

DIU
Arthroscopie



Anatomie et Biomécanique du LCP

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Introduction

Pivot central

Frein principal au tiroir postérieur en flexion

PAPL (LCL): frein principal au tiroir postérieur en extension

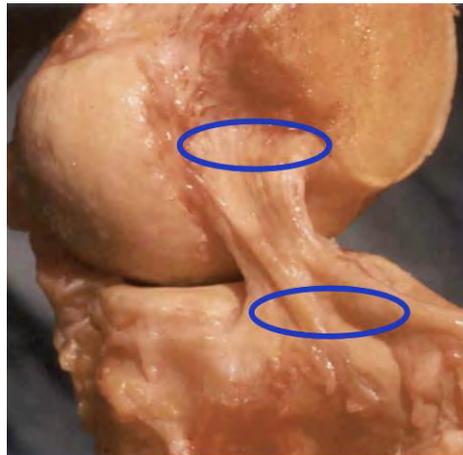
LMF: assistent le LCP



Anatomie macroscopique

Fosse (ou échancrure) intercondyalaire du fémur

Intra-articulaire mais extra-synovial



Harner 1995



Portion centrale

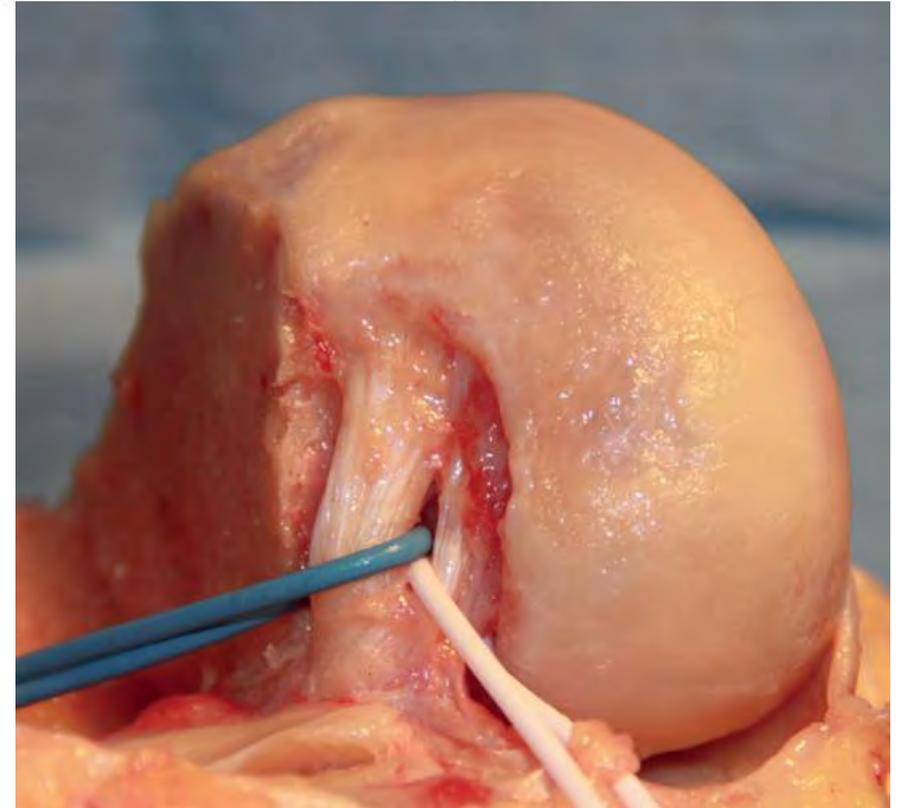
L=30-40 mm

l=11 mm

2 faisceaux:

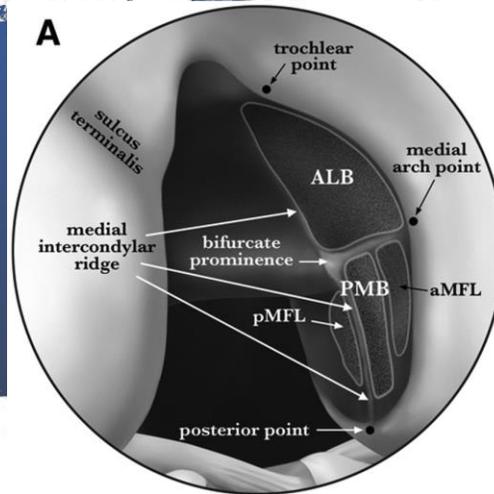
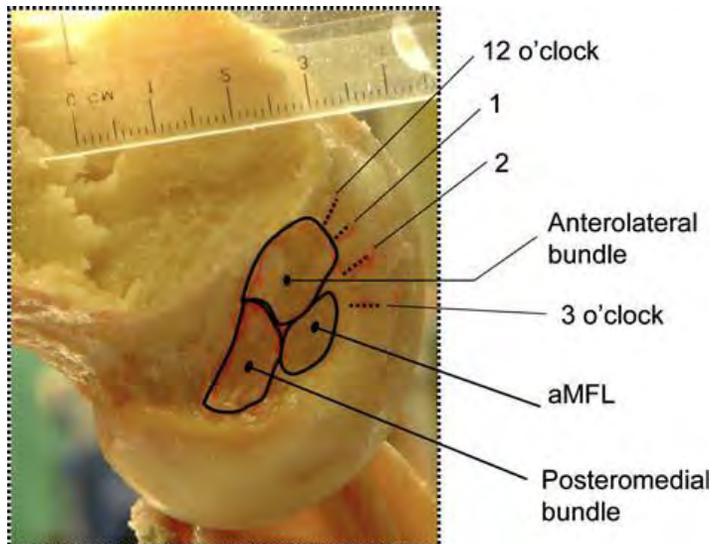
antéro-latéral (AL)

postéro-médial (PM)

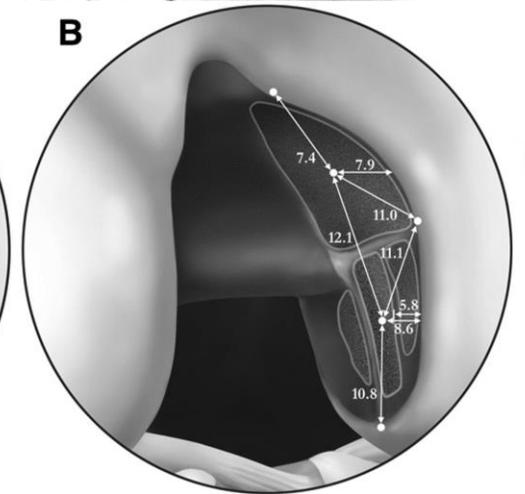


Insertion fémorale

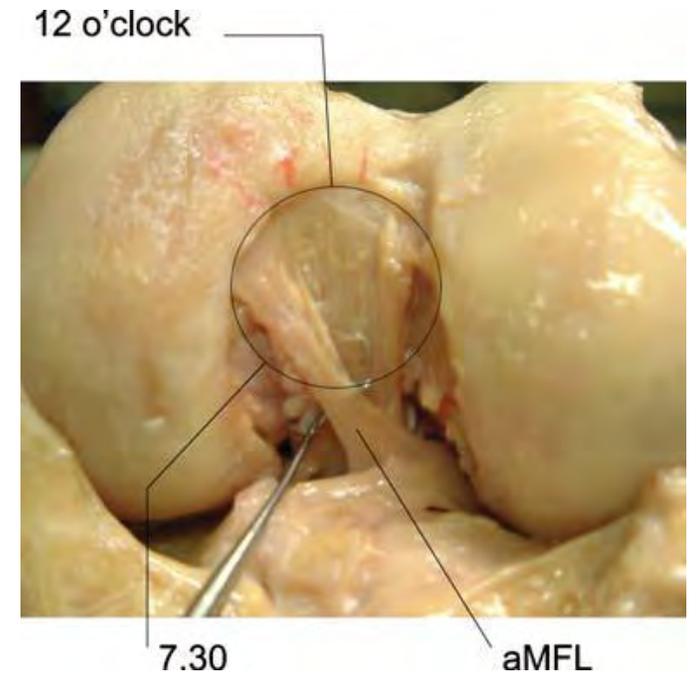
Face latérale du condyle médial
290 mm²



Laprade. 2015

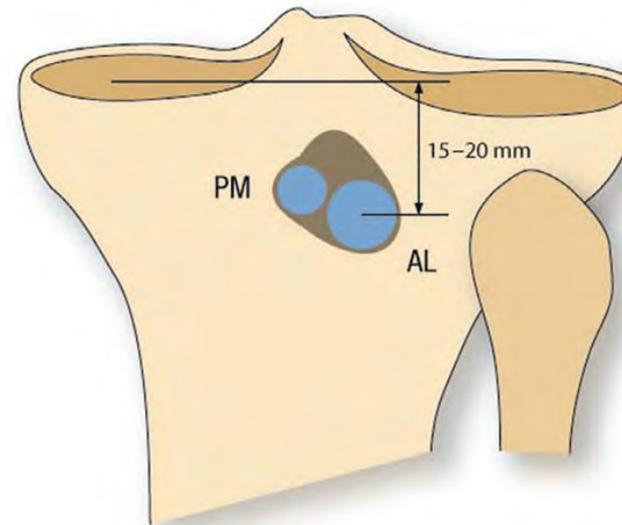
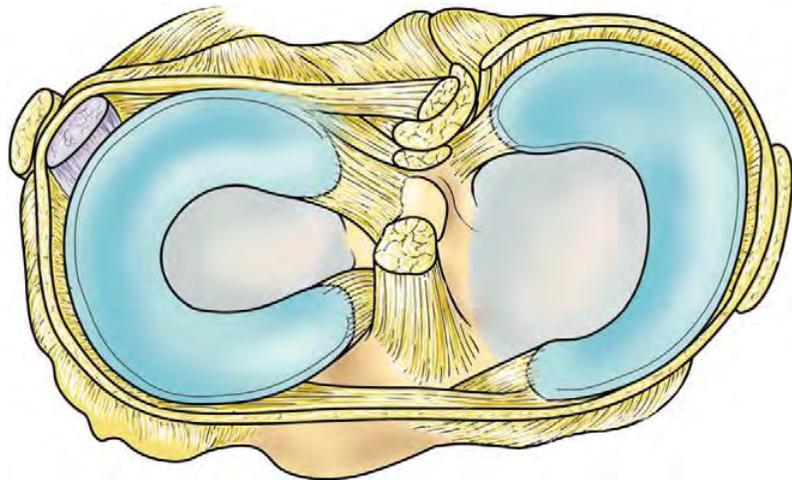


Amis. 2006



Insertion tibiale

190 mm²



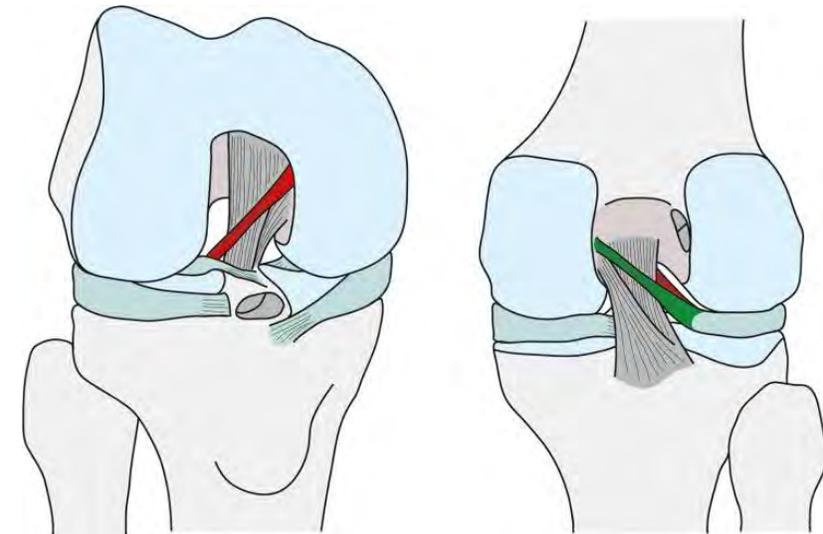
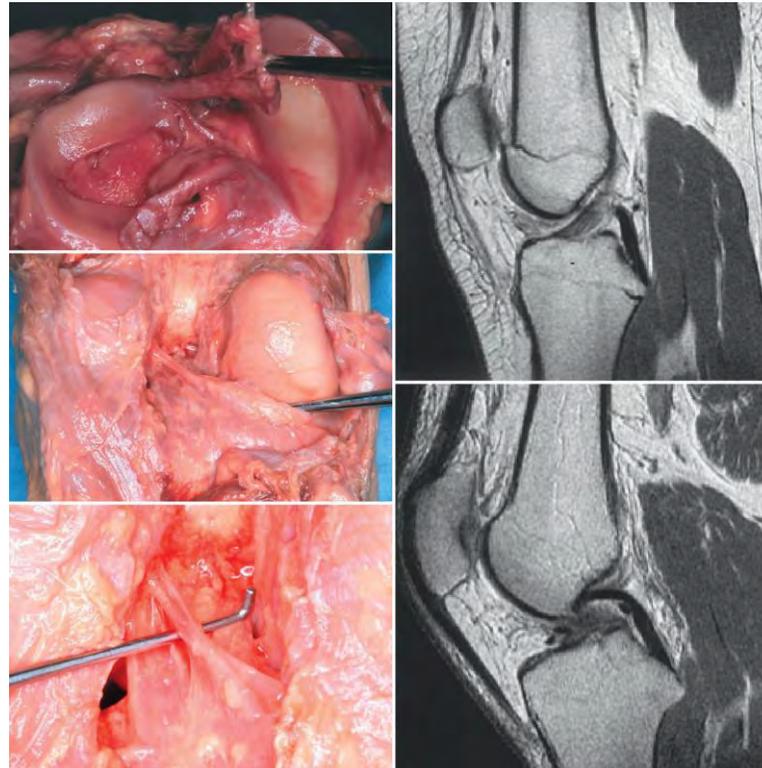
Ligaments ménisco-fémoraux

LMF antérieur (Humphry)

20% du LCP

LMF postérieur (Wrisberg)

25% du LCP



Rapport essentiel ++: artère poplitée

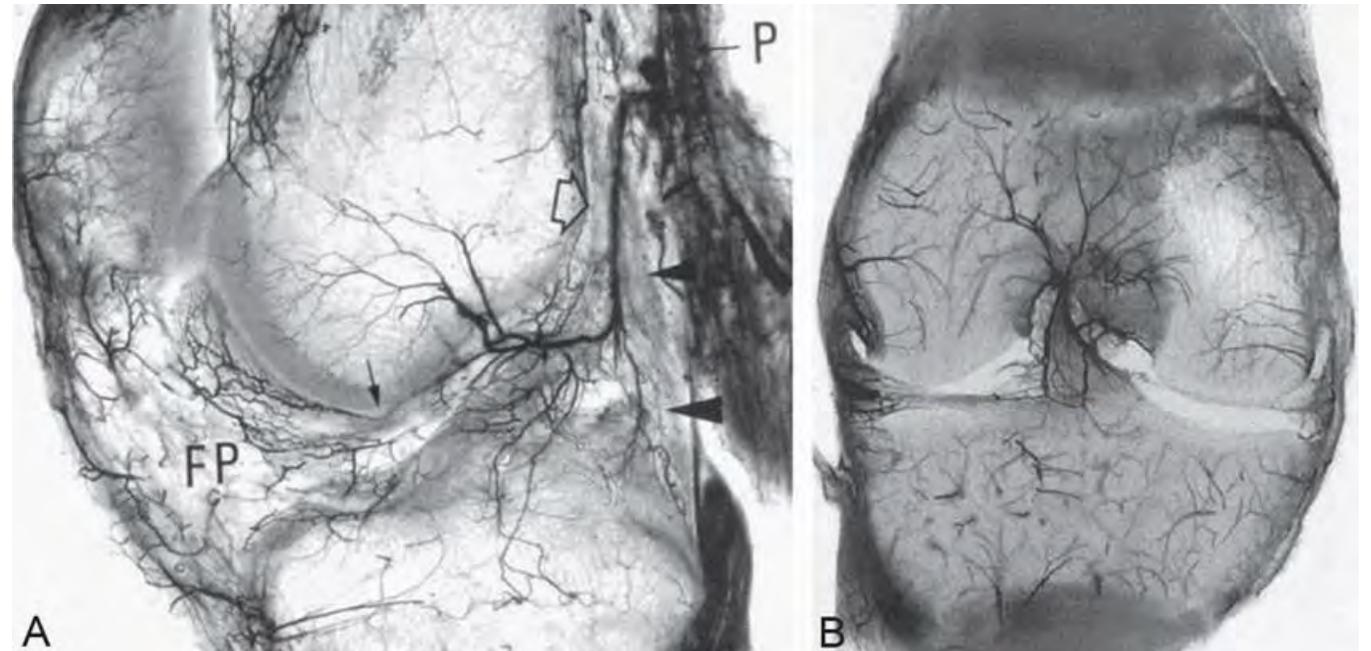
7,5 mm en extension

10 mm en flexion



Vascularisation

Portion avasculaire moyenne
Artère gémiculée moyenne
Artères gémiculées inférieures
Cicatrisation ++



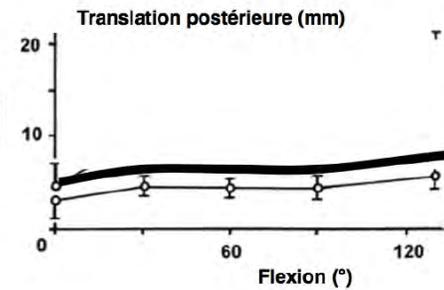
Biomécanique du LCP

Frein primaire au tiroir postérieur en flexion

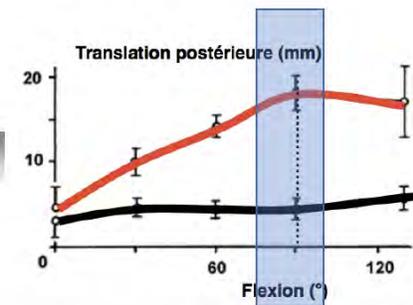
Frein au varus

Frein à la rotation latérale

LCP intact



LCP Rompu

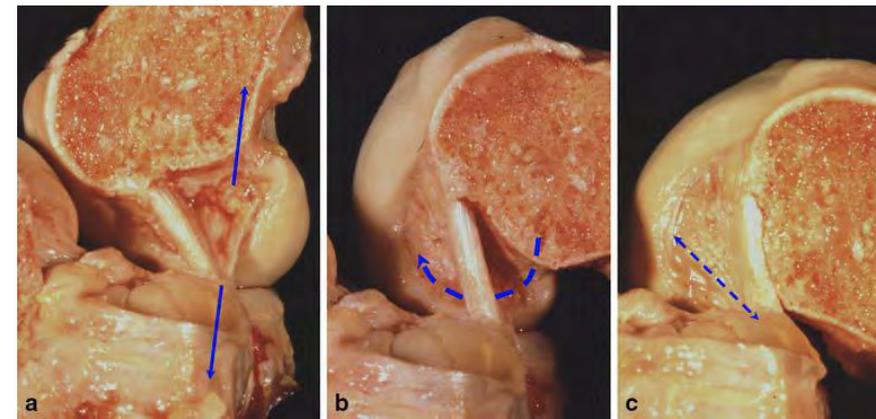
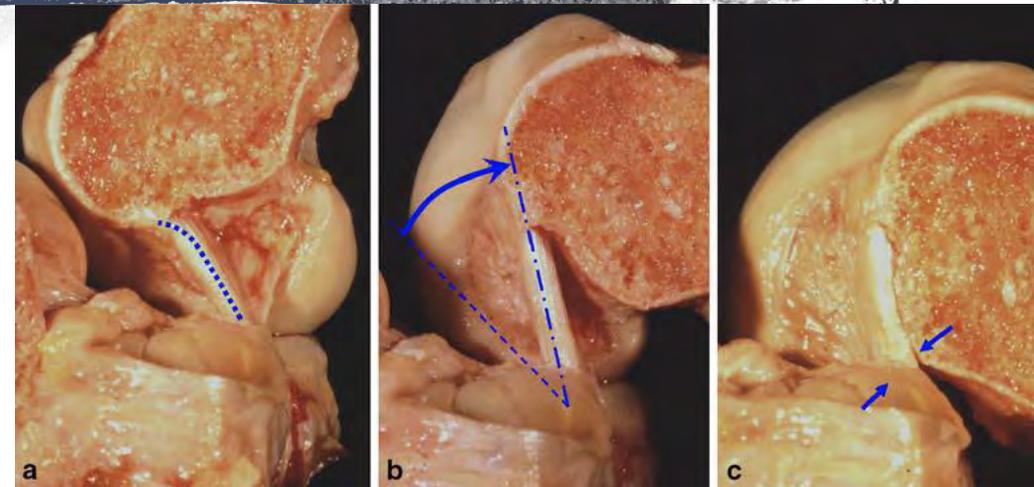
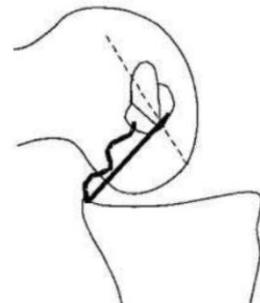
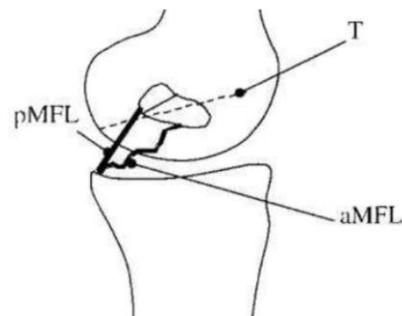


Biomécanique des faisceaux

Fx AL: tendu entre 30 et 90° de flexion

Fx PM: tendu en extension et en flexion complète

LMF: frein secondaire au TP

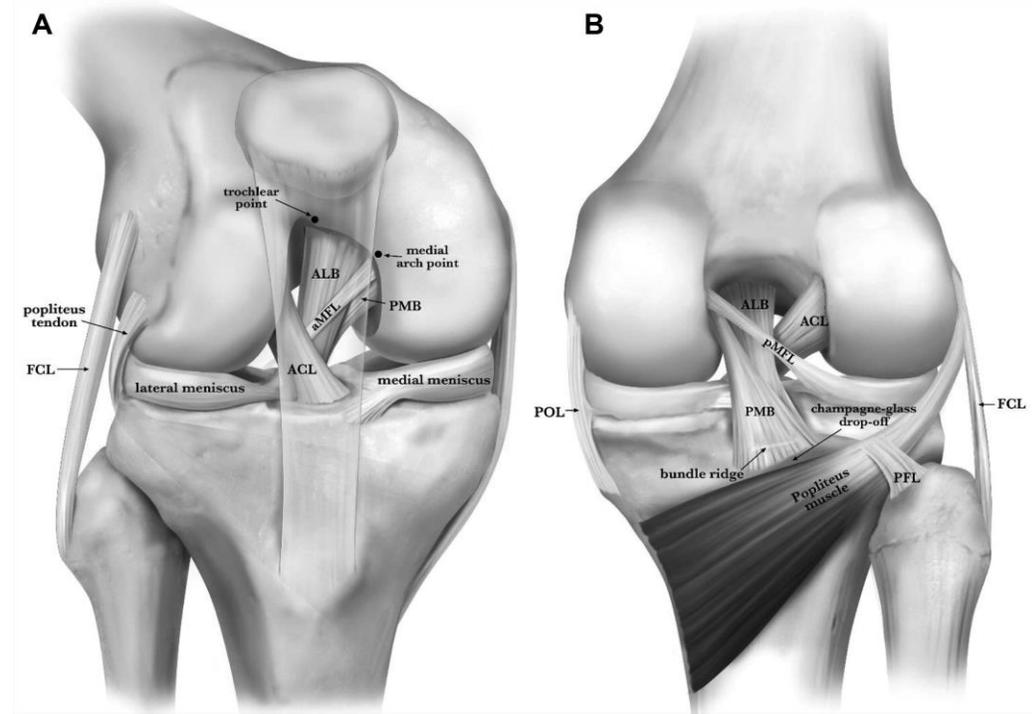


Amis. 2006

PAPL

Frein primaire à la rotation latérale (ligament poplitéo-fibulaire)

Frein primaire au TP en extension (LCL)



Conclusion

LCP: frein au tiroir postérieur en flexion, varus et RL

LMF: assistent le LCP

PAPL: frein au tiroir postérieur en extension



Merci