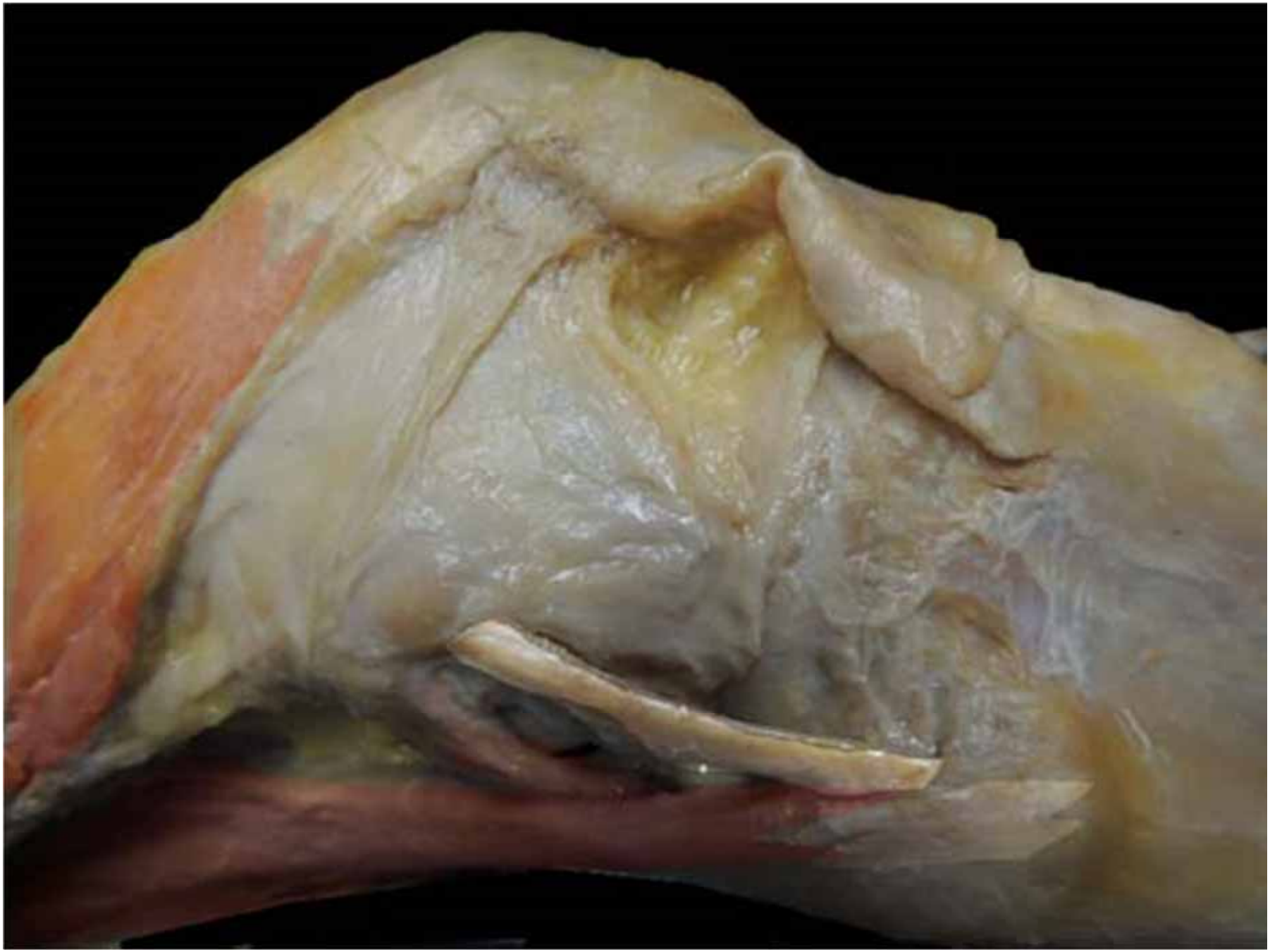
- Montpellier

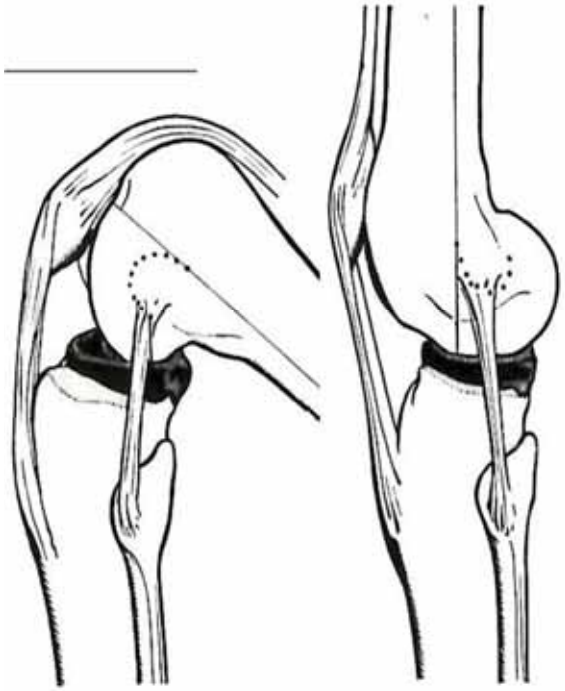

Muscle
Vaste Latéral
Patella
Tractus Ilio Tibial
(tenseur du fascia lata)
Muscle Biceps Crural

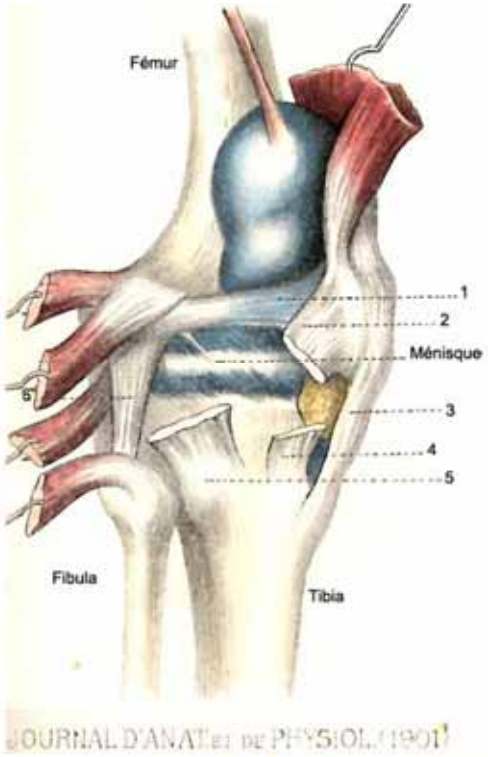



M. Vaste Médial
T. Muscle Biceps

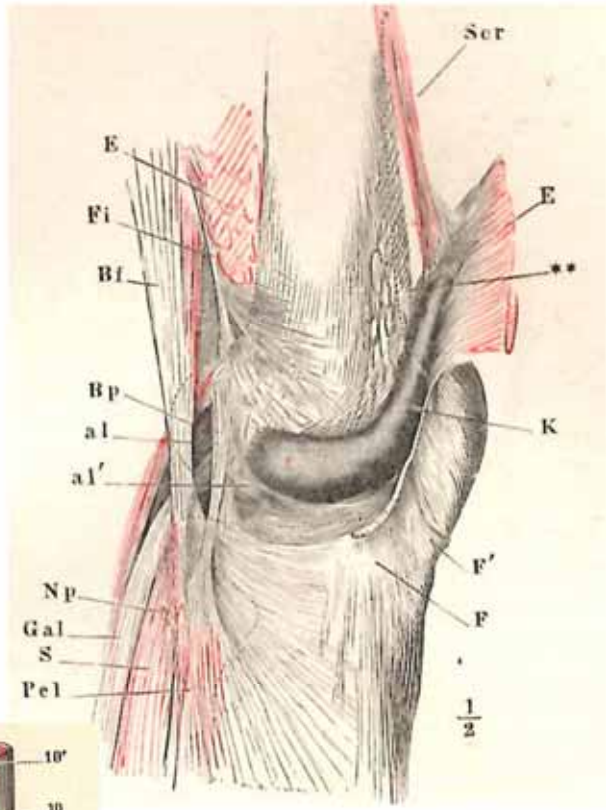

Muscle Vaste Latéral
Muscle Biceps Crural
Tractus
Ilio Tibial

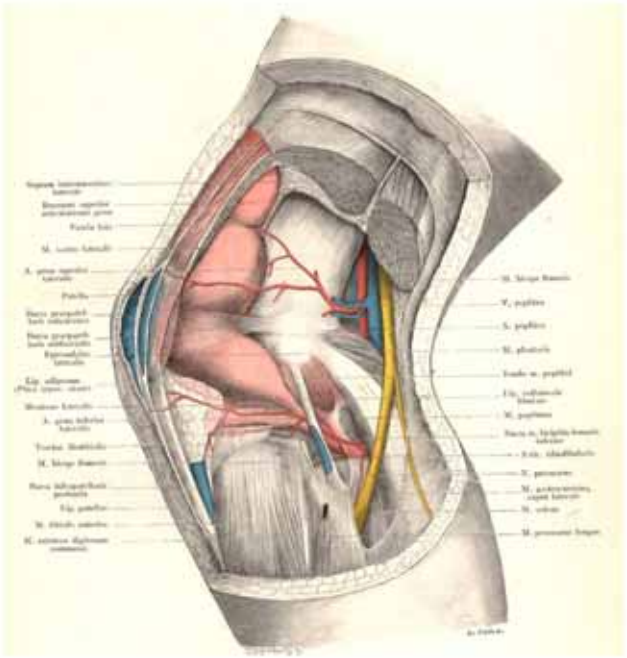


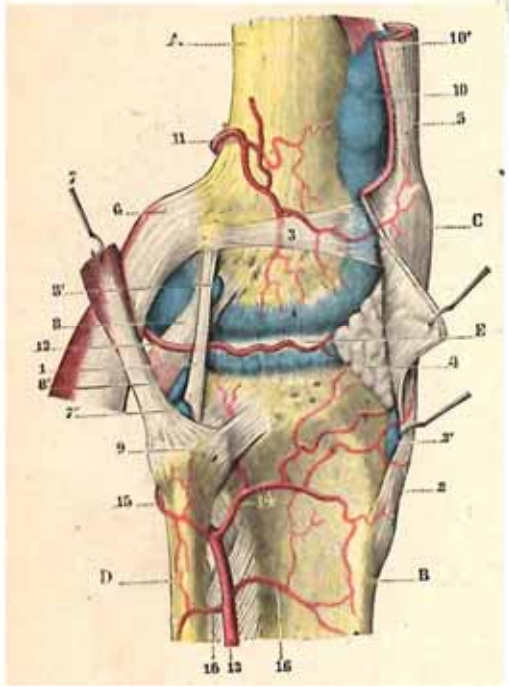


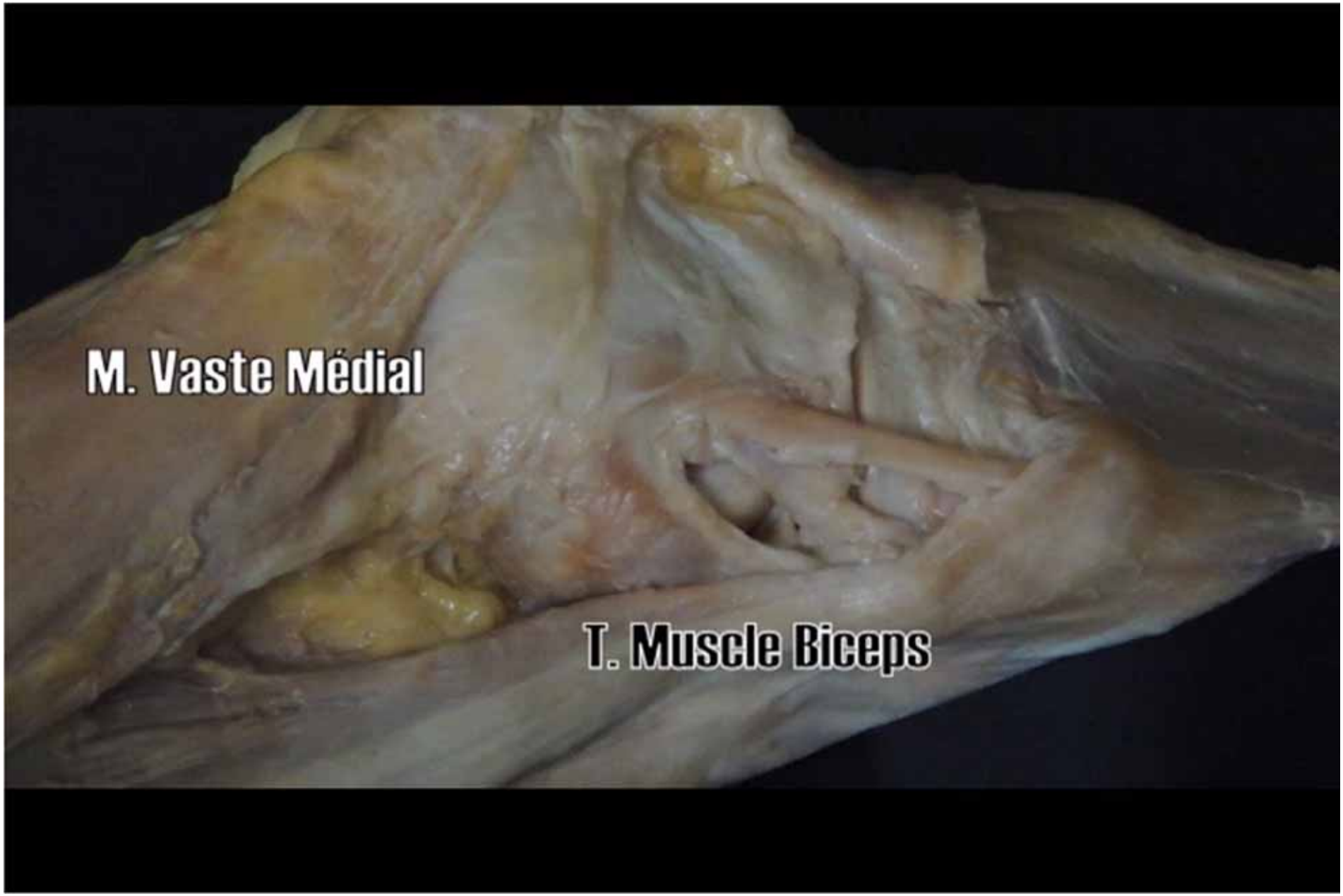


JOURNAL D'ANAT. ET DE PHYSIOL. (1901)








M. Vaste Médial
T. Muscle Biceps

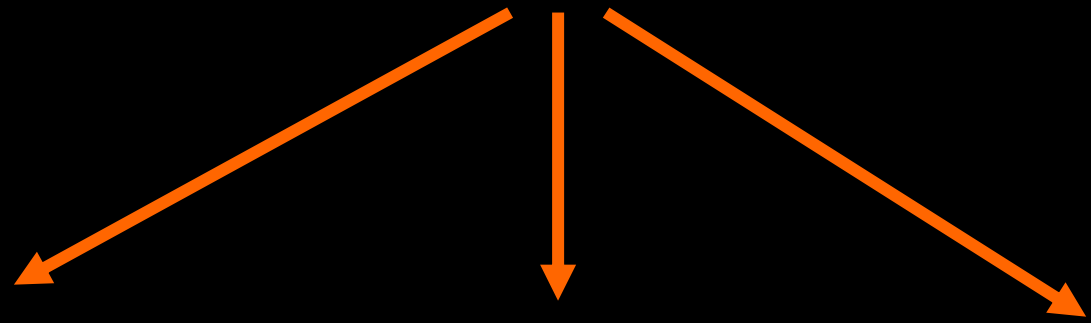
Articulation Discordante

Instable

- Montpellier

Buts Ligaments

Stabilité



Frontal Sagittal Horizontal

Latéralité Tiroir Rotatoire

Facteurs Péjoratifs

Stabilité

De La Stabilité

90 °

À

ALIGNEMENT

L'Instabilité

- Montpellier

Rotation Externe

Valgus

Flexion

INSTABLE

- Montpellier

Rotation Interne

Varus

Flexion

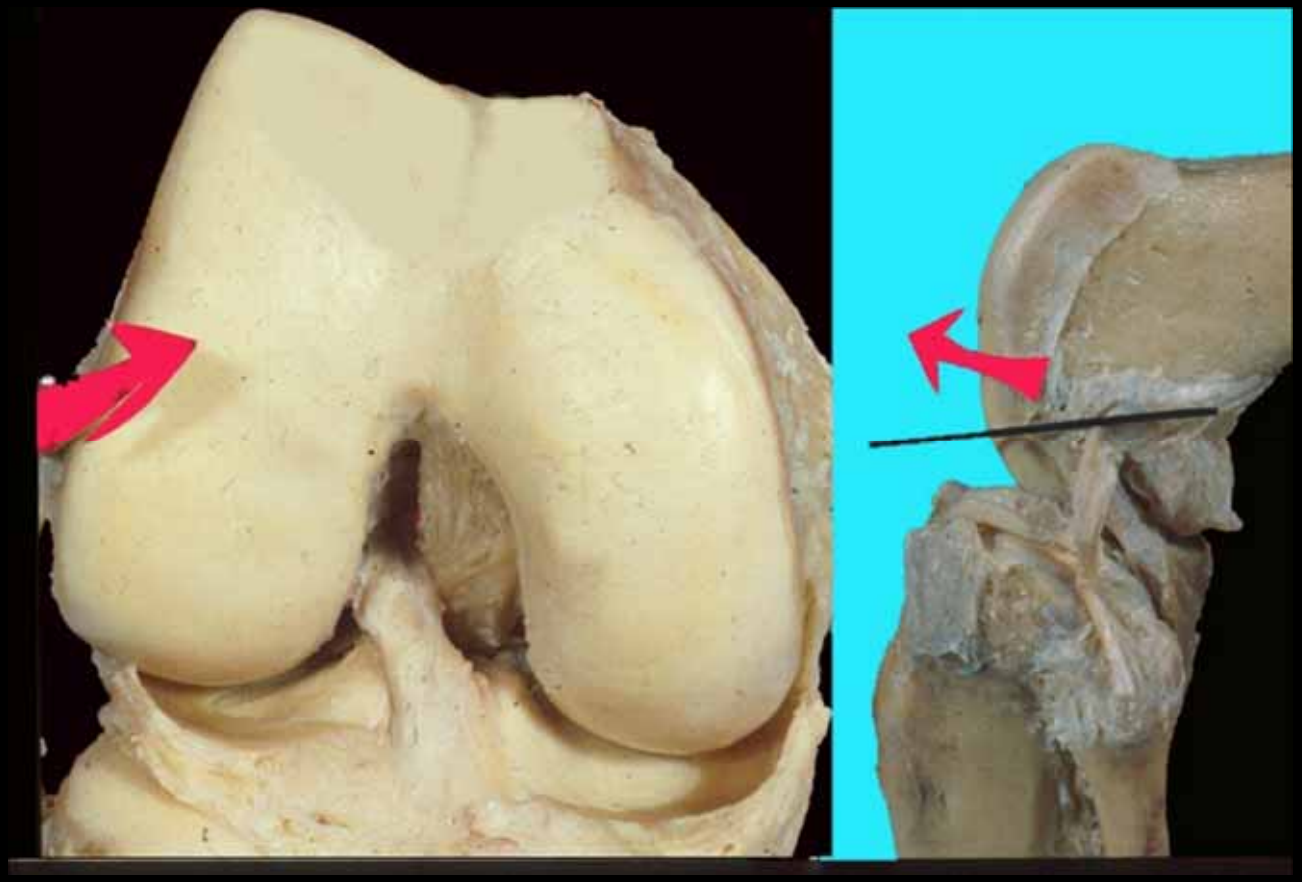
STABLE

- Montpellier

Flexion Tibia

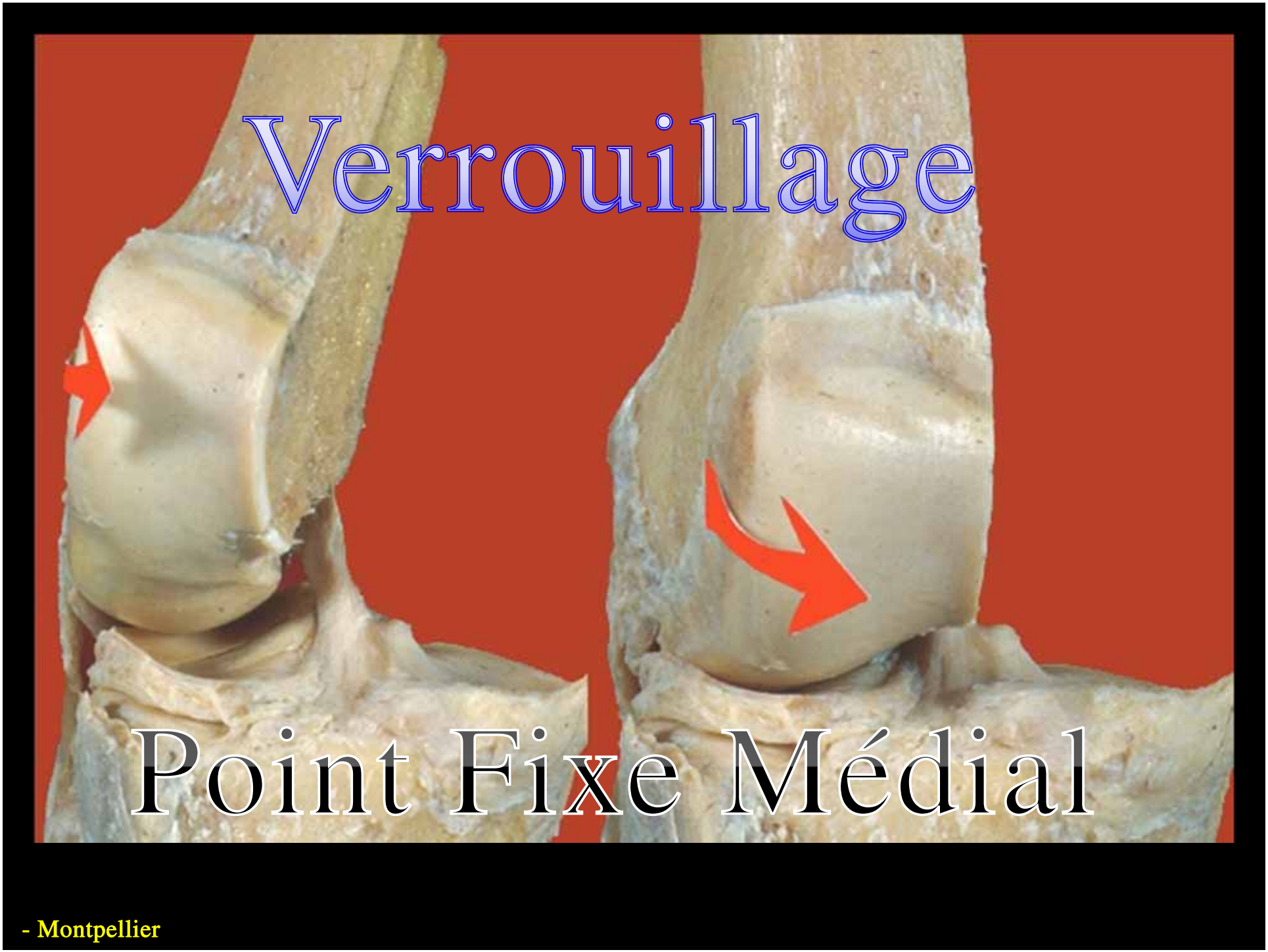
Rotation Interne

Valgus



Course Externe +++

- Montpellier


Verrouillage
Point Fixe Médial

Cinématique

Roulement

Glissement

Tension Pivot Central

- Montpellier

FACTEURS MUSCULAIRES

REEDUCATION

N.F.

ANTERO INTERNE

- Montpellier

Noyau Fibro Tendineux Postero Medial

- Montpellier

Fascicules Muscles

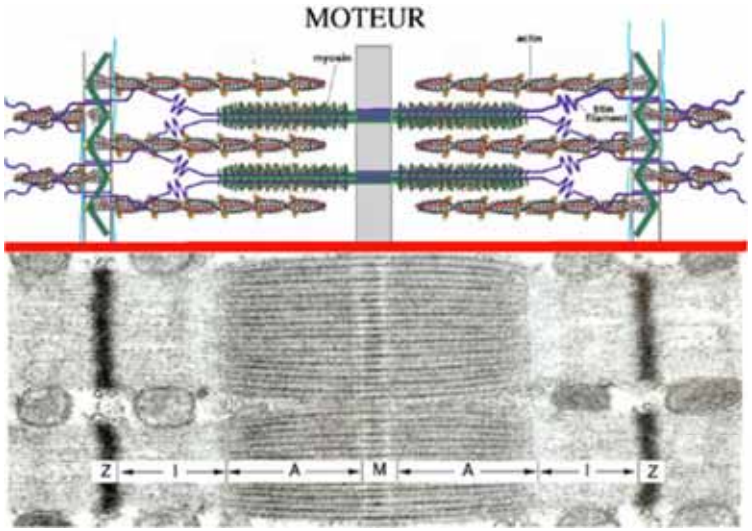
Angles pennation PUISSANCE

Aponévrose

Transmission

Restitution Energie

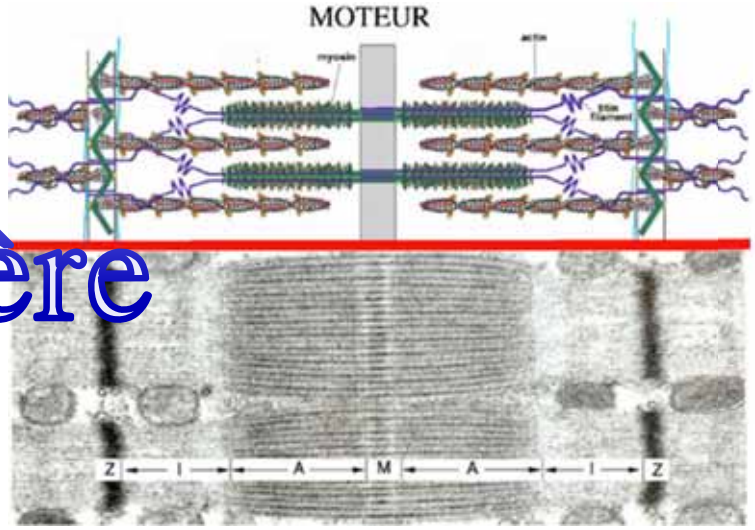
REEDUCATION



Sarcomère

Fragile

Fascicules Musculaires



Sarcomère

Fragile

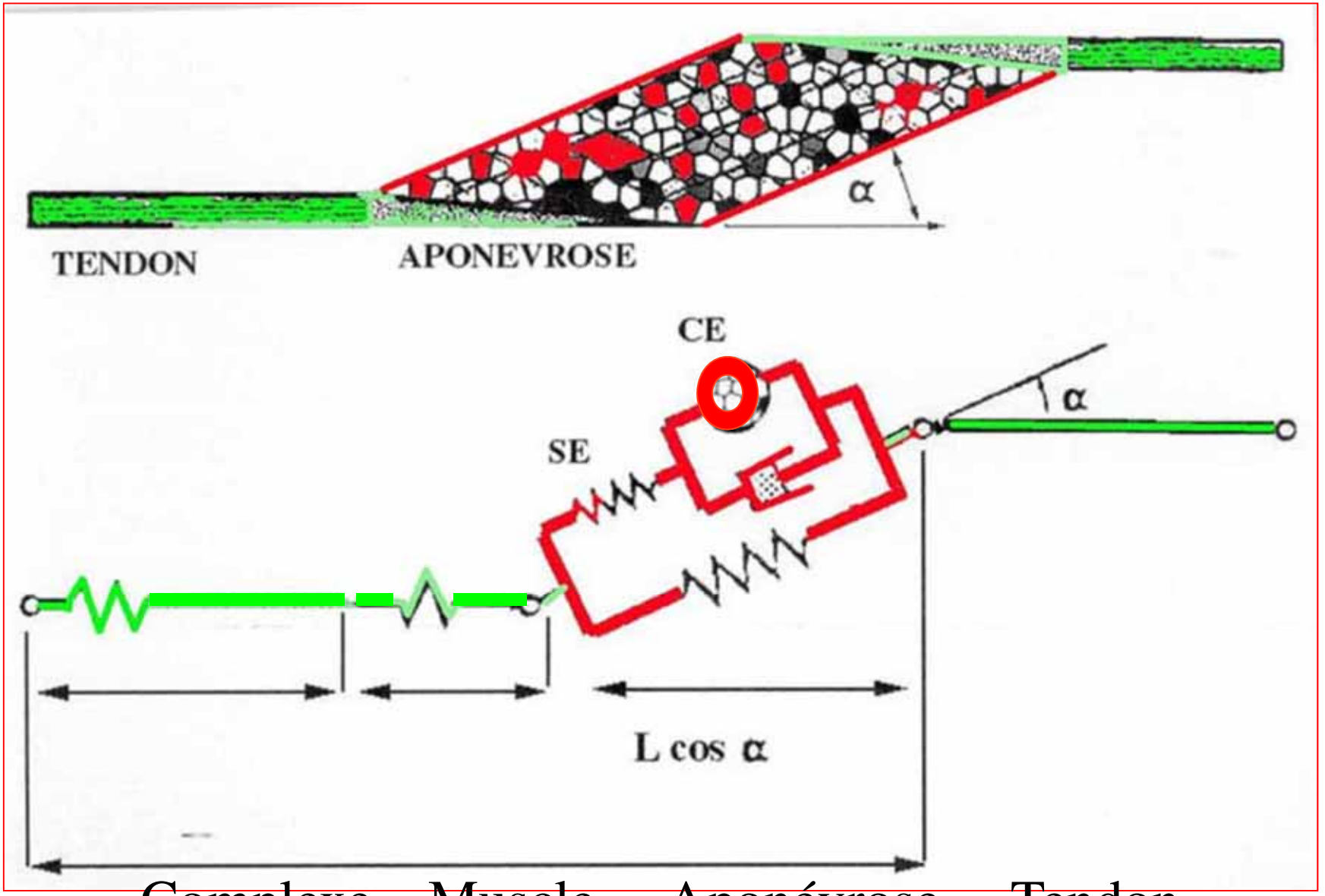
APONEVROSE

Angle

PUISSANCE

Aigu

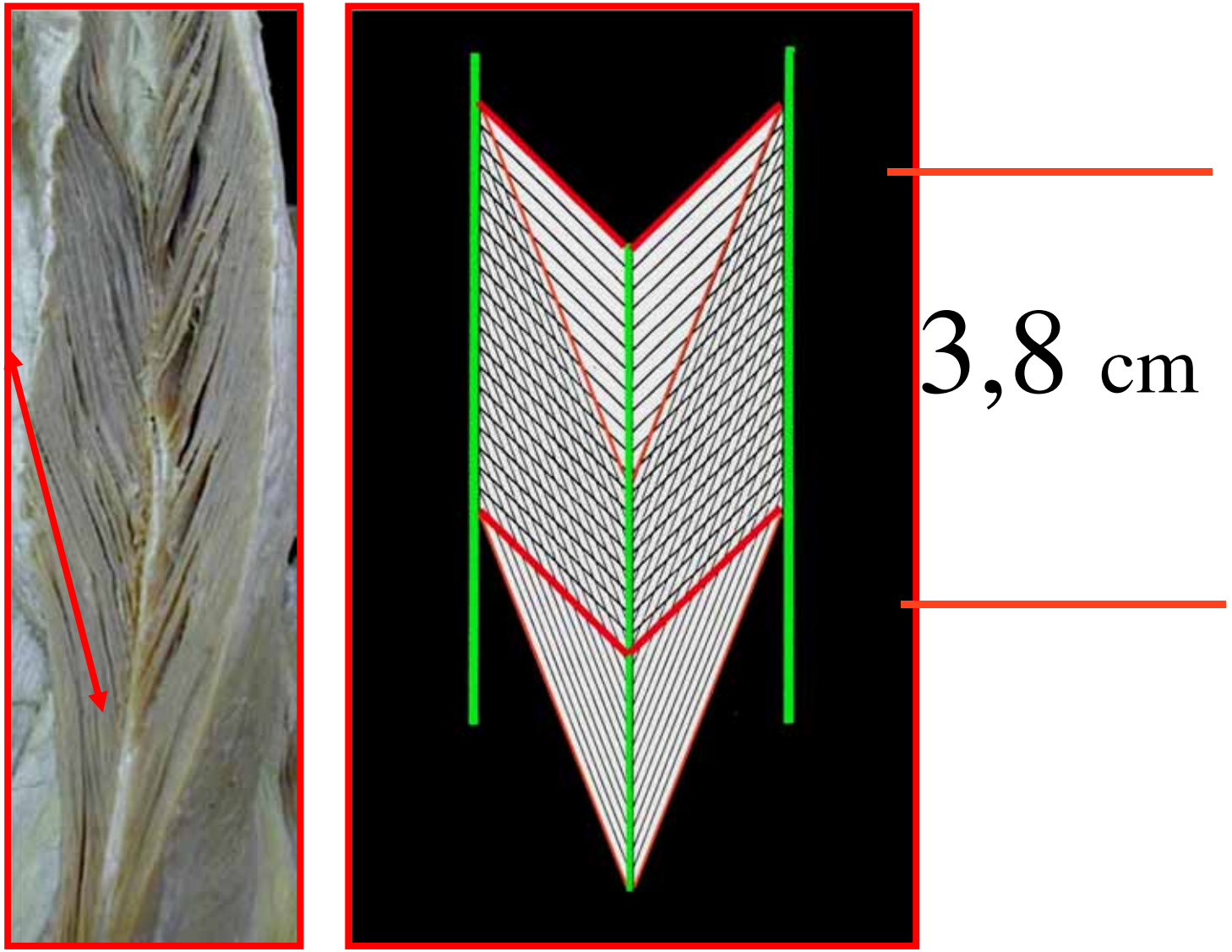
Modélisation : Ettema - Huijing 1989



Complexe Muscle Aponévrose Tendon

ANGLE PENNATION

PENNATION Fibres Obliques



6,5 cm

RACCOURCISSEMENT réel

DROIT de la CUISSE

Longueur:
4cm.

DROIT de la CUISSE

Vue Antérieure

Vue Postérieure

SEMI - MEMBRANEUX

T
or
sa
dé

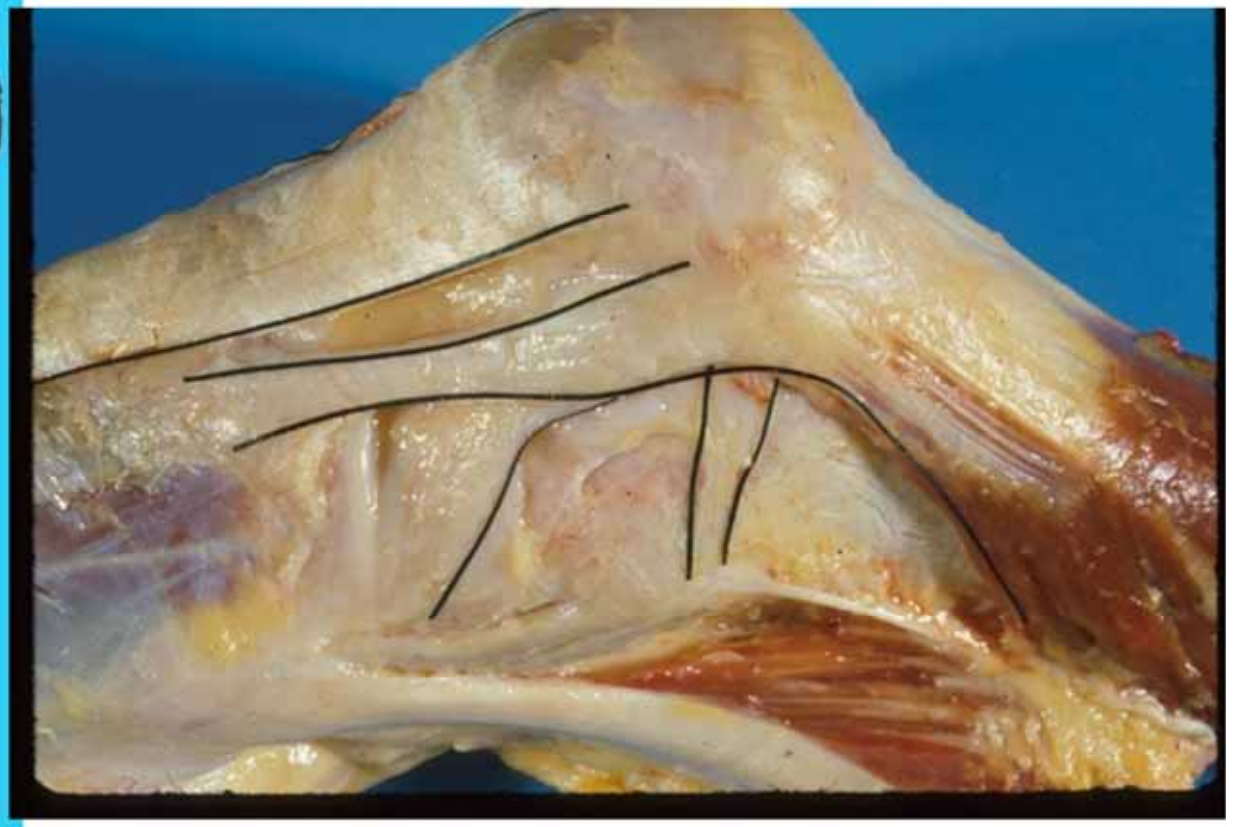
AMORTISSEMENT

ELASTIQUE

ANGLE PENNATION

AIGU

Et Maintenant……



Suivez nous …

LCA Retour Externe