

RECONSTRUCTION DU LCA § OSTEOTOMIE



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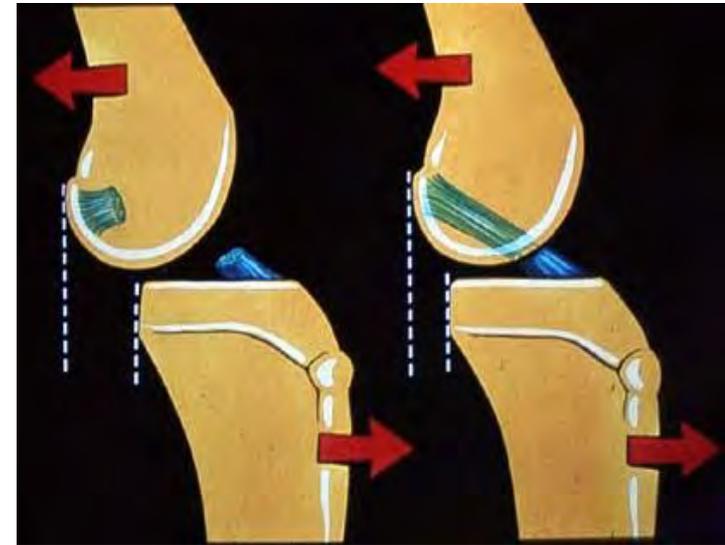
Hôpital de la Croix-Rousse

DIU arthroscopie 2019

Le Ligament Croisé Antérieur

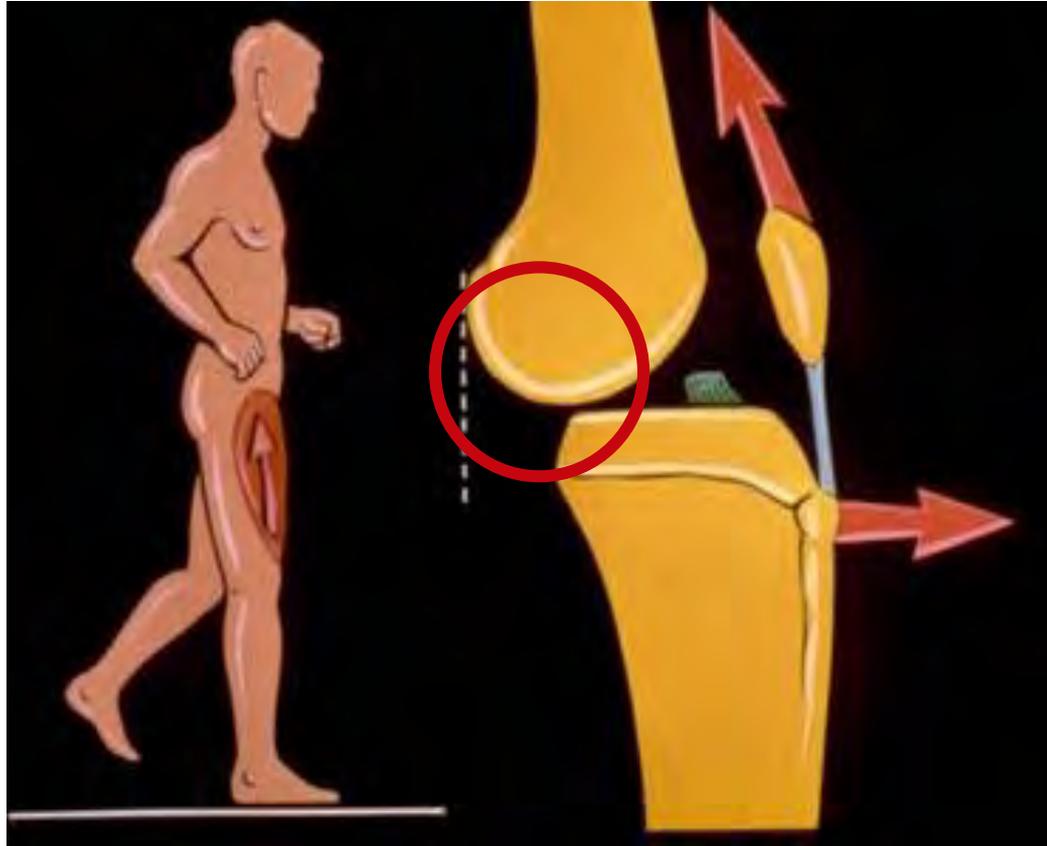
Limite le déplacement
antérieur du tibia / fémur

Translation Tibiale
Antérieure



Augmentation de la TTA

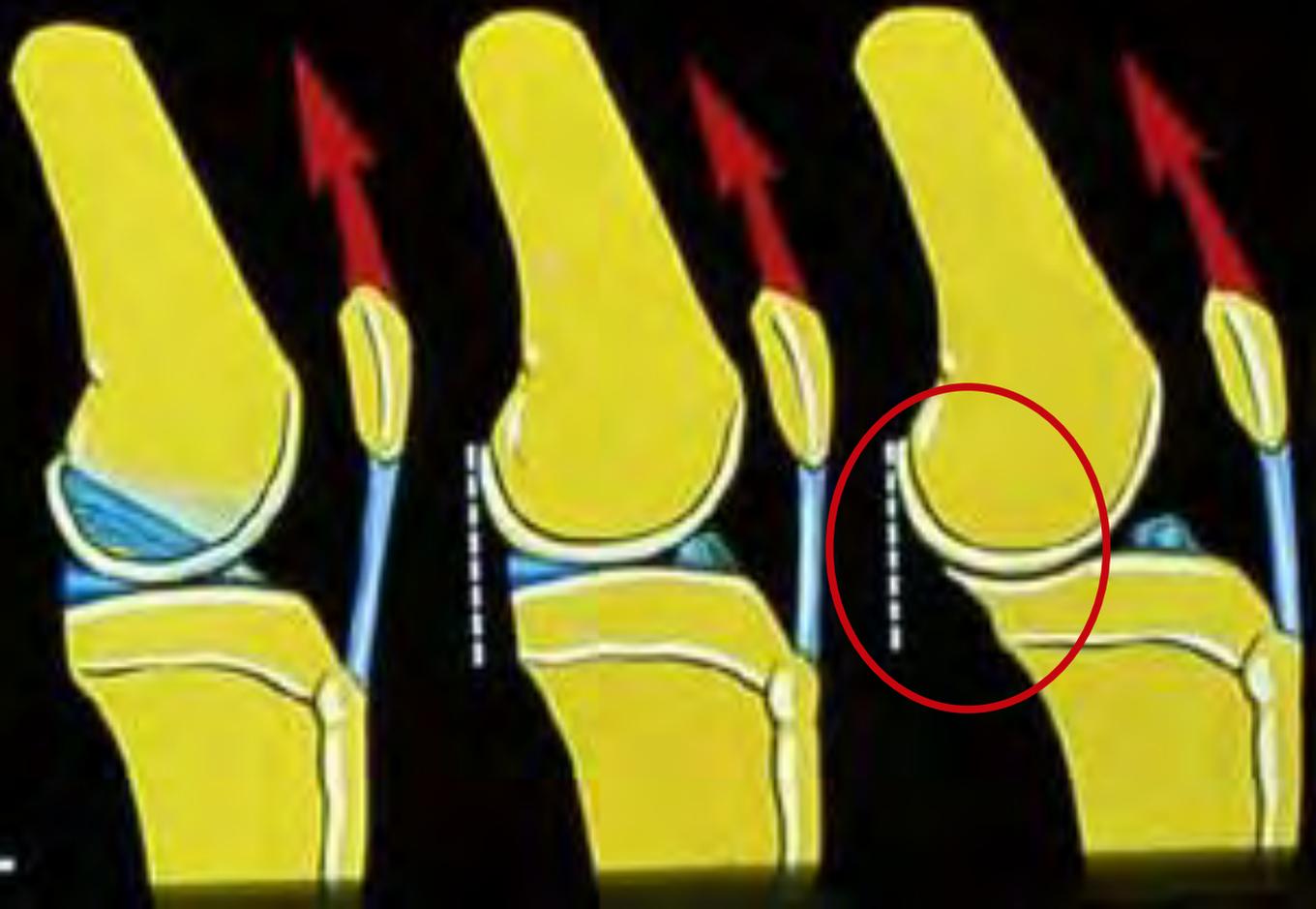
Translation Tibiale Antérieure



Augmentation contraintes postéro-internes

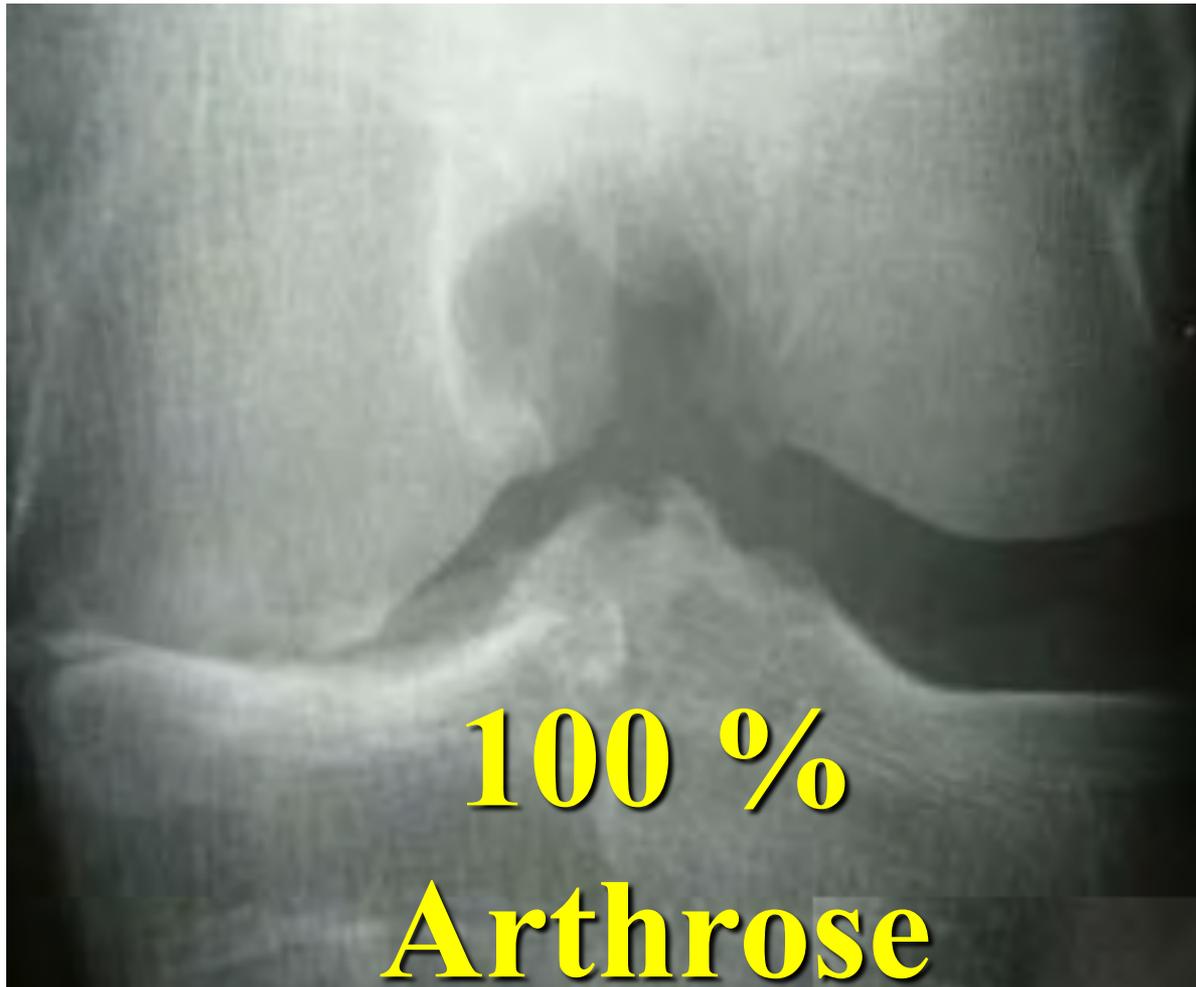
Evolution naturelle après rupture du LCA

Translation antérieure fixée "cupule postéro interne"



LCA + ménisque 25 ans

(A Trillat - thèse Ph. Neyret RCO 1988)



75 %
Interne

25 %
Globale

**100 %
Arthrose**

Rupture du lca chez l'adulte

Histoire naturelle

© Masson, Paris, 1988



THE JOURNAL OF
BONE AND JOINT
SURGERY

PARTIAL MENISCECTOMY RELATED TO THE STATE OF THE ANTERIOR CRUCIATE LIGAMENT

REVIEW AT 20 TO 35 YEARS

P. NEYRET, S. T. DONELL, H. DEJOUR

From Centre Hospitalier Lyon Sud, Lyon, France

Follow-up	Degenerative changes
20-24 years	61% pre OA - OA
25-29 years	71% pre OA - OA
30-34 years	86% pre OA - OA

Caractères de l'arthrose sur laxité chronique antérieure

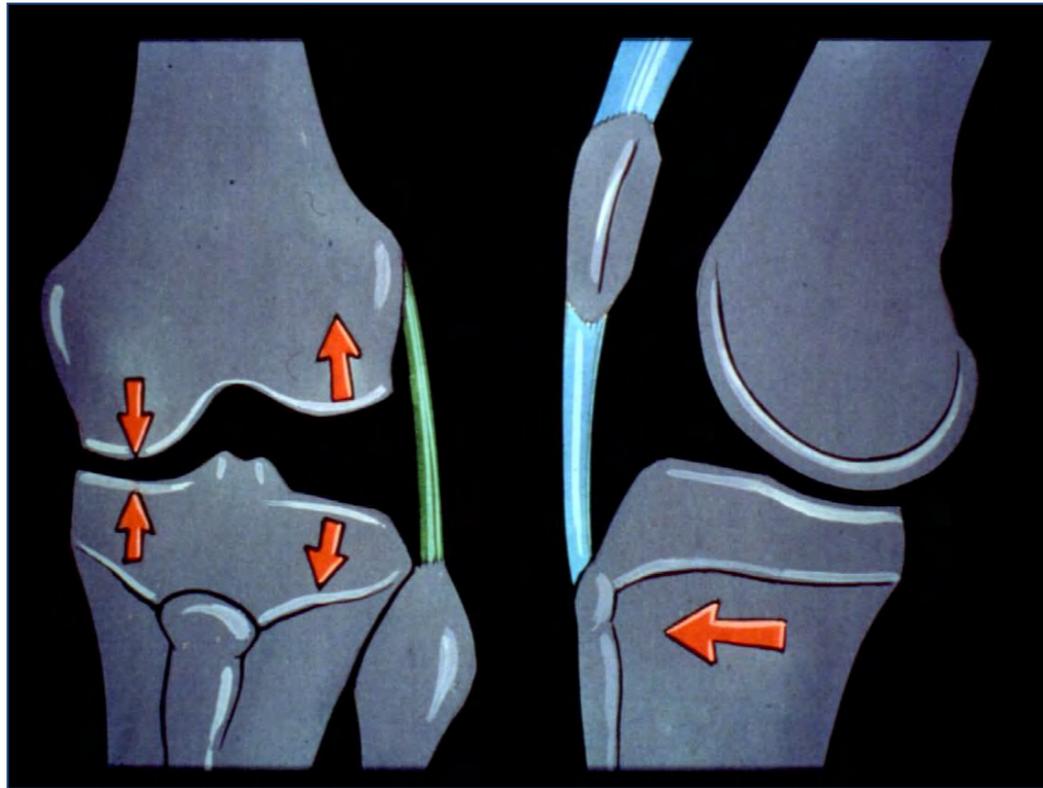
FACTEURS ETIOLOGIQUES DE L'ARTHROSE

- Facteurs biochimiques
- Facteurs aggravants (ménisques, poids, ATCD chir.)
- Facteurs biomécaniques +++
(déséquilibre frontal et sagittal)

Déséquilibre frontal

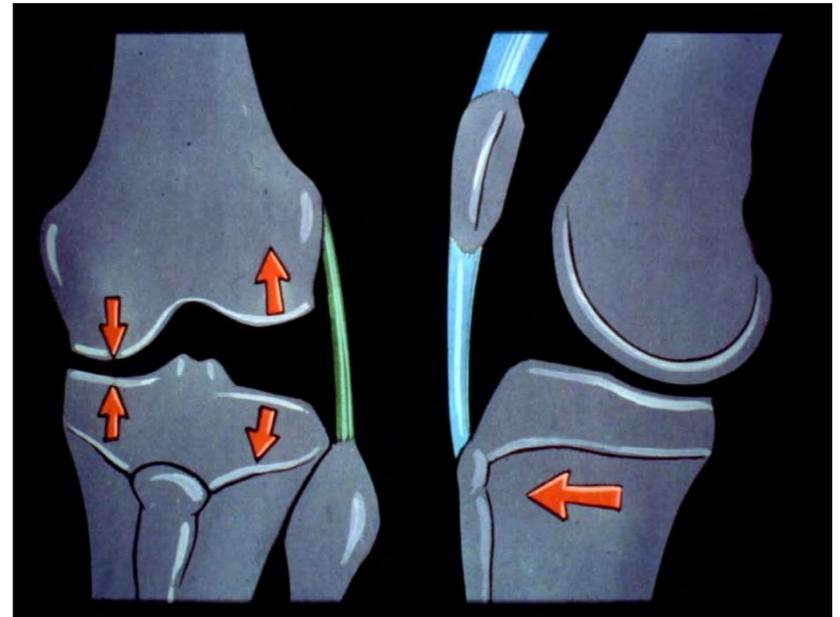
- Genu varum constitutionnel
- Genu varum acquis
(usure ou laxité)

Déformation en Varus



- Aggrave les autres facteurs

Varus asymétrique



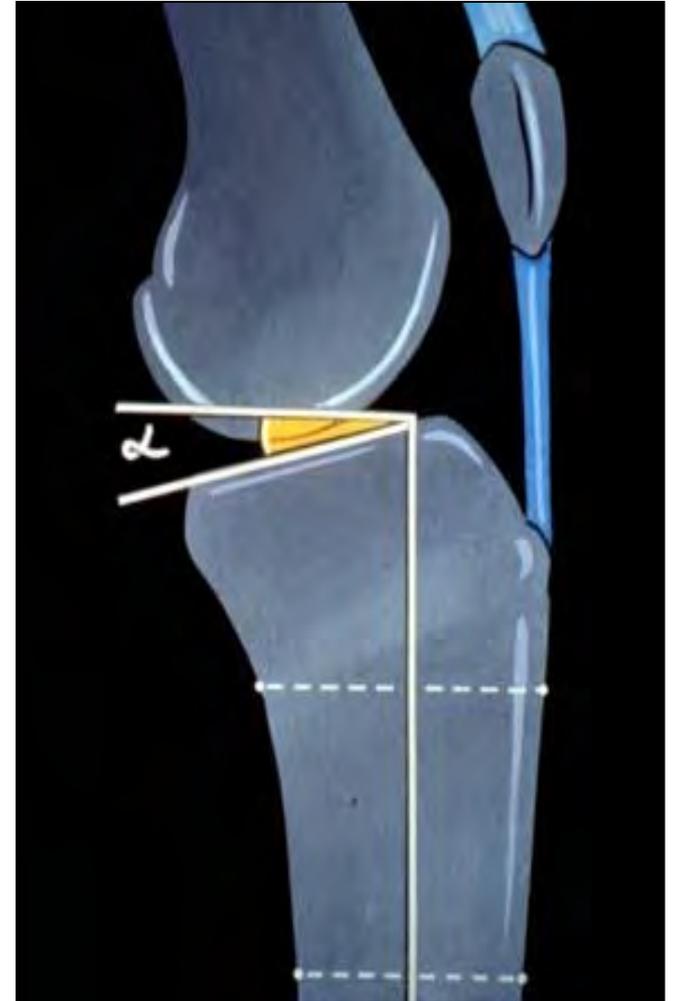
Déséquilibre sagittal ++

- Translation tibiale antérieure
- Pente tibiale

Déséquilibre Sagittal

(Translation tibiale antérieure)

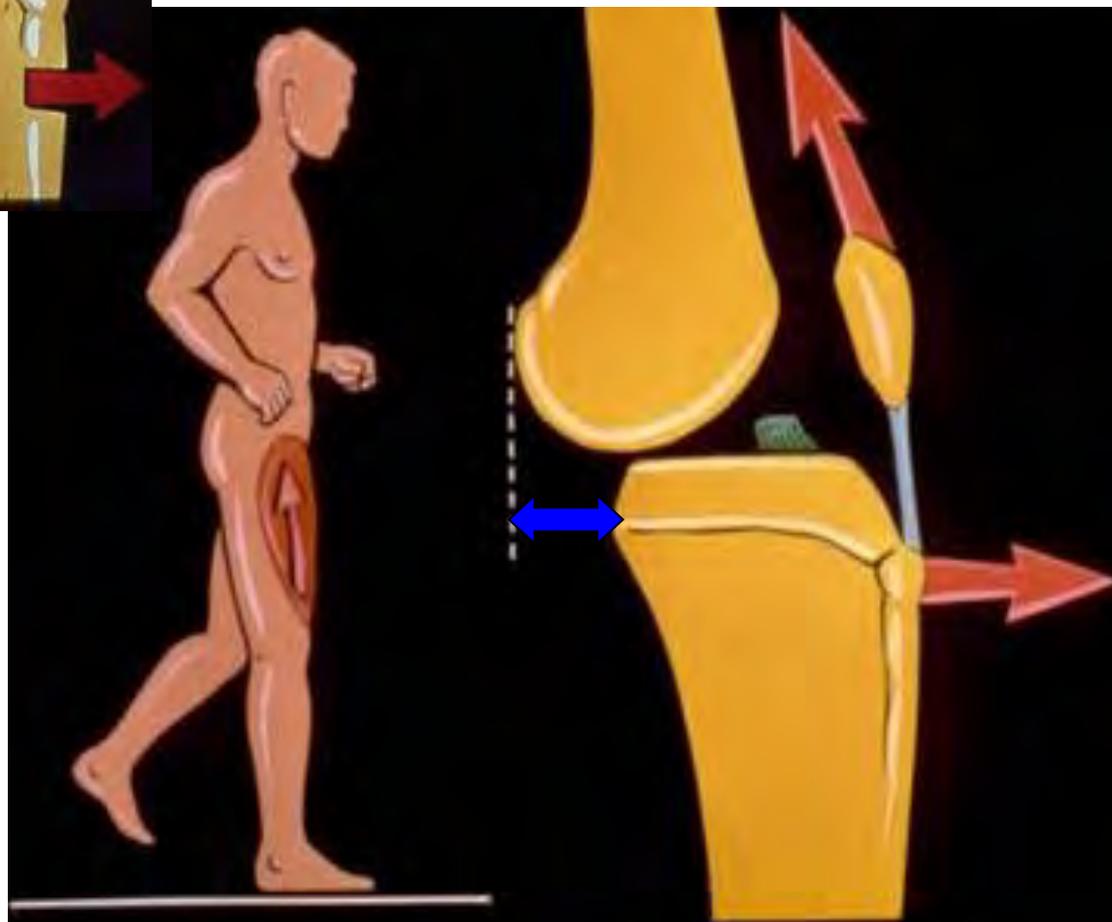
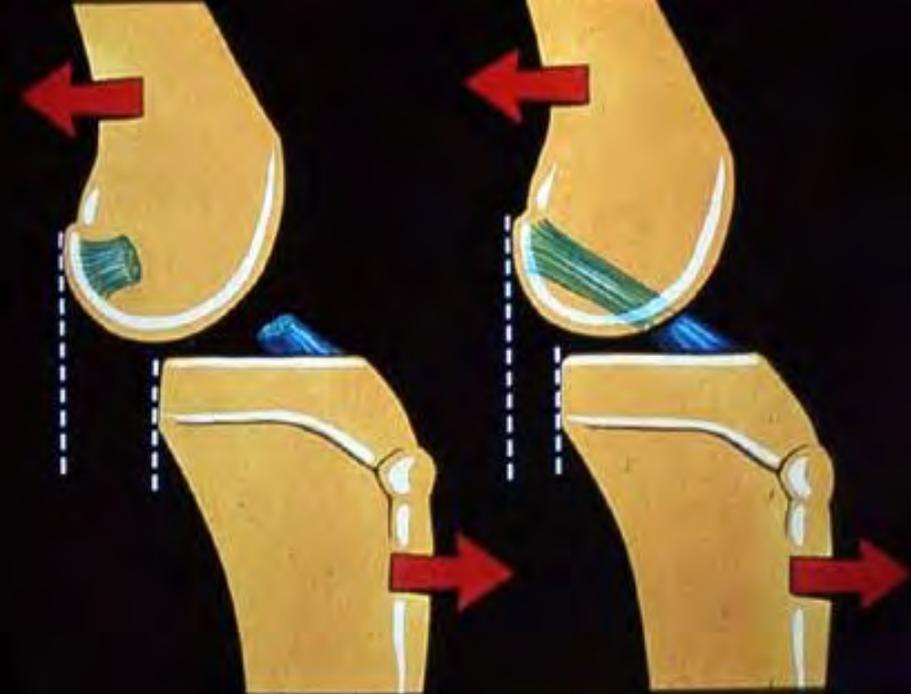
- Laxité chronique
- Pente tibiale excessive
- Ménisectomie interne



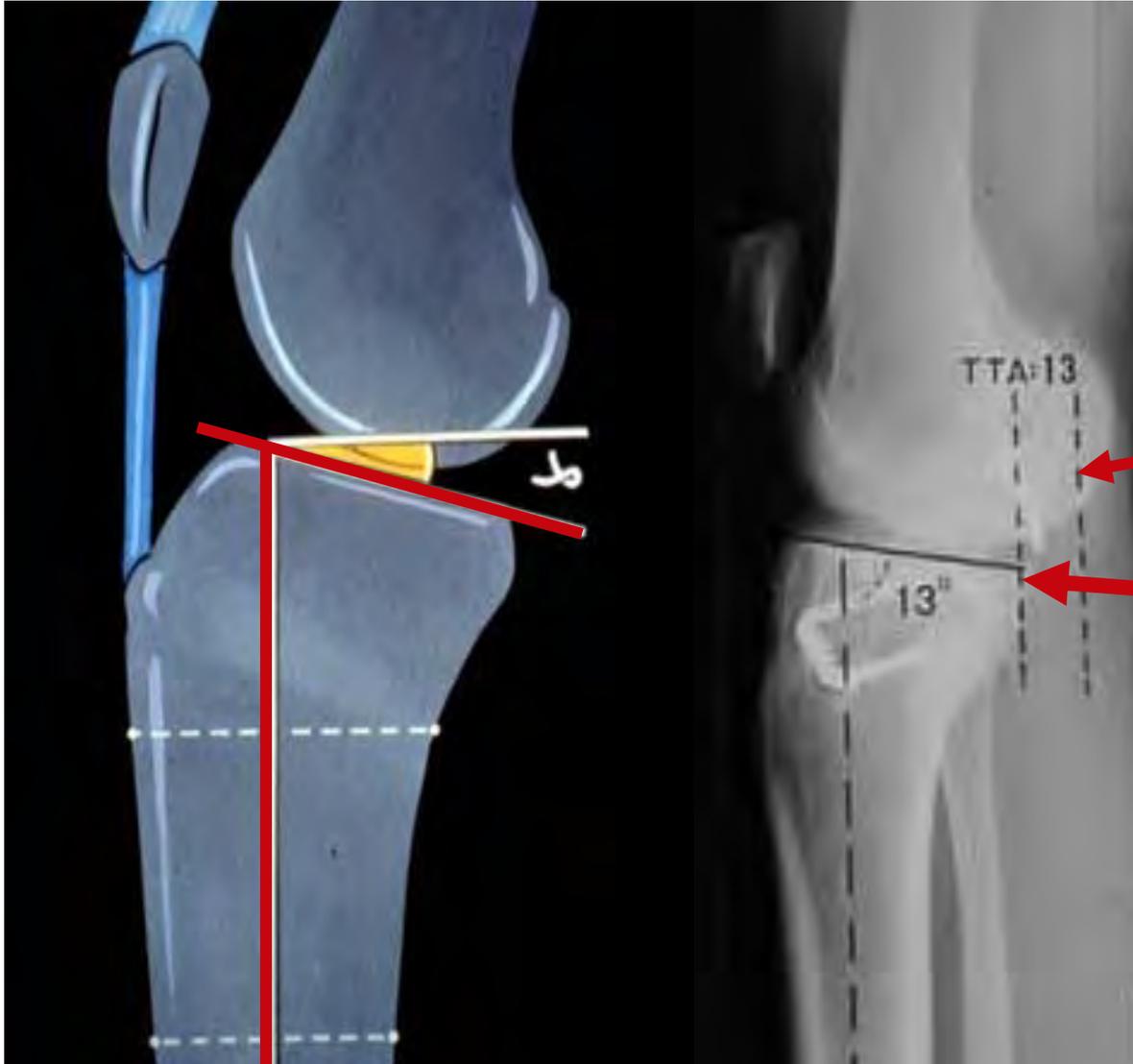
Tension excessive
sur la greffe du LCA



Distension



Translation tibiale antérieure



Ménisque
interne

Pente Tibiale
>10-12°

Rupture du lca chez l'adulte

Classification

« **Isolé** »

Complete
Partielle

Evoluée

Laxité
avec
pré-arthrose

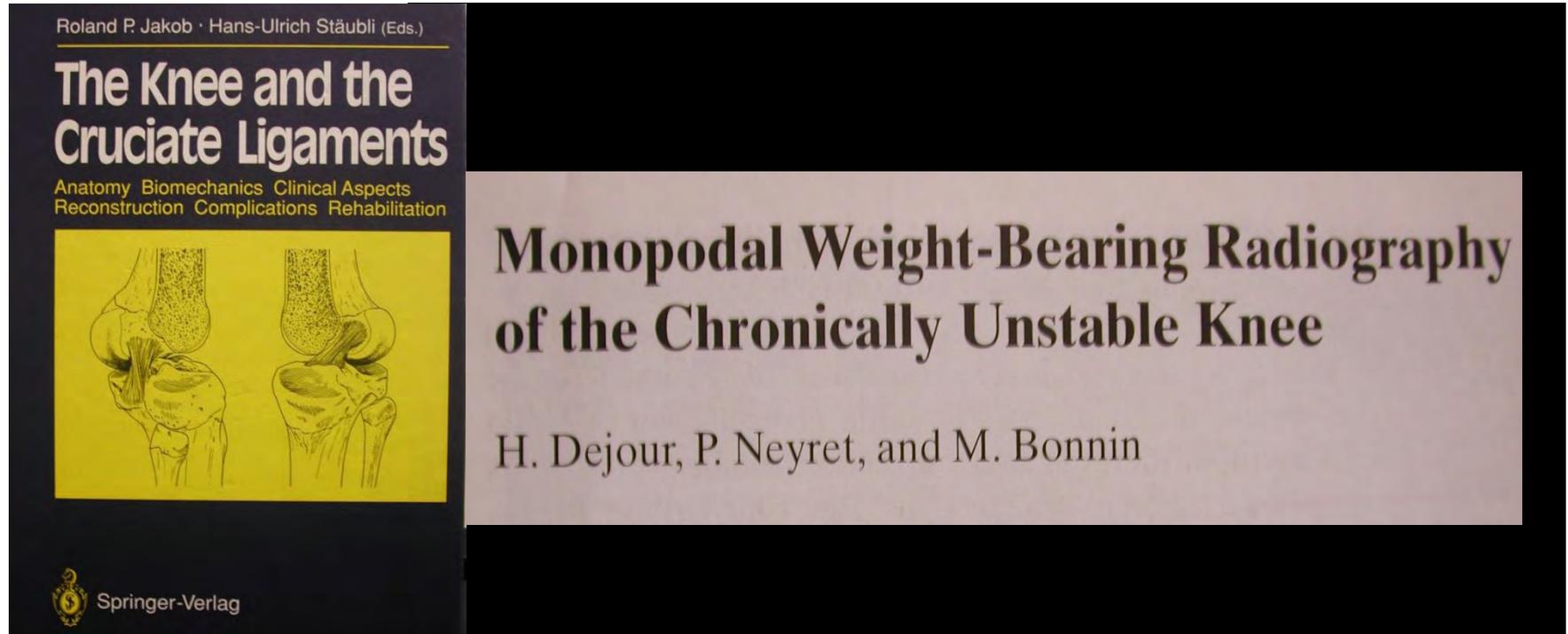
Arthrose

Posterolatérale < 5%

25-35ans



Reconstruction du LCA + OTV



« ACL deficient knee with a frontal or sagittal imbalance that appears on monopodal stance cannot be compensated for by a simple ligamentous ACL graft »

Reconstruction du LCA + OTV

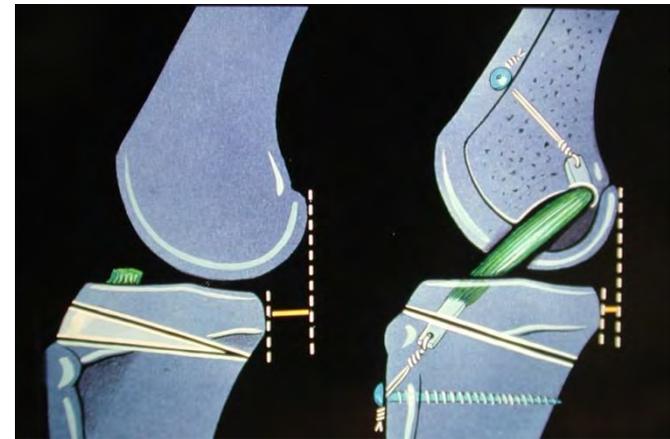
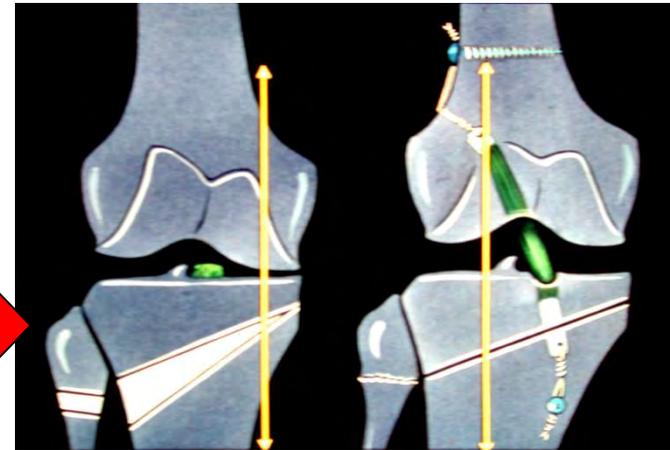
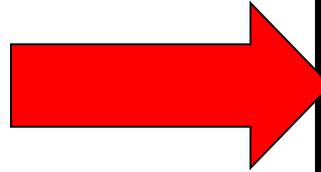
Déséquilibre Frontal



Pincement FT
interne



"laxité" externe



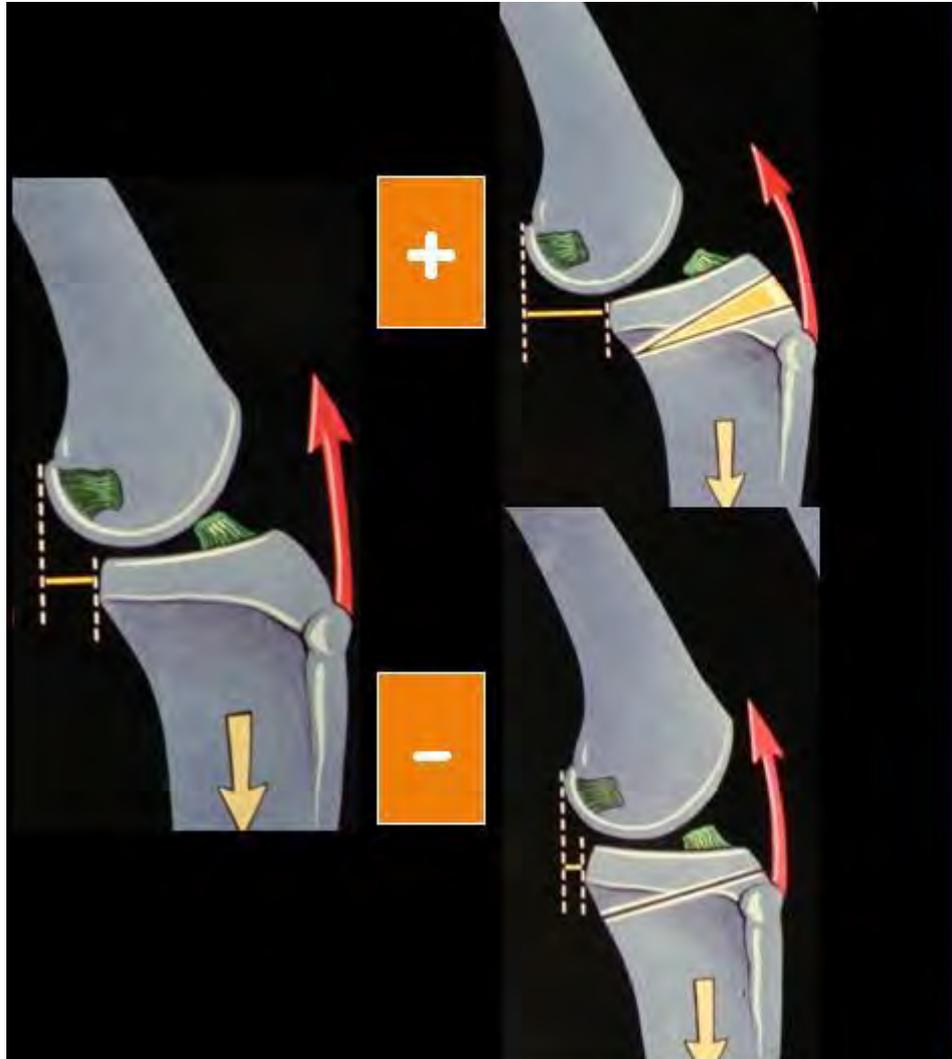
Déséquilibre Sagittal

Reconstruction du LCA + OTV

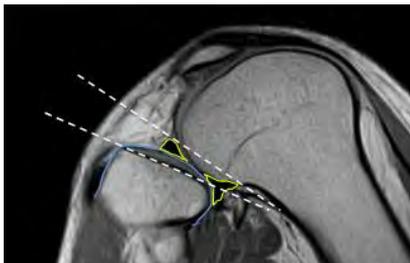
- 1- Installation
- 2- Prélèvement
- 3- Arthroscopie
- 4- Tunnels fémoral et tibial
- 5- OTValgisation**
- 6- Calibration of tibial tunnel**
- 7- fixation fémorale
- 8- fixation tibiale (double fixation)



Reconstruction du LCA + OT fermeture antérieure



Major Anatomic factors: Tibial slope



- X-Ray Analysis : monopodal weight bearing X-rays
- Telos™ 15 KG : Laximetry

- New dynamic vision
- MRI Analysis
- Bone and meniscal slope

Posterior tibial slope

1. Increases load in ACL
2. Role in pivot shift
3. Consider soft tissue (meniscus)

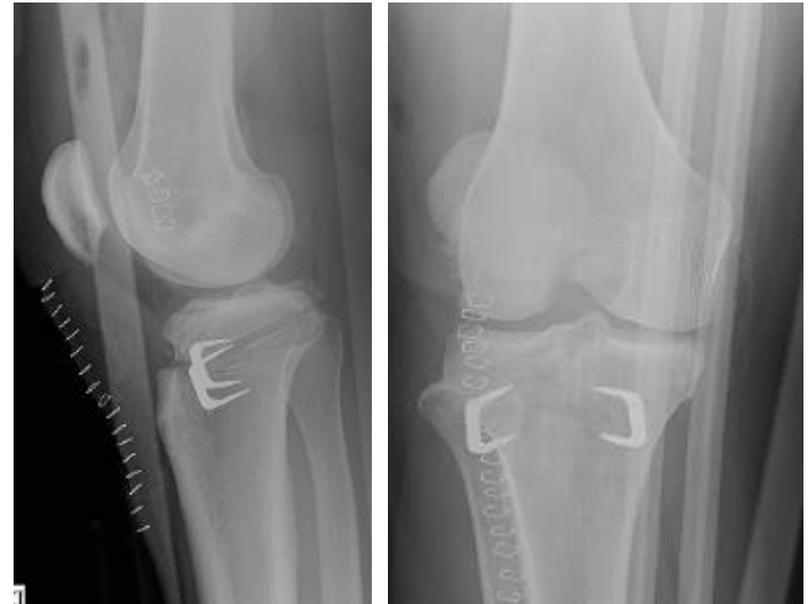
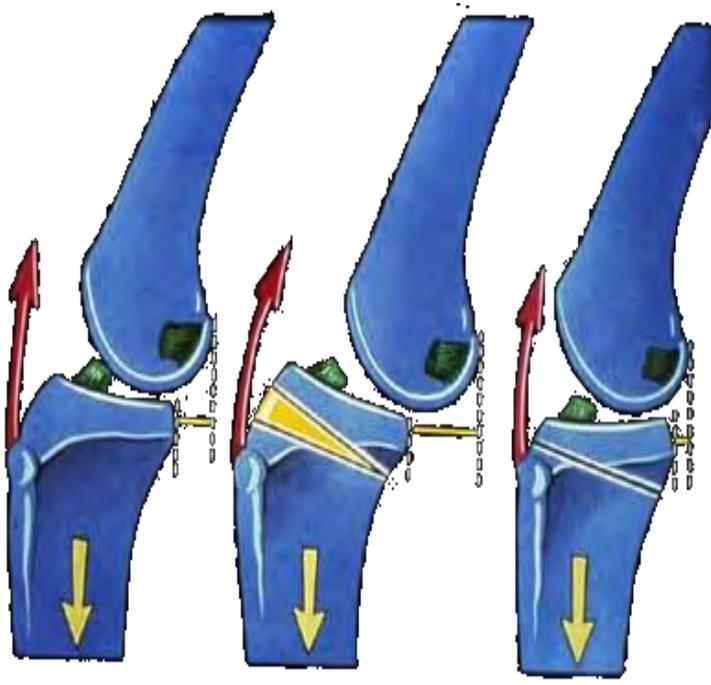
Make a accurate pre-operative diagnosis

Tibial slope measurements $> 12^\circ$

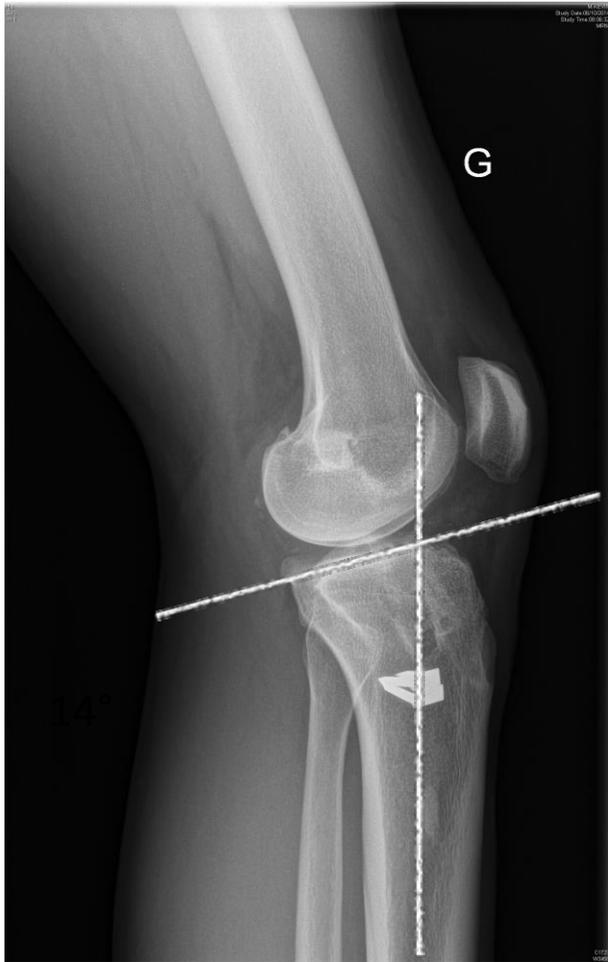
1. Standard ACL reconstruction
2. Combined ACL reconstruction

Correction of the tibial slope

Uncommon for primary ACL grafting
Think it on failure and re rupture



Technique Chirurgicale





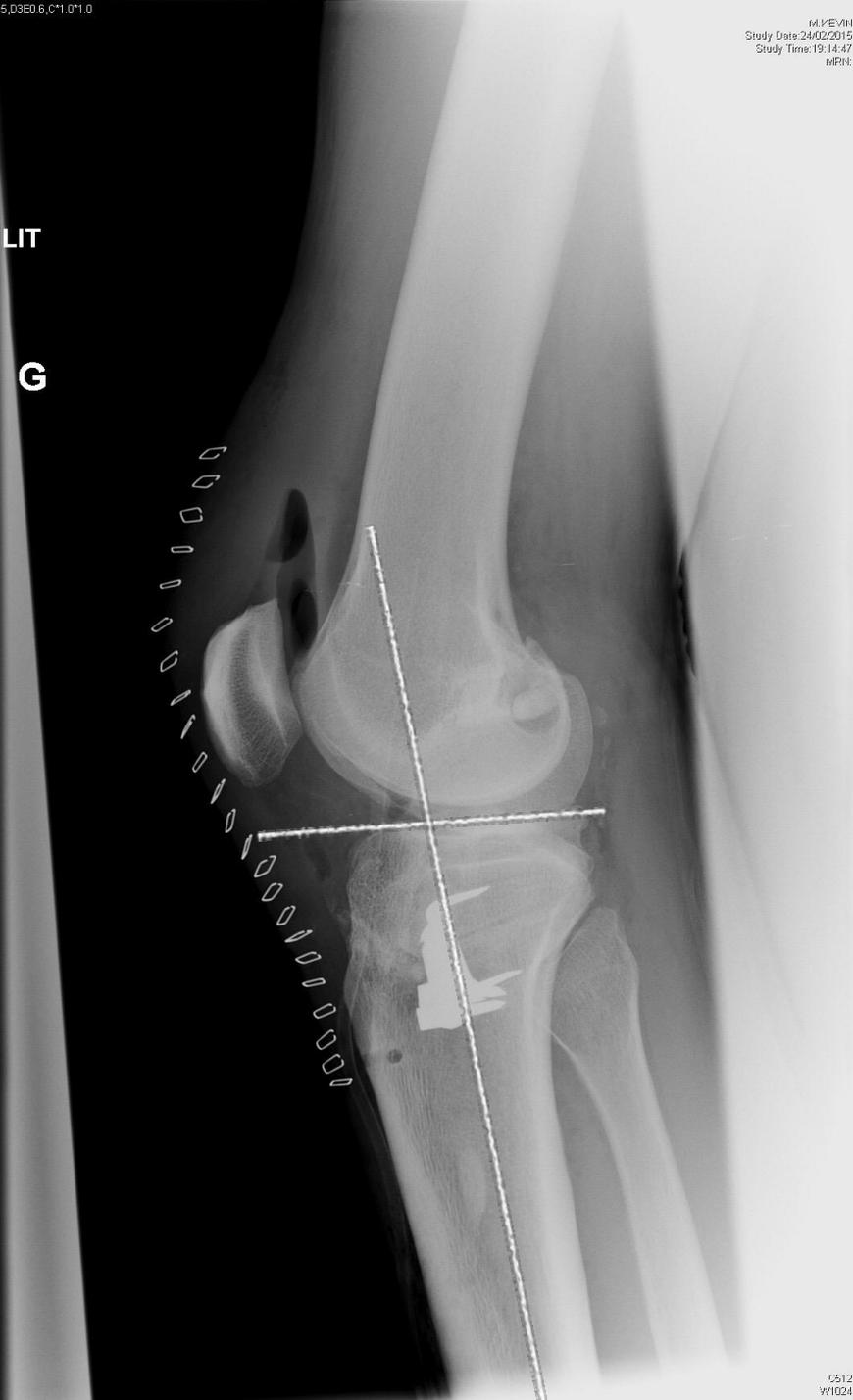






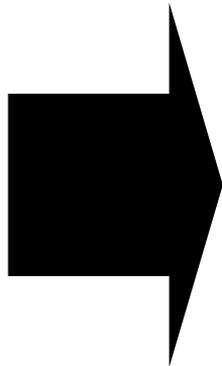
AU LIT

G



***Si déséquilibre
Frontal ou Sagittal***

La greffe isolée du LCA



• ECHEC

Analyse des déséquilibres

Frontal

Sagittal