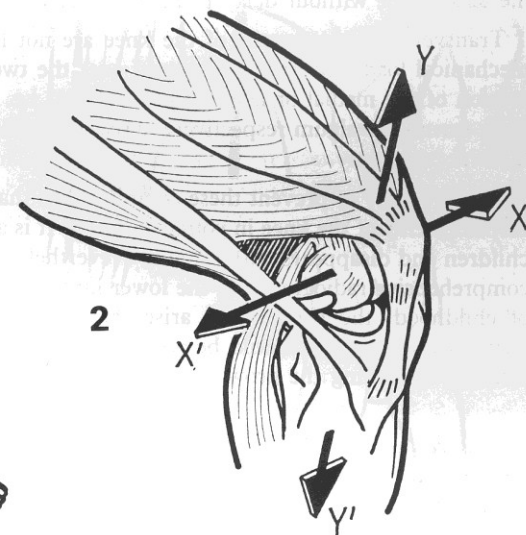
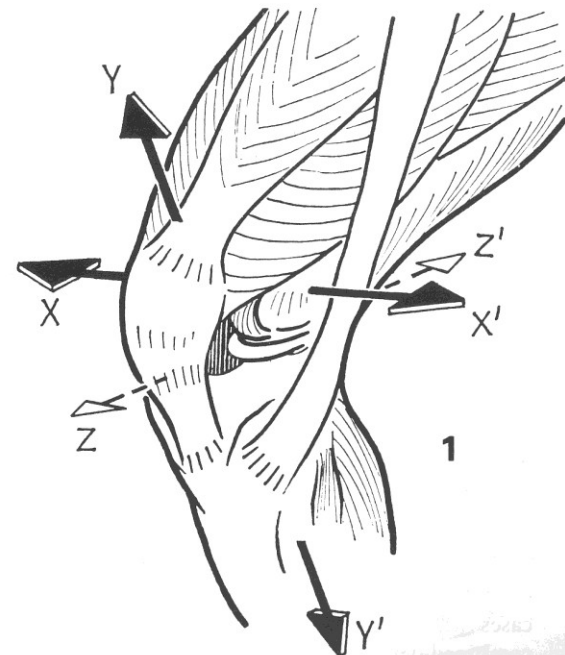
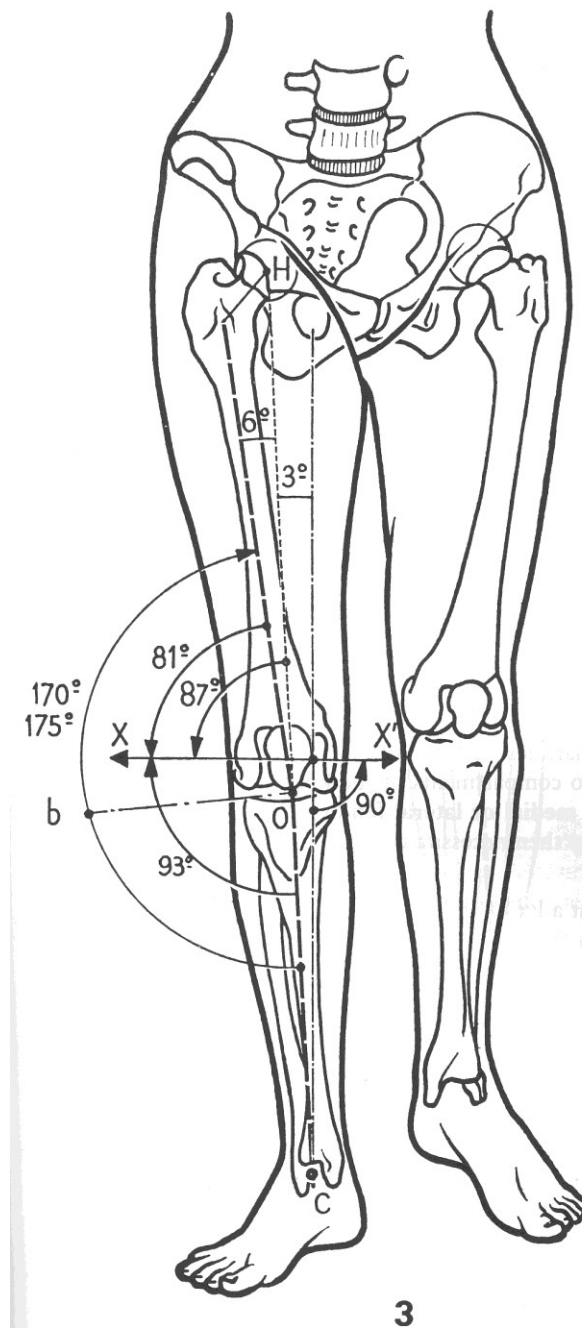


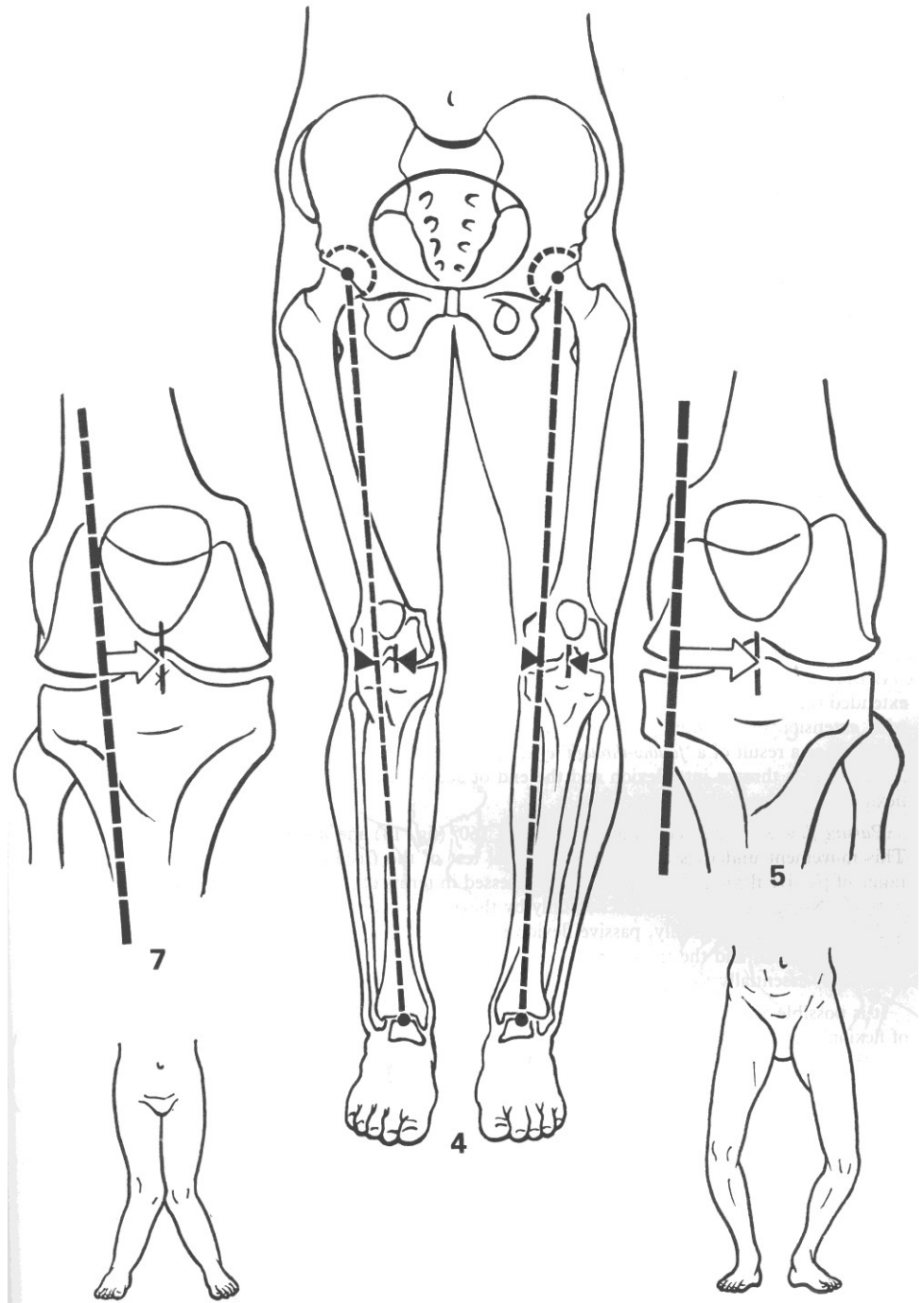
**APLIKOVANÁ
BIOMECHANIKA
kolenní kloub**

Kolenní kloub

- typ kloubu
- fyziologická valgozita
- mechanická osa pohybu



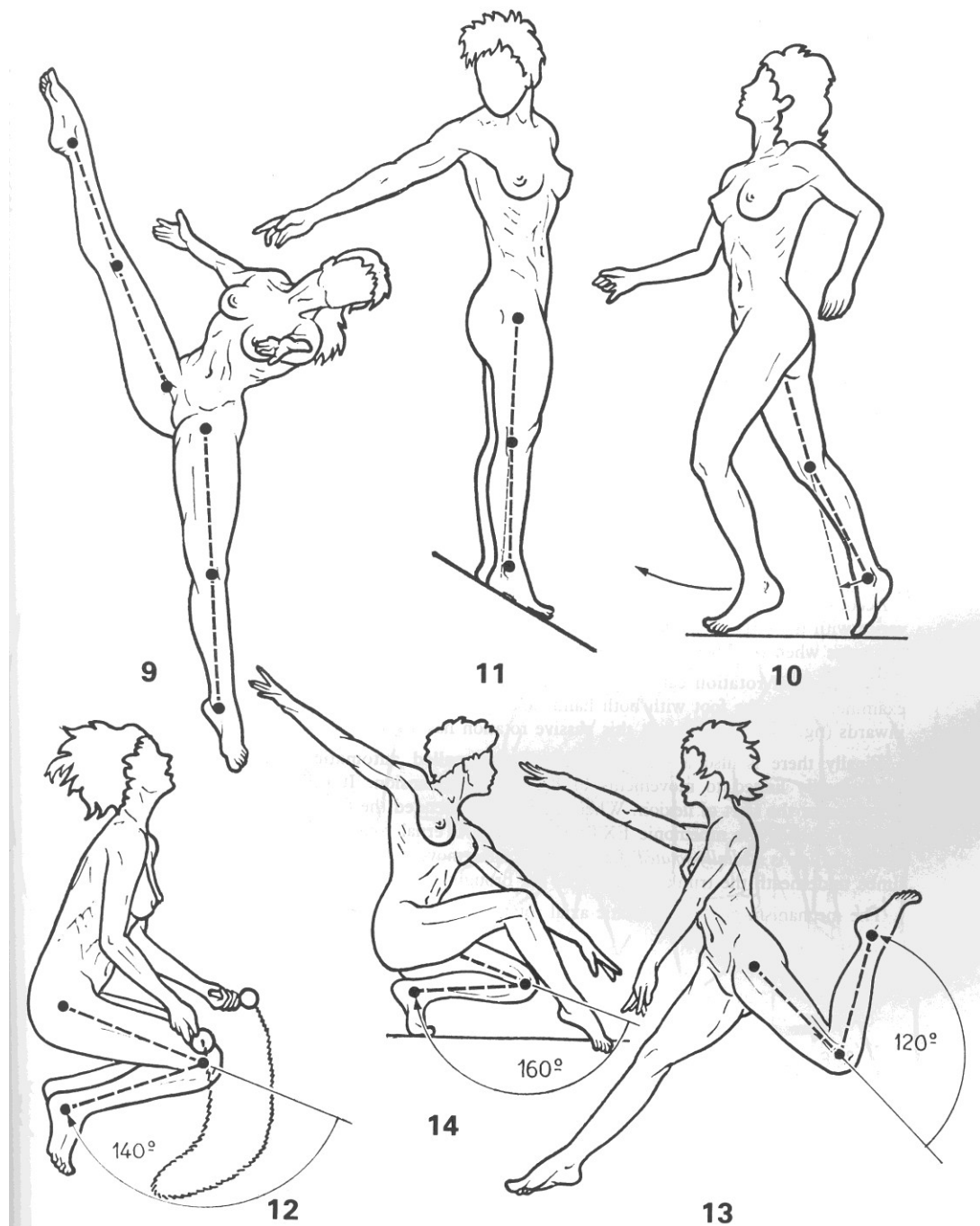
**Genu
valgum
/
genu
varum**



ROZSAH POHYBU

FLEXE

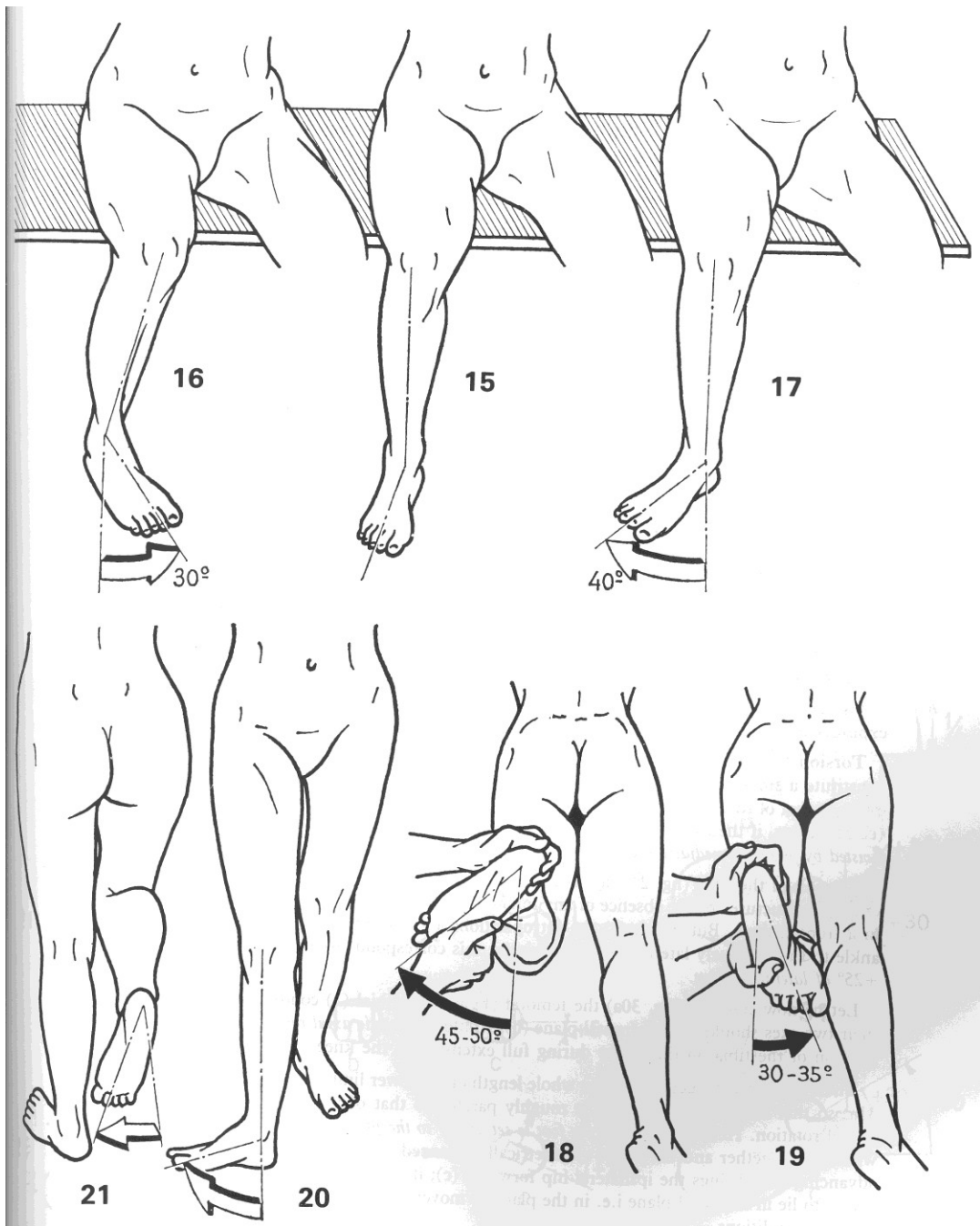
EXTENZE



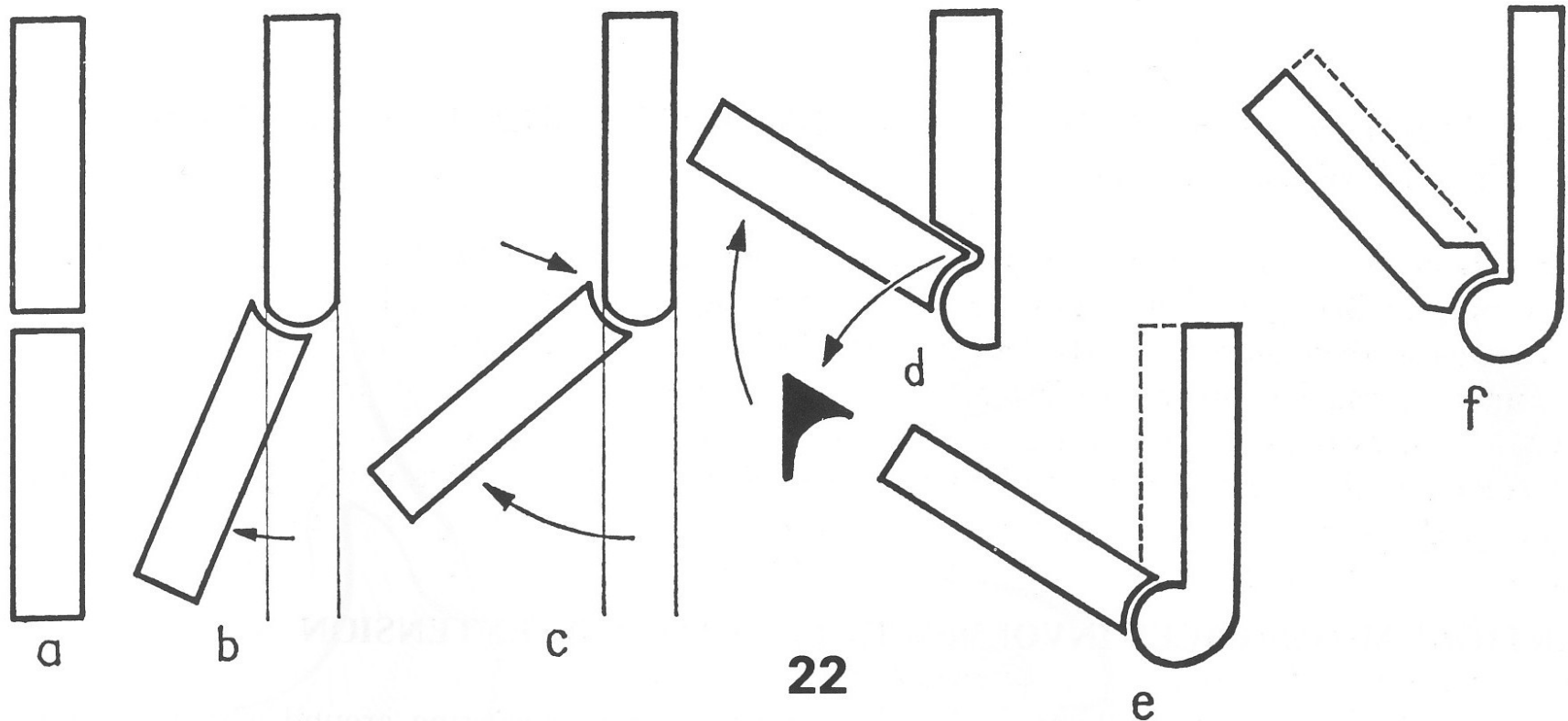
ROZSAH POHYBU

ROTACE

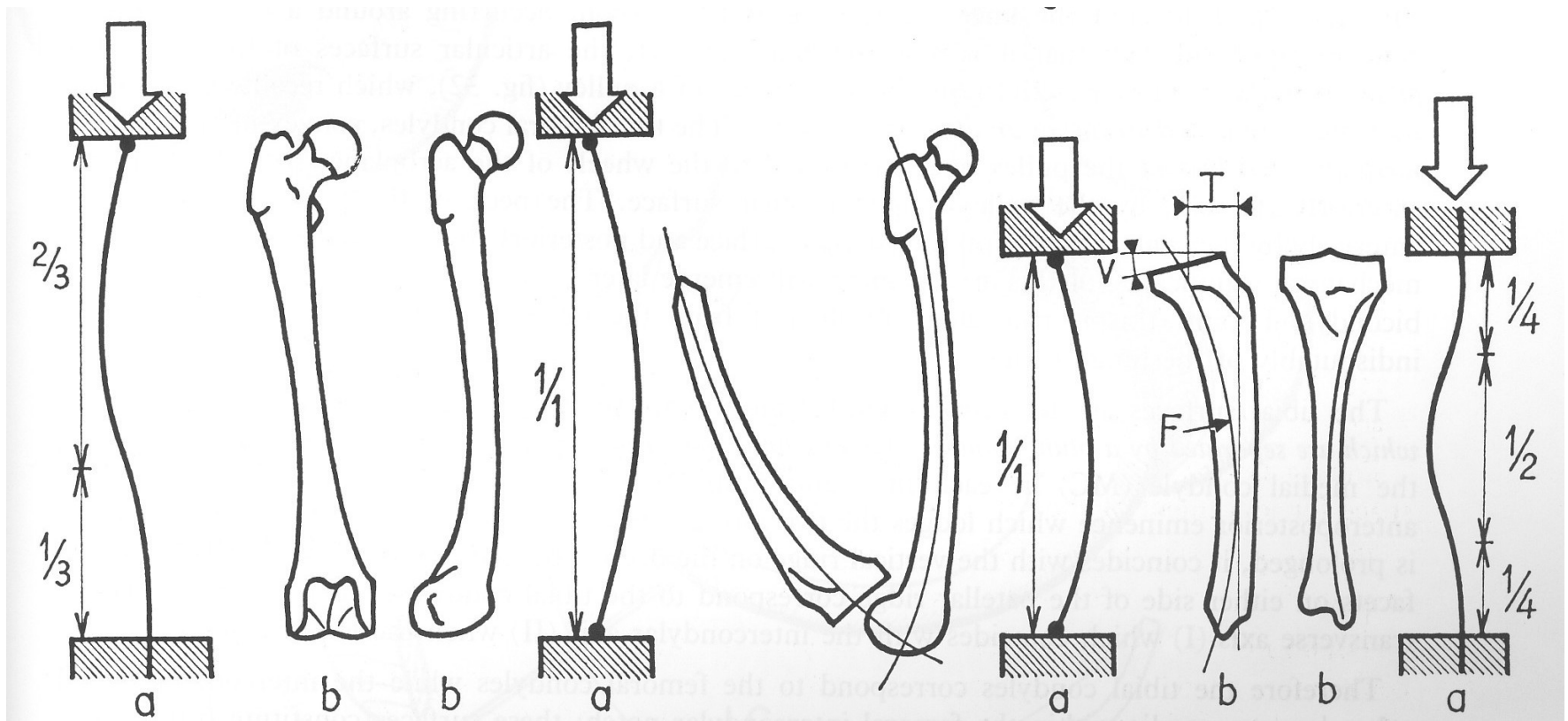
automatická rotace
během flexe/extenze
kolene



TVAR KLOUBNÍCH PLOCH

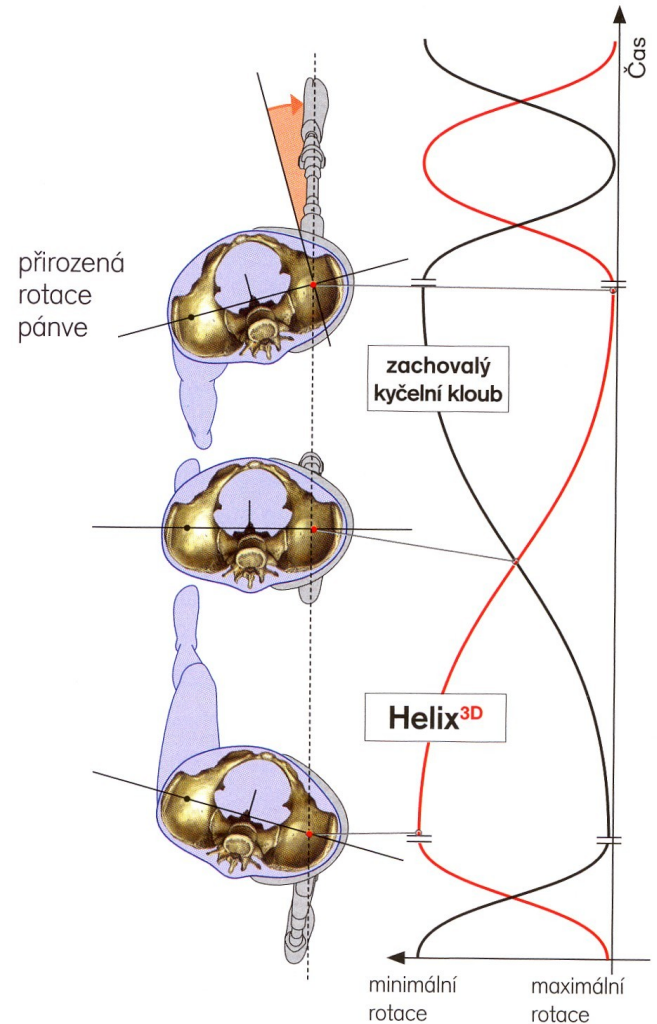


TVAR DIAFÝZY



POSTAVENÍ KLOUBNÍCH PLOCH

- ROTACE PÁNVE při chůzi (forward swing) + 30°



POSTAVENÍ KLOUBNÍCH PLOCH

- ROTACE PÁNVE

při chůzi (forward swing)
+ 30°

- TORZE FEMURU

+ 30°

- ÚHEL KRČKU FEM. S AP OSOU

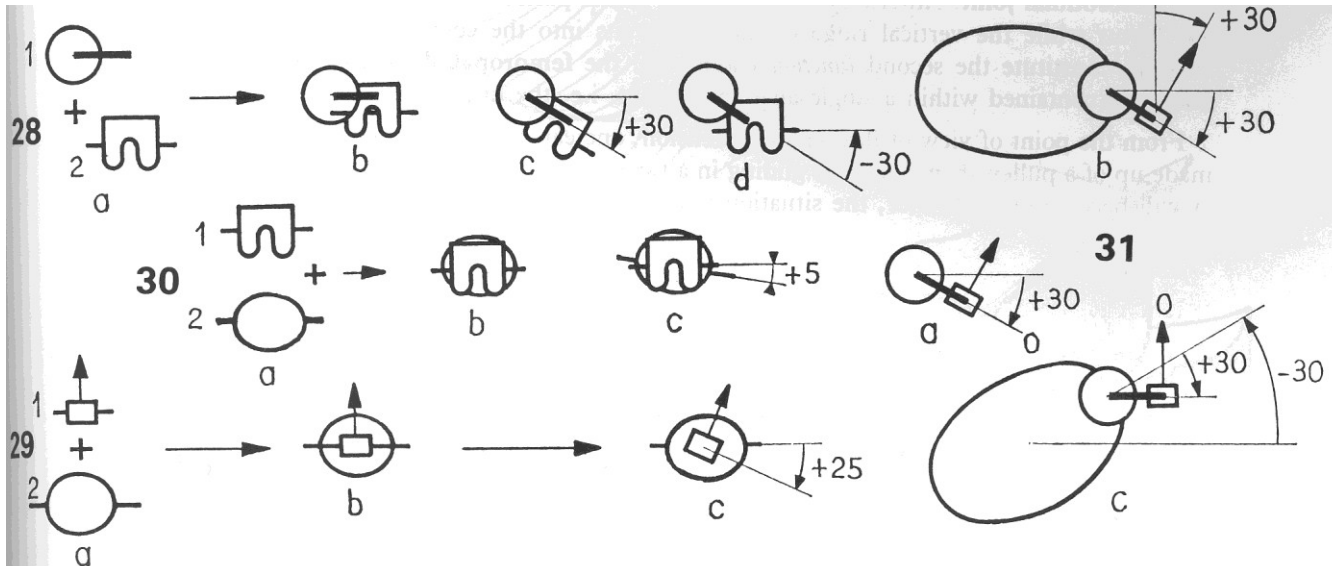
- 30°

- ROTACE KOLENE PŘI FLEXI

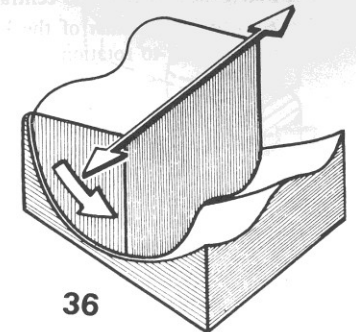
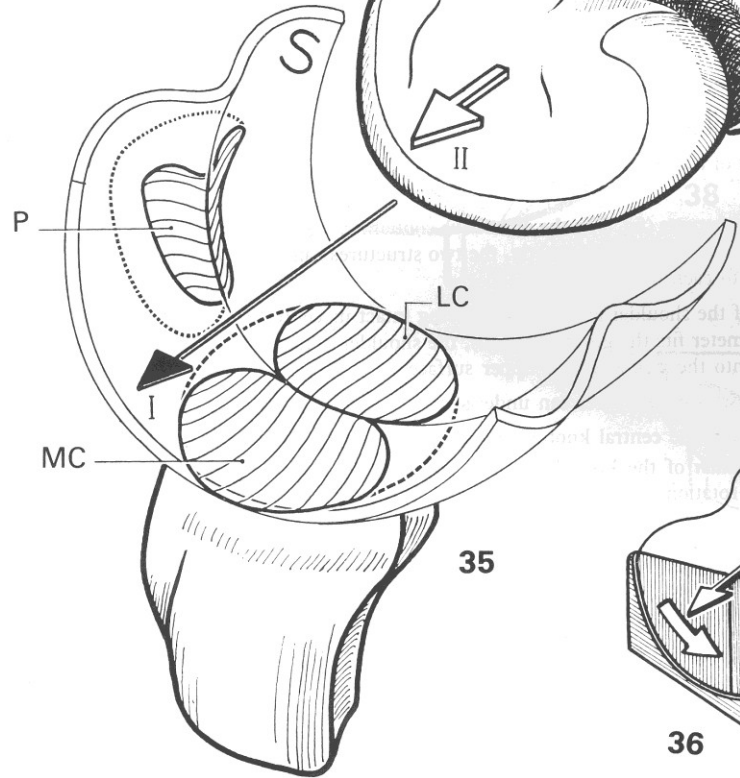
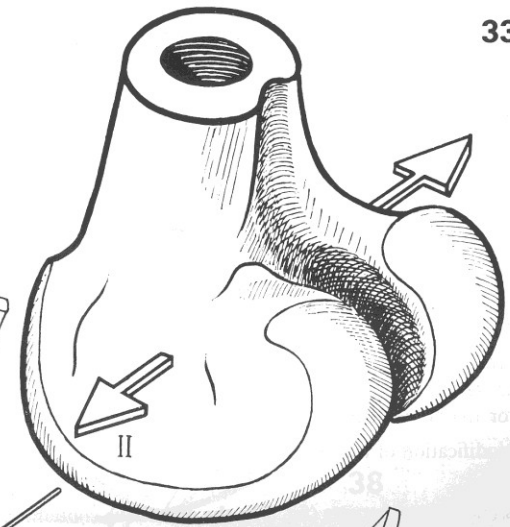
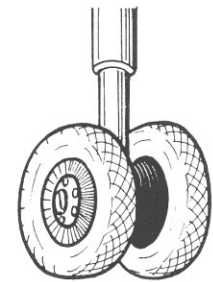
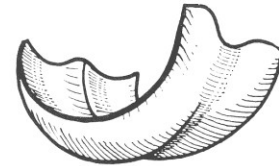
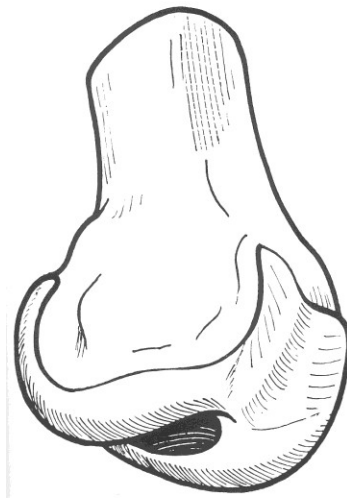
- 5°

- TORZE TIBIE

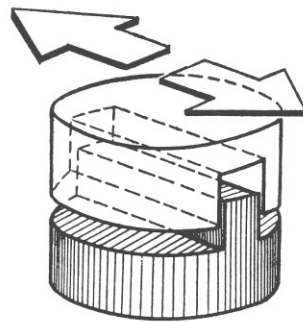
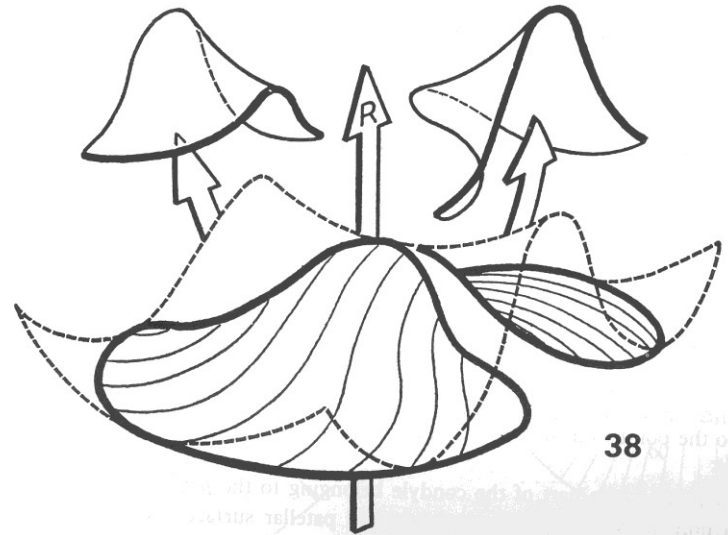
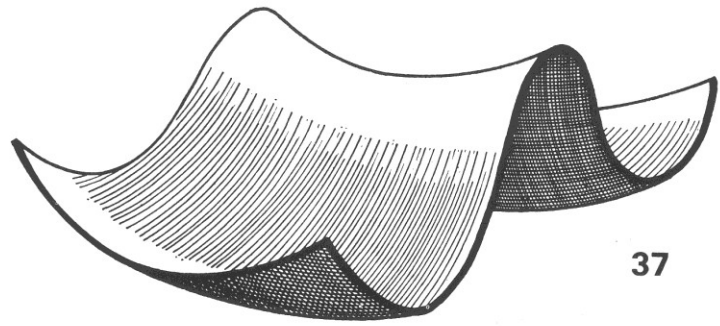
- 25°



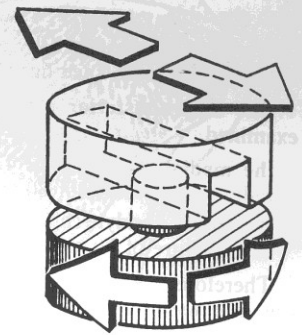
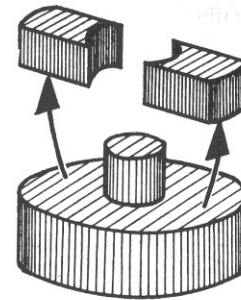
FLEXE / EXTENZE



AXIÁLNI ROTACE

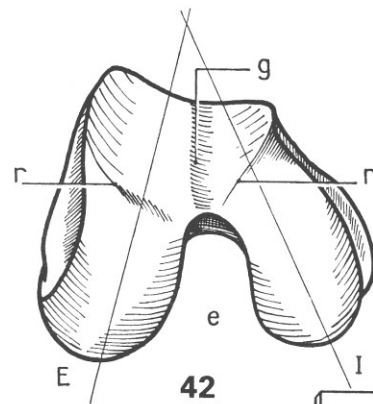


39

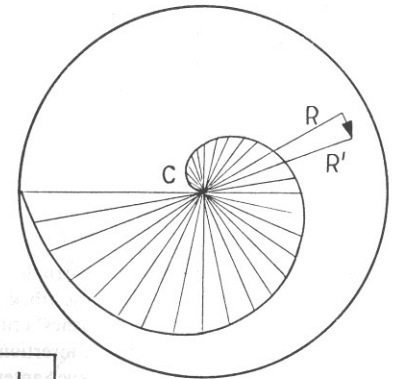


41

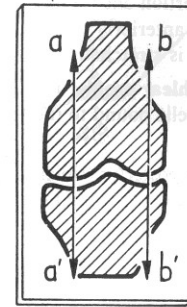
FEMORÁLNI VS. TIBIÁLNI KONDYLY



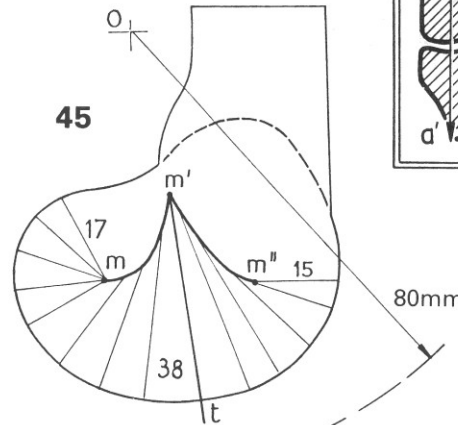
42



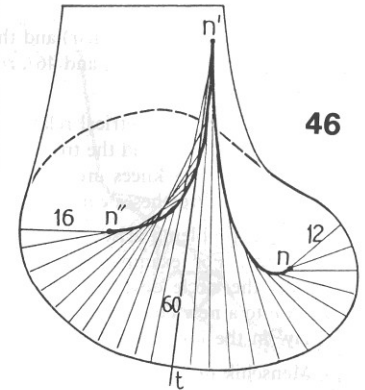
44



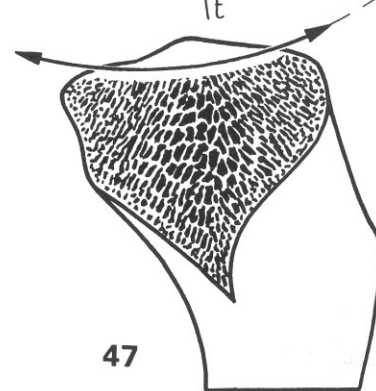
43



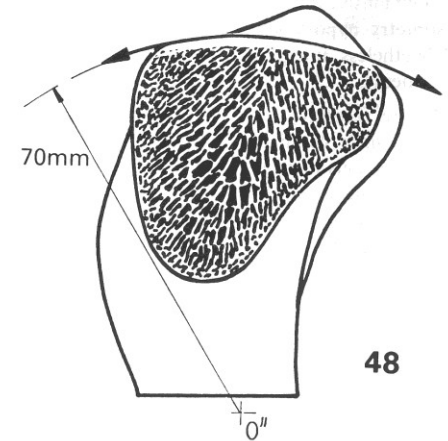
45



46

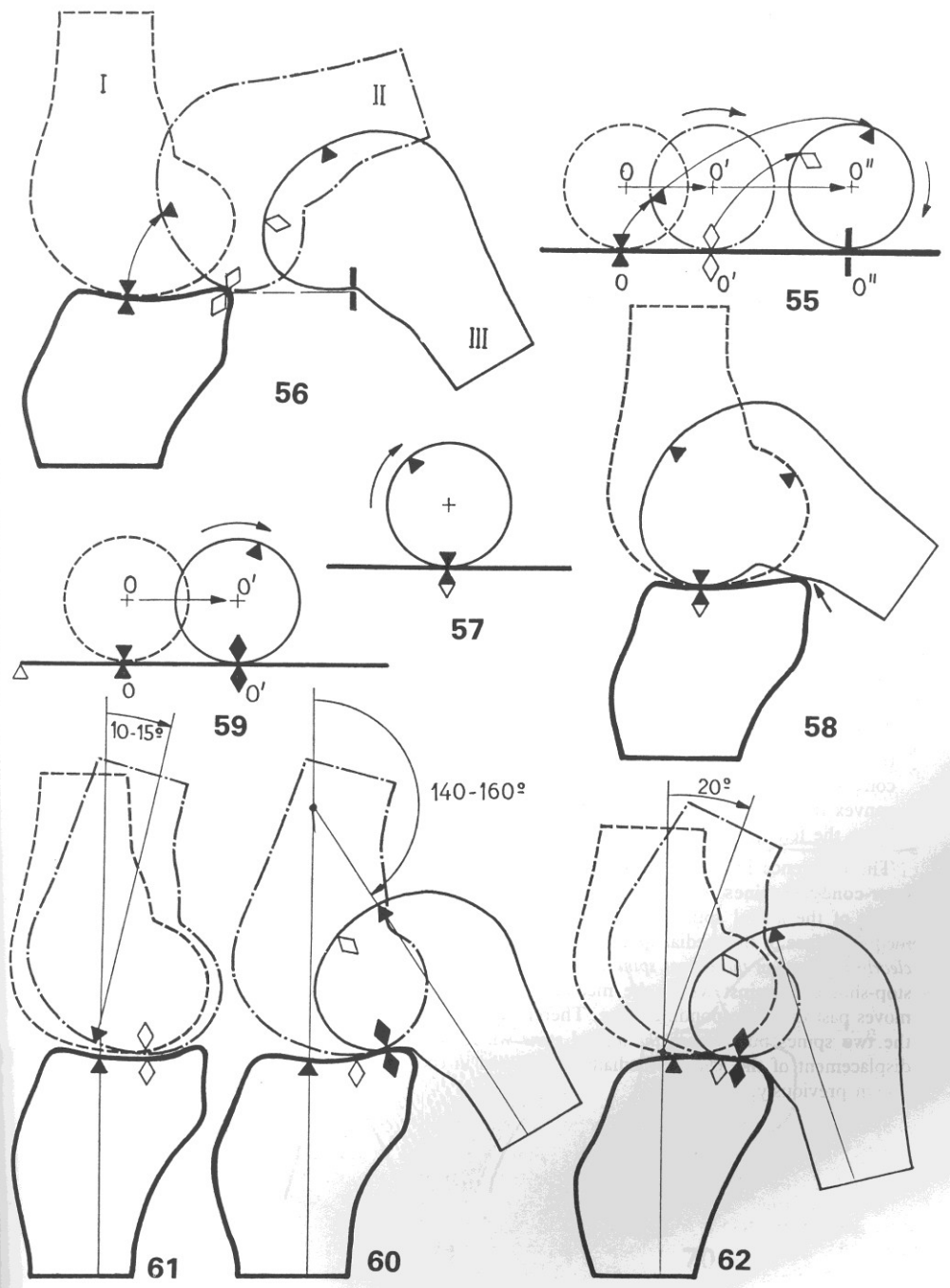


47

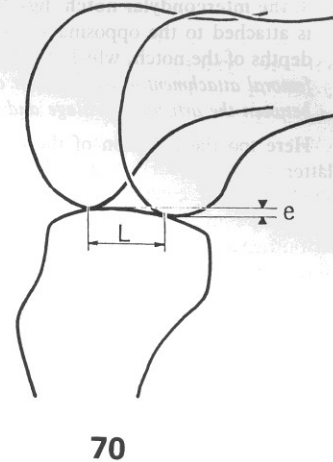
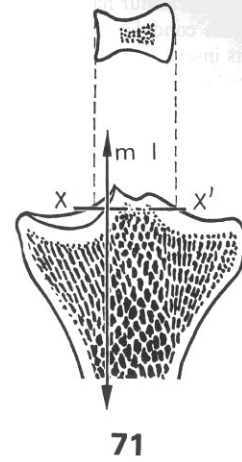
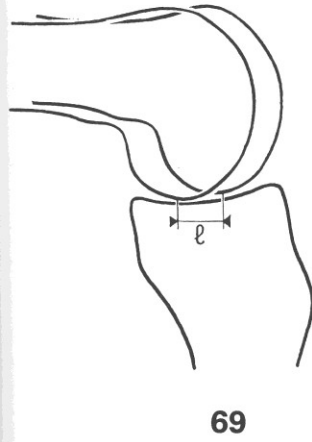
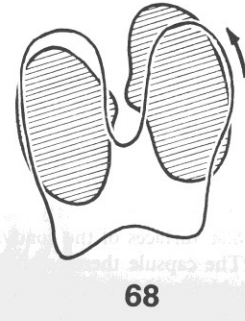
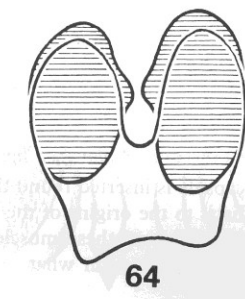
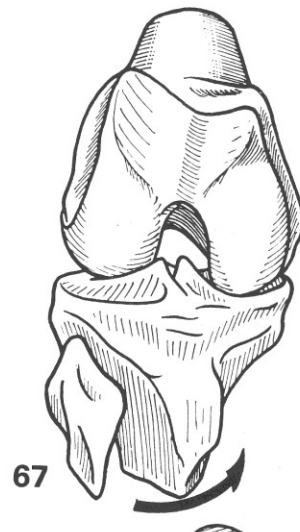
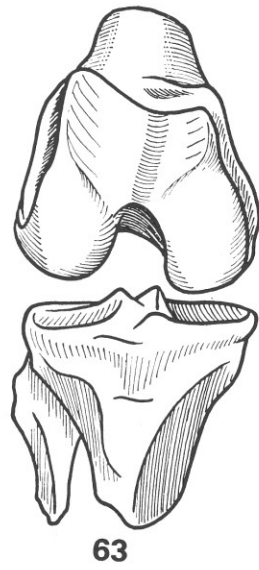
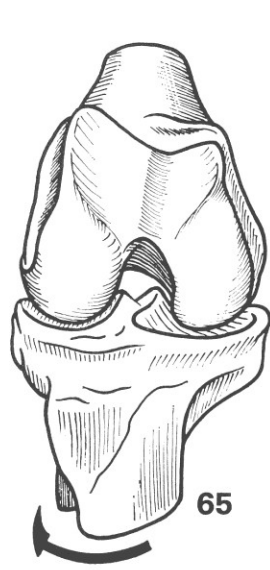


48

POSUVNÝ A VALIVÝ POHYB V PRŮBĚHU FLEXE/EXTENZE

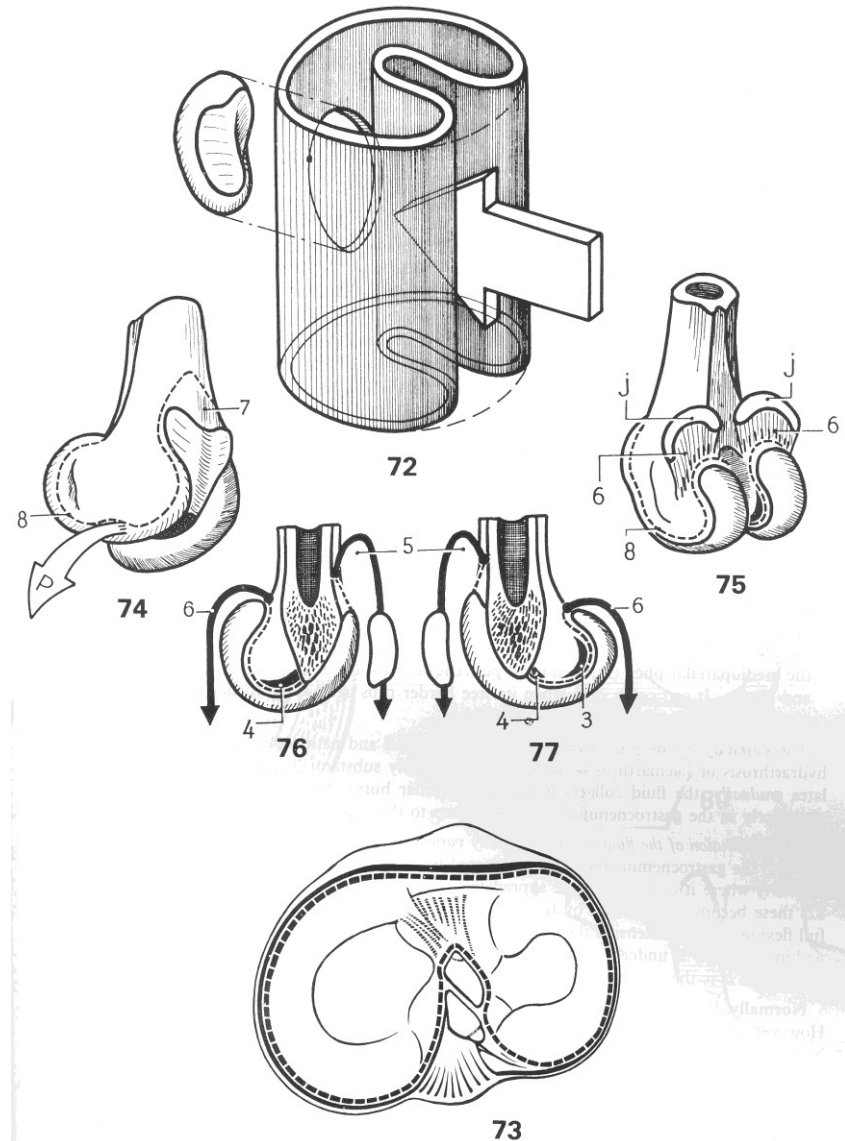


POHYBY KONDYLŮ V PRŮBĚHU AXIÁLNÍ ROTACE



KLOUBNÍ POUZDRO

- suprapatelární recesus
- parapatelární recesus
- kondylární část

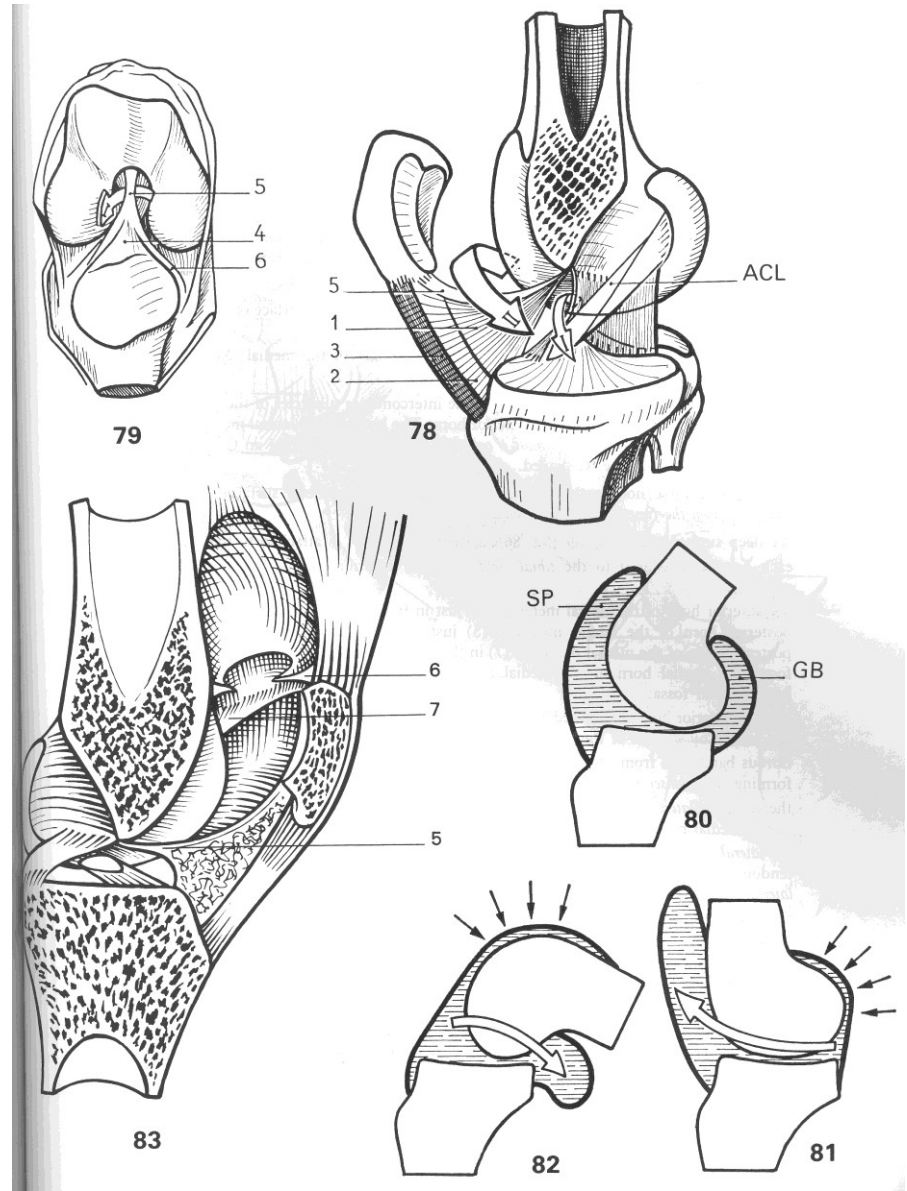


KLOUBNÍ POUZDRO

- infrapatelární plica

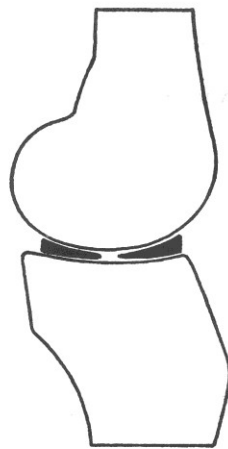
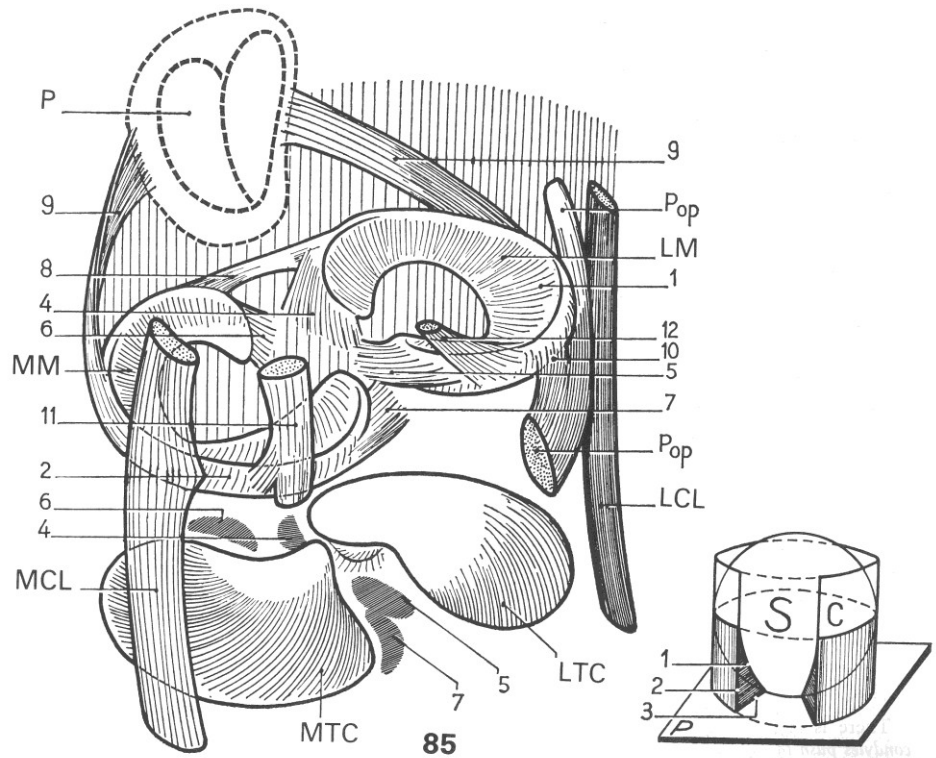
- suprapatelární plica

- mediopatelární plica

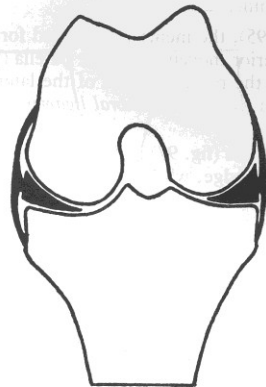


MENISKY

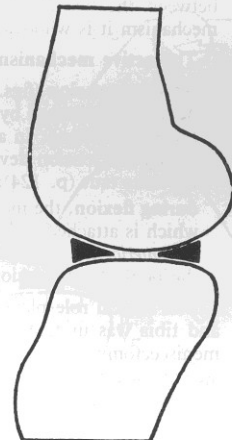
JEJICH ÚPONY, VZTAH KE SVALŮM



87



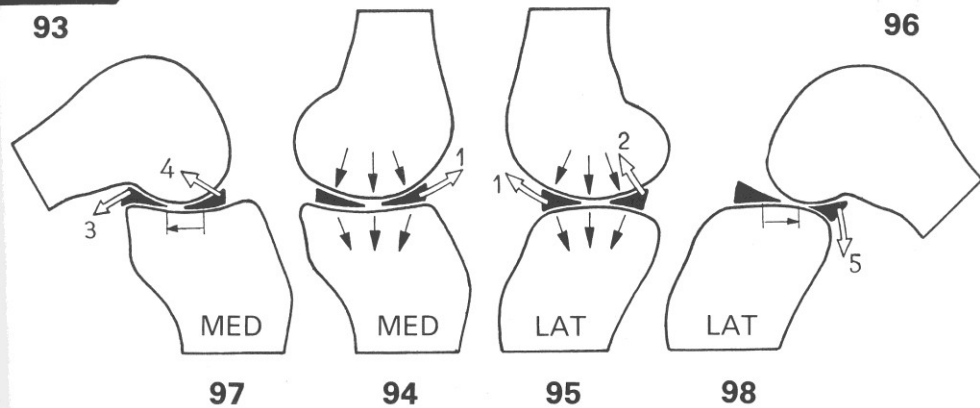
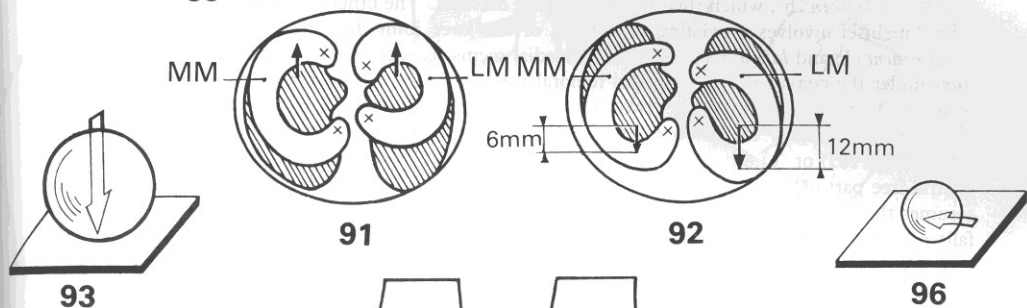
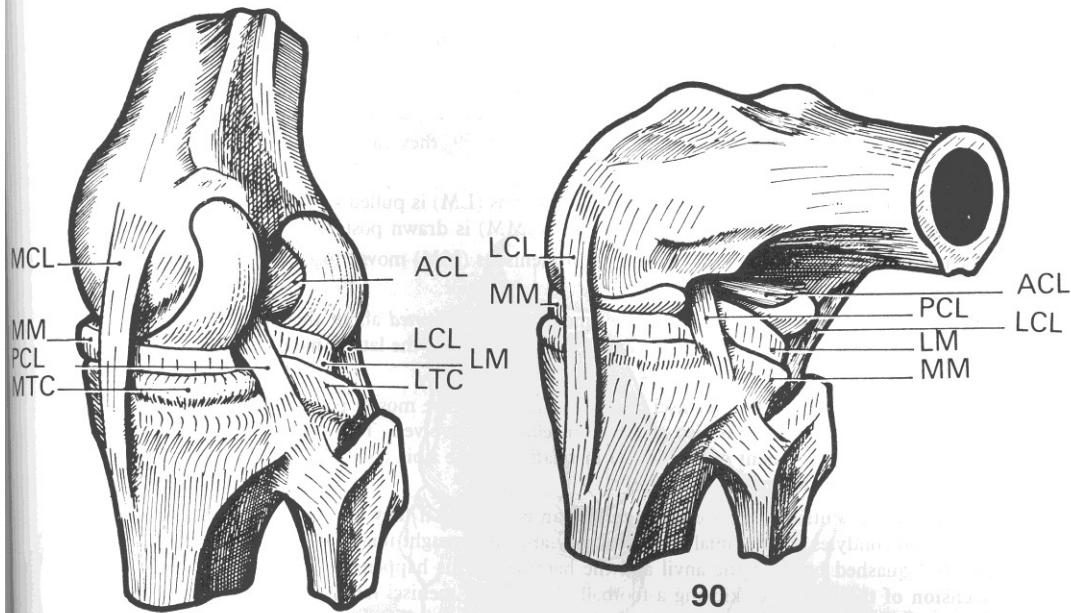
86



88

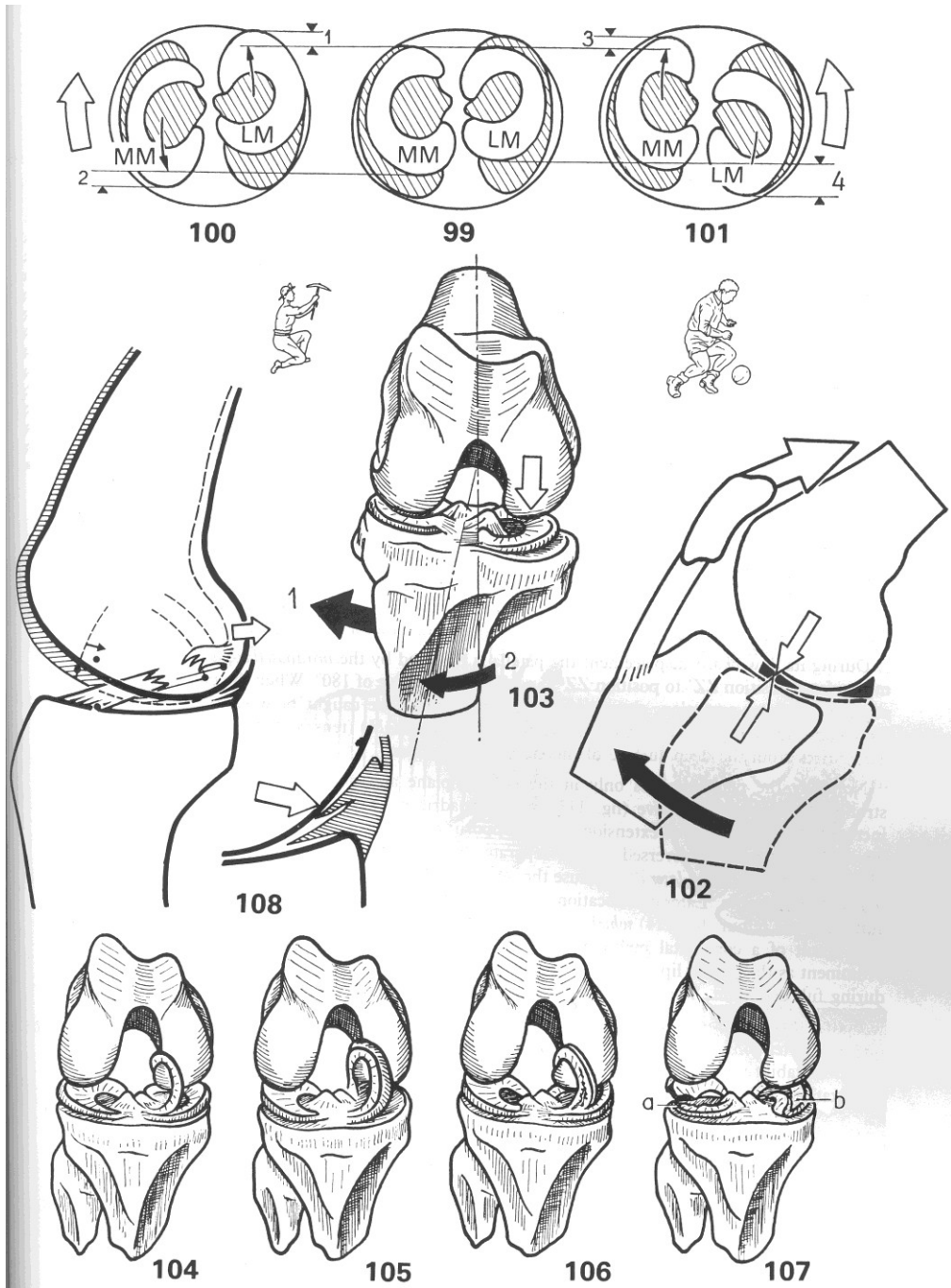
POHYBY MENISKŮ

FLEXE / EXTENZE

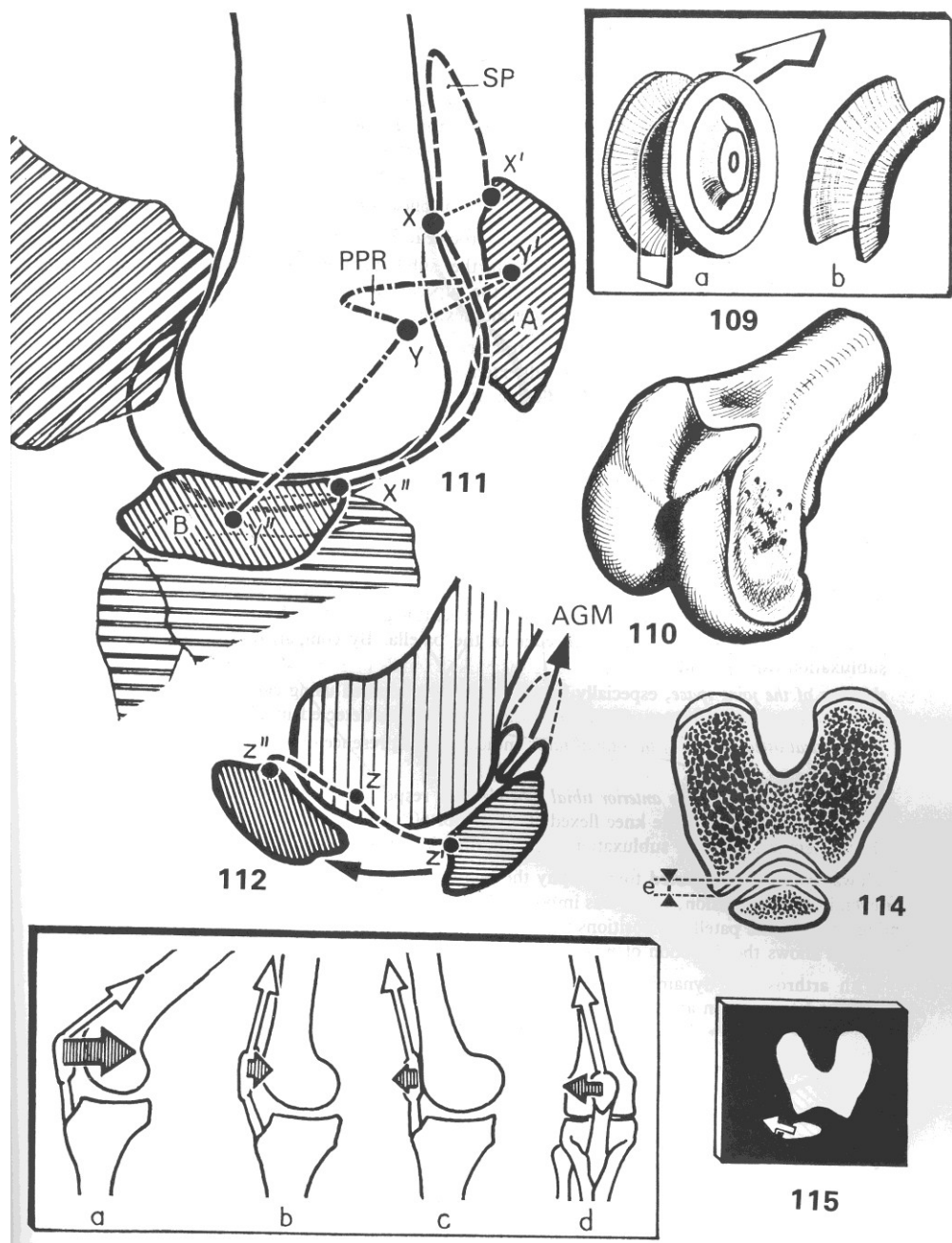


POHYBY MENISKŮ

AXIÁLNÍ ROTACE

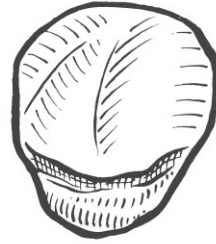
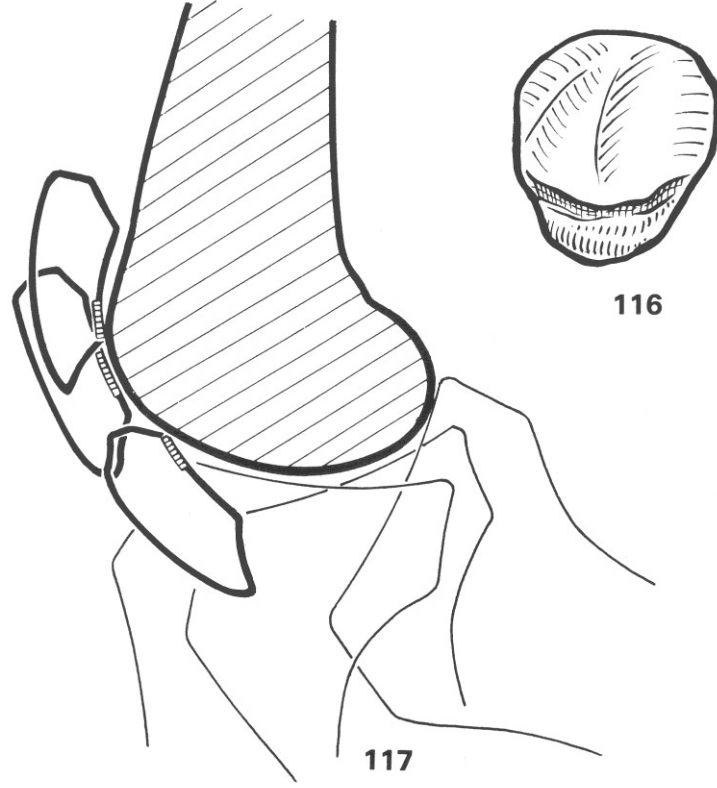
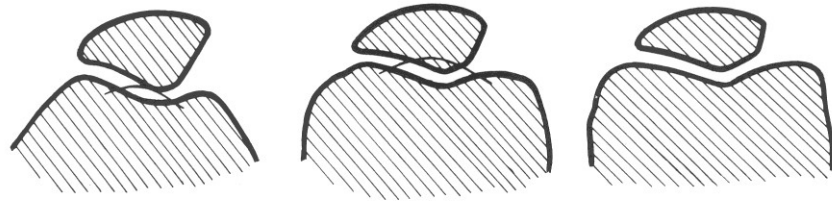


POHYBY PATELY LATERÁLNÍ DEVIACE, SUPRAPATELÁRNÍ BURZA



VZTAH

FEMUR - PATELA



PLOCHONOŽÍ



LATERÁLNÍ
ROTACE TIBIE



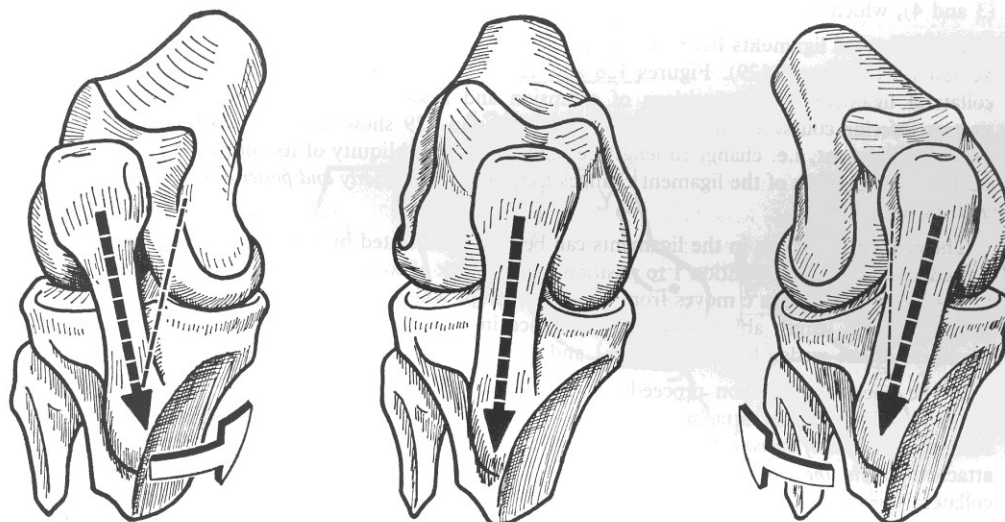
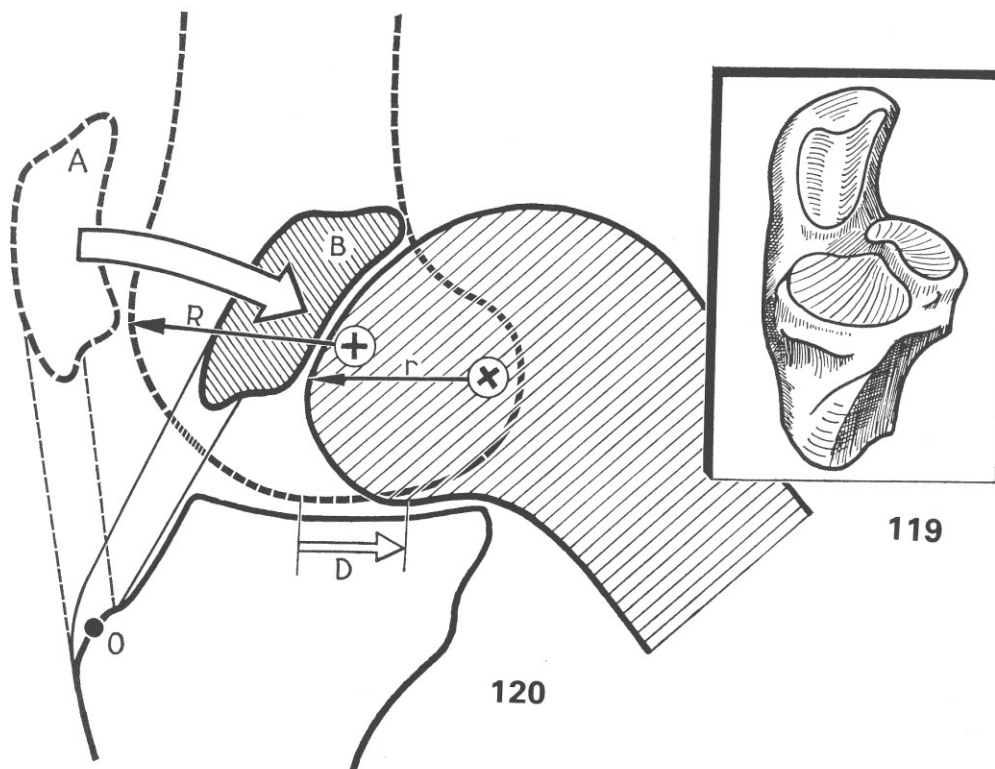
ZMĚNA ÚHLU
PATELLÁRNÍH
O LIGAMENTA



SUBLUXACE
PATELY



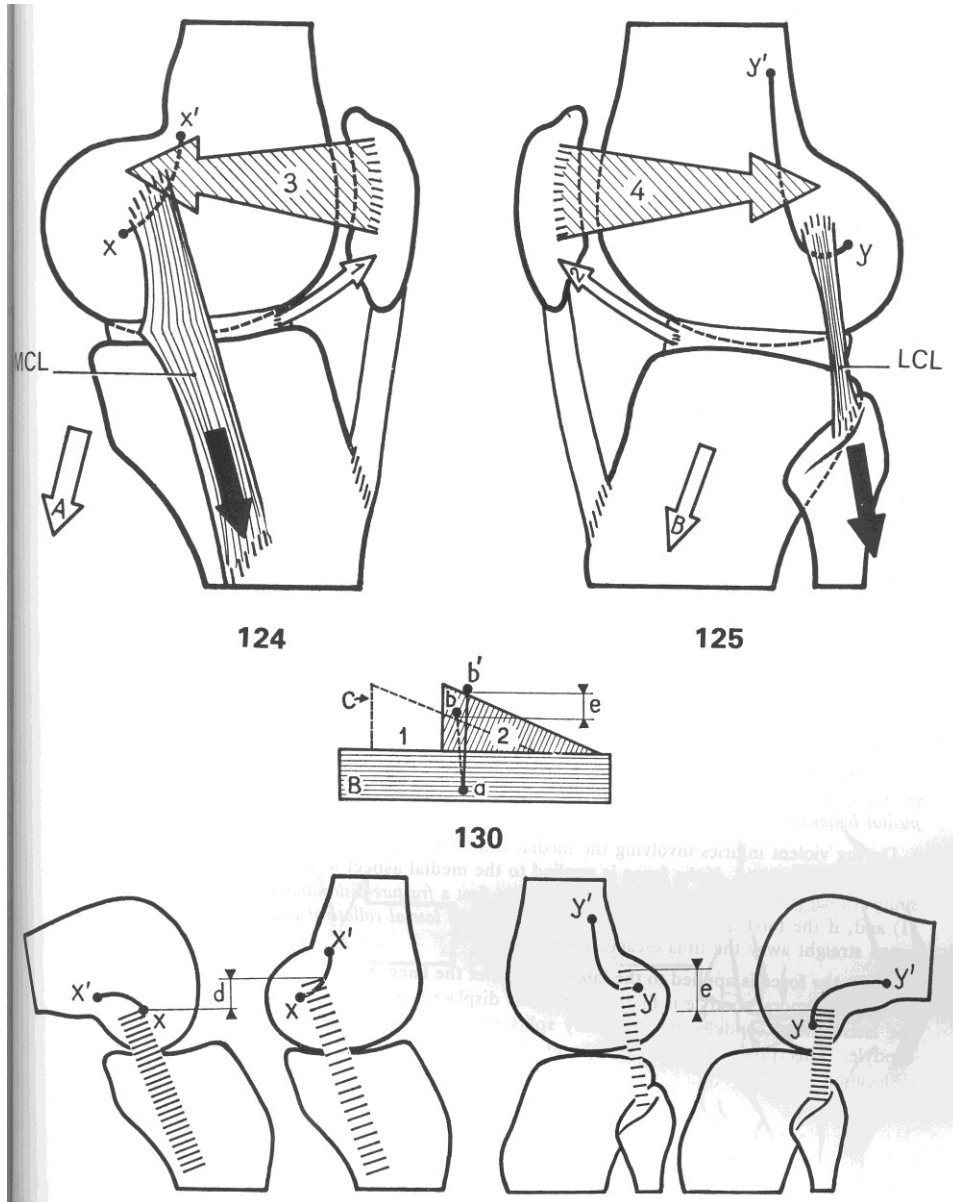
PATELLÁRNÍ
SYNDROMY



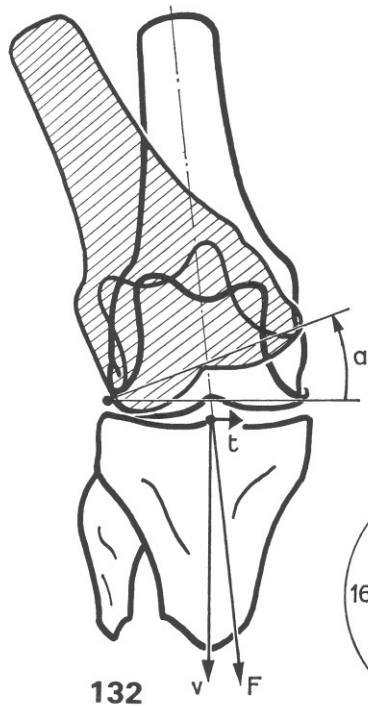
KOLATERÁLNÍ LIGAMENTA

FLEXE - EXTENZE
NAPĚTÍ - UVOLNĚNÍ

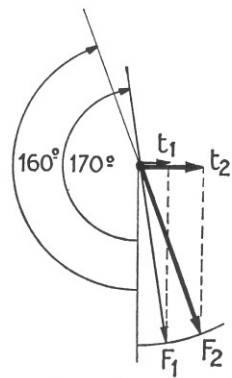
PRŮBĚH



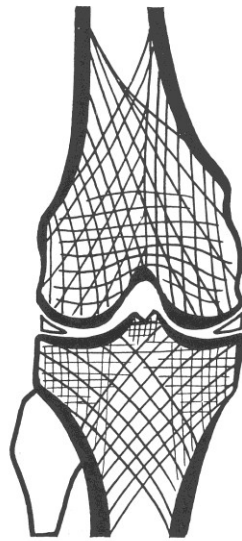
TRANSVERZÁLNÍ STABILITA KOLENE



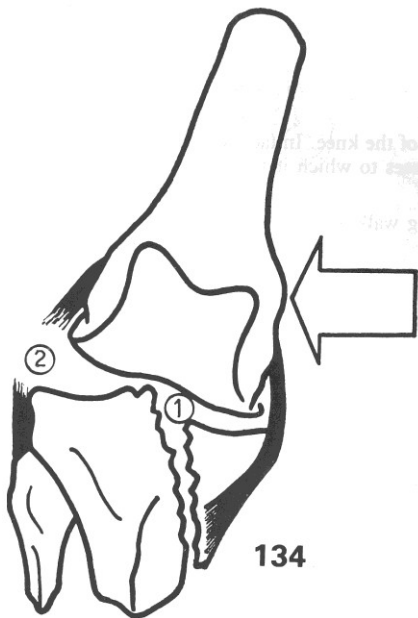
132



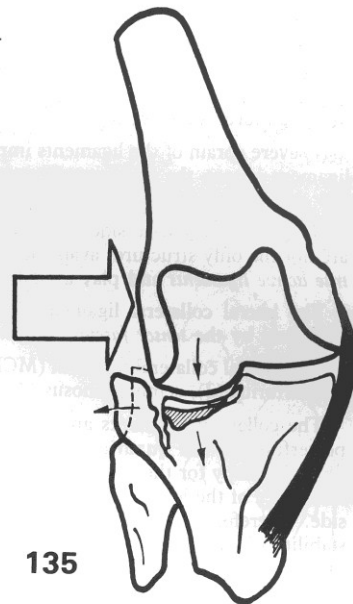
133



131

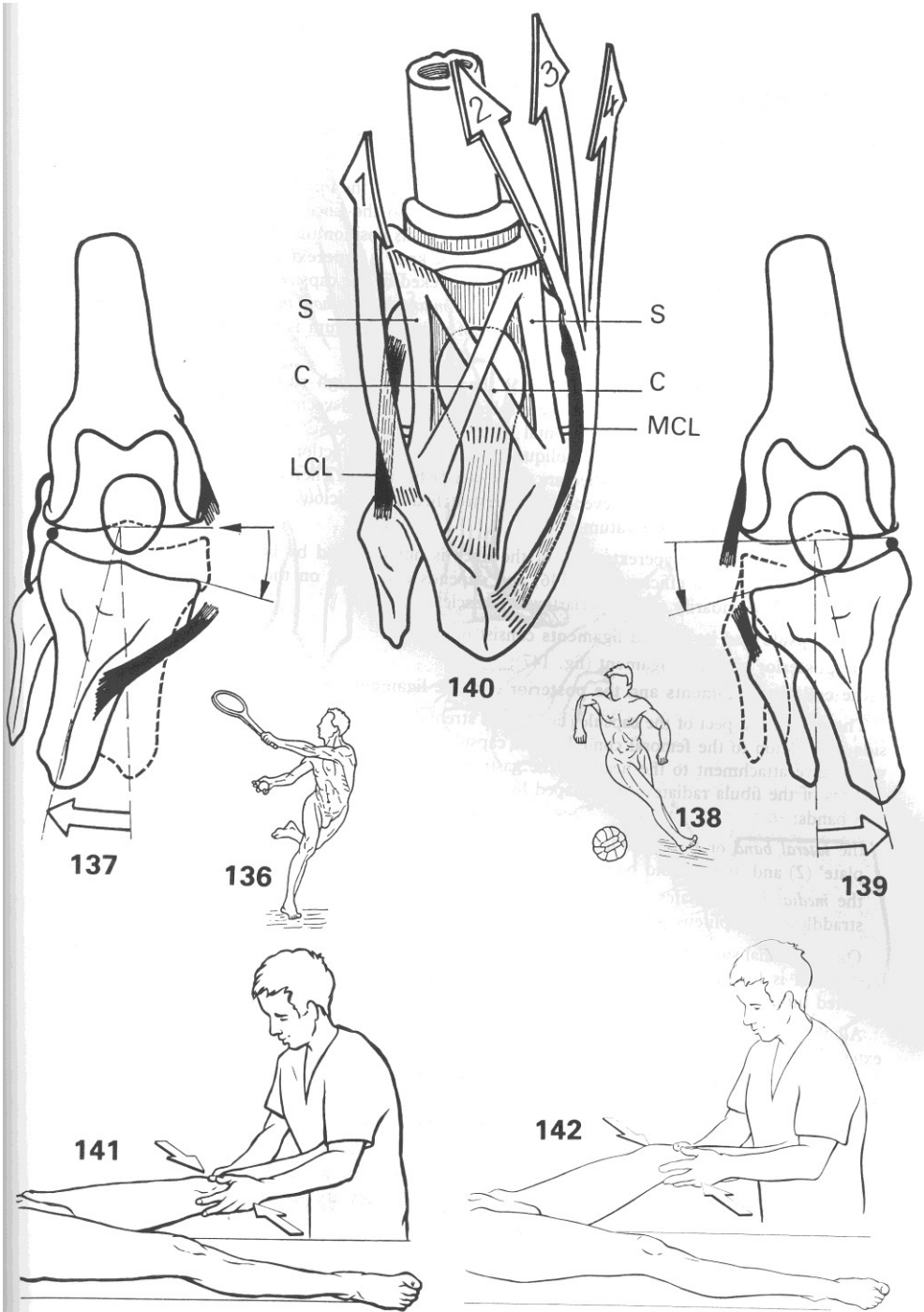


134

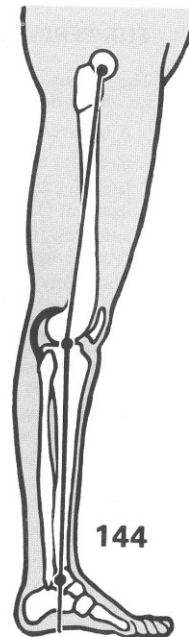
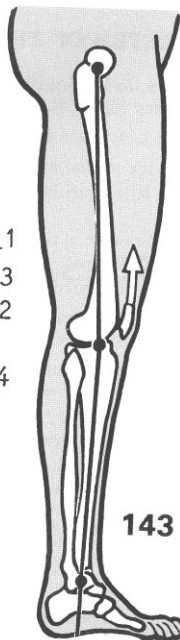
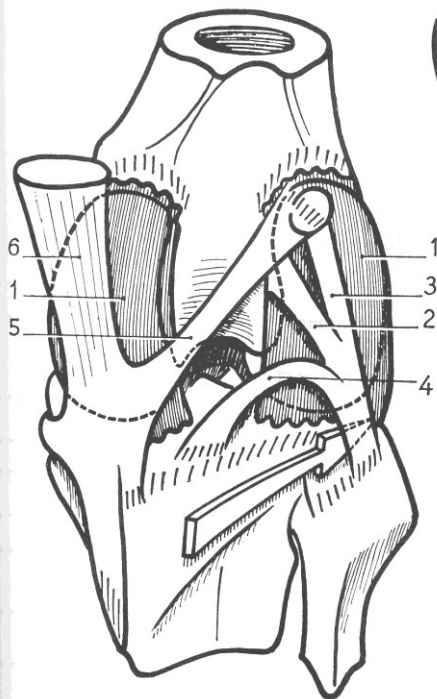


135

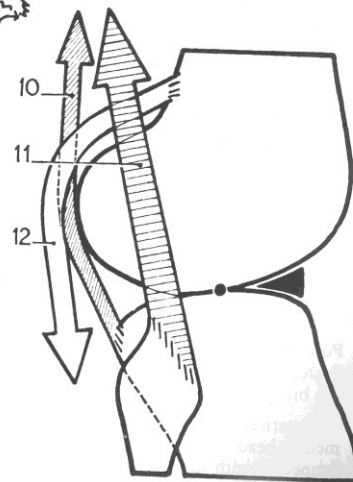
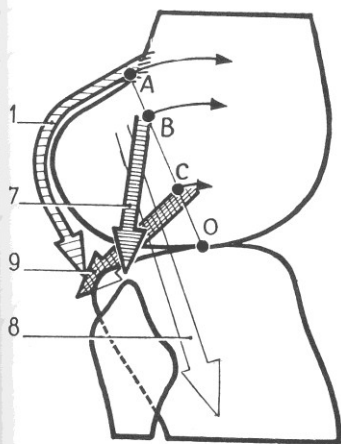
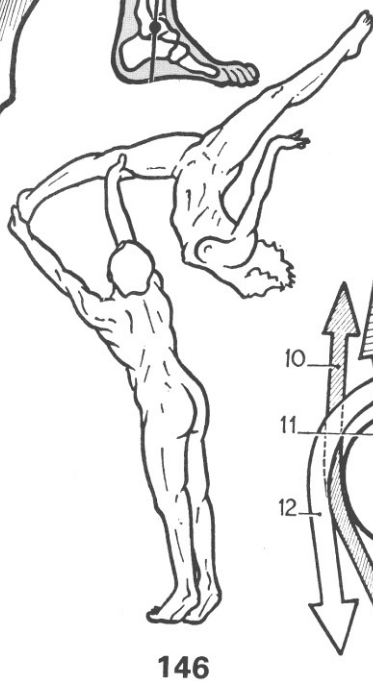
TRANSVERZÁLNÍ STABILITA KOLENE



ANTEROPOSTERIORNÍ STABILITA KOLENE

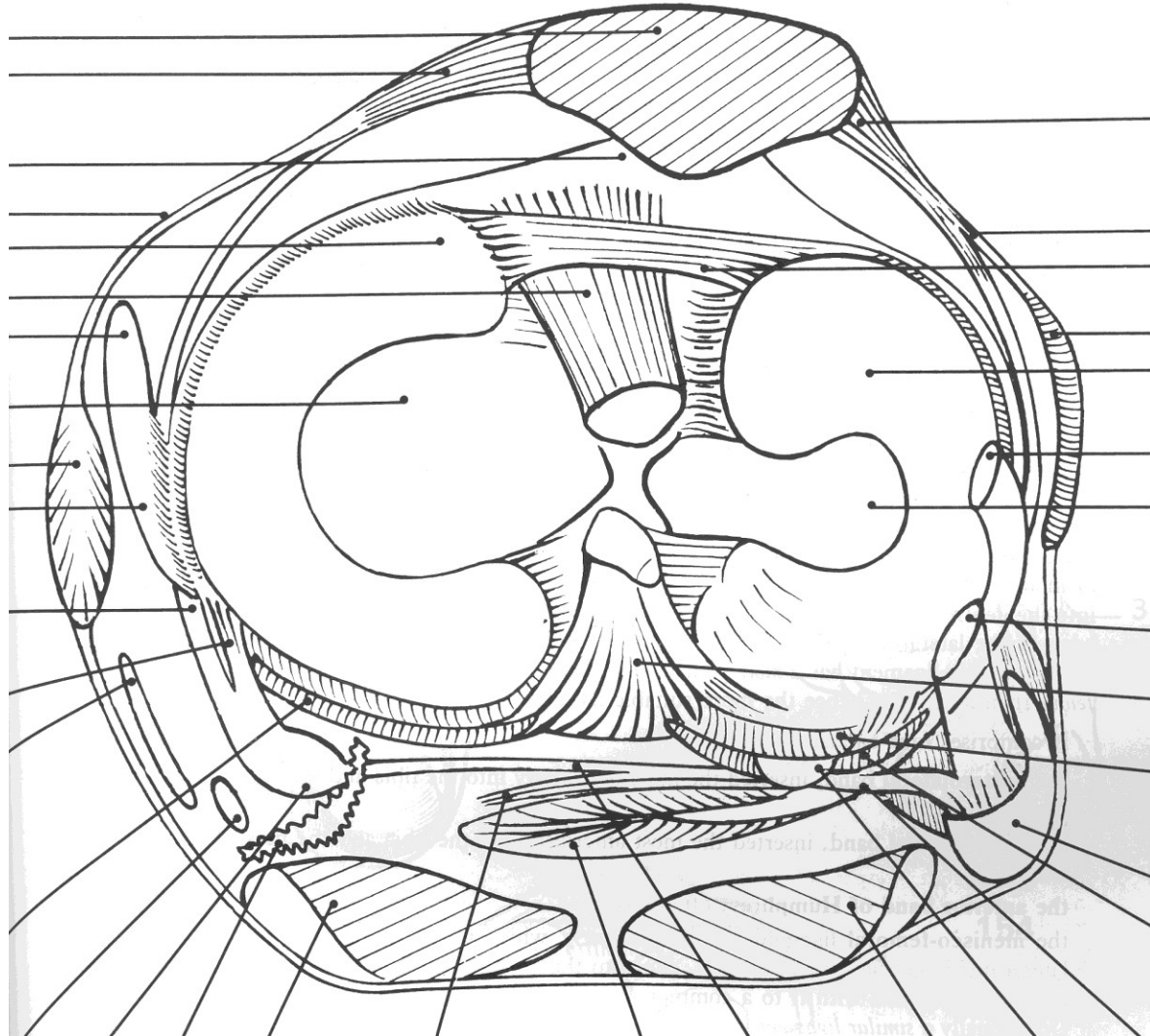


SVALOVÉ
FAKTORY

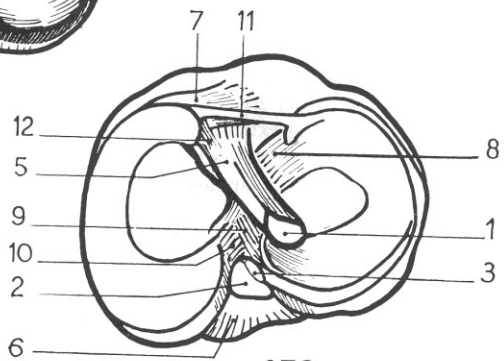
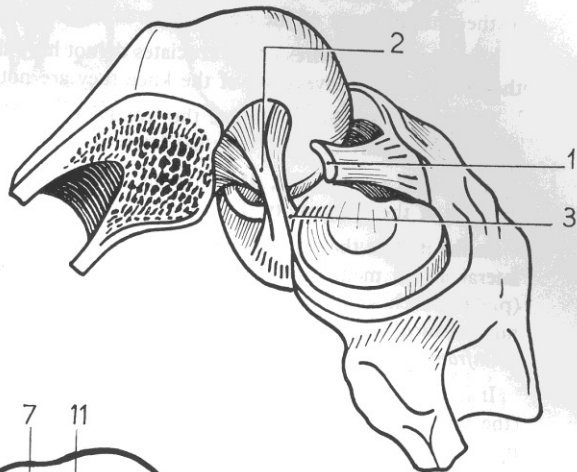
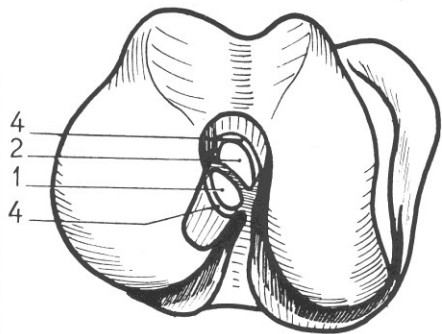
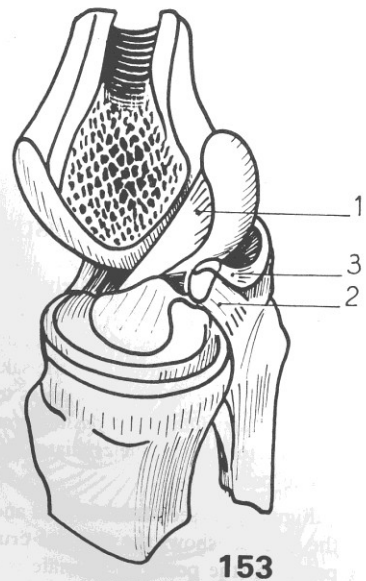
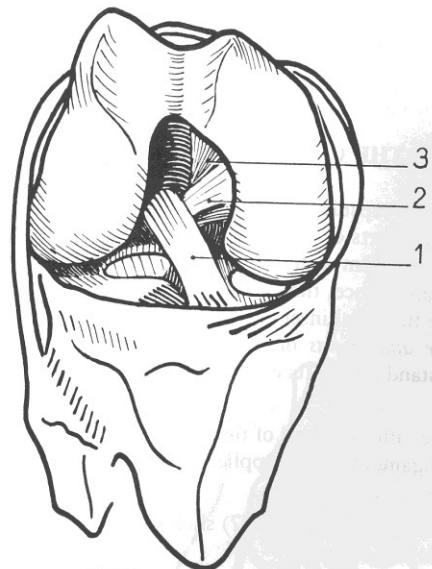


LIGAMENTÓZNÍ
FAKTORY

PERIARTIKULÁRNÍ OCHRANNÝ SYSTÉM KOLENE



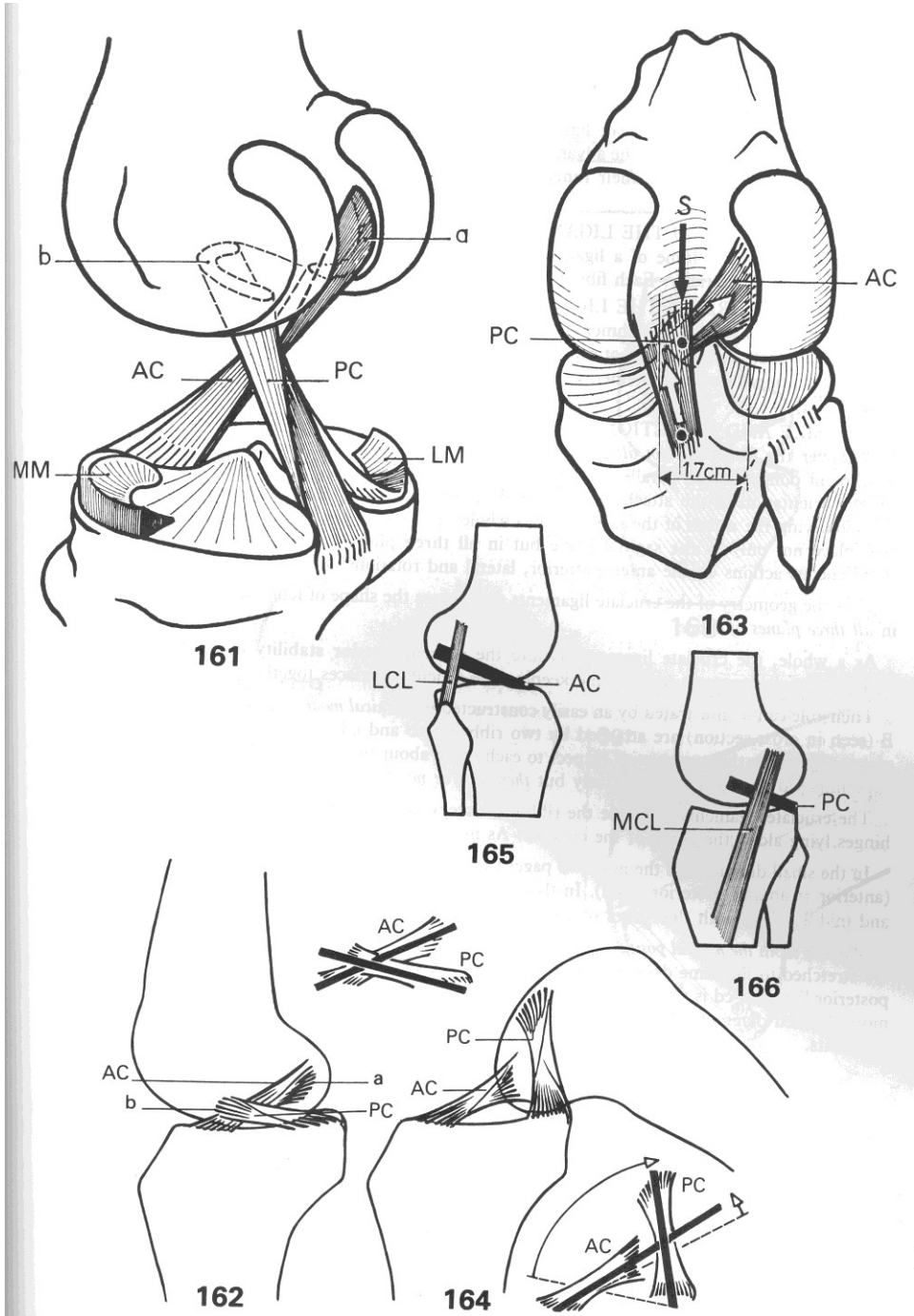
ZKŘÍŽENÉ VAZY



ZKŘÍŽENÉ VAZY

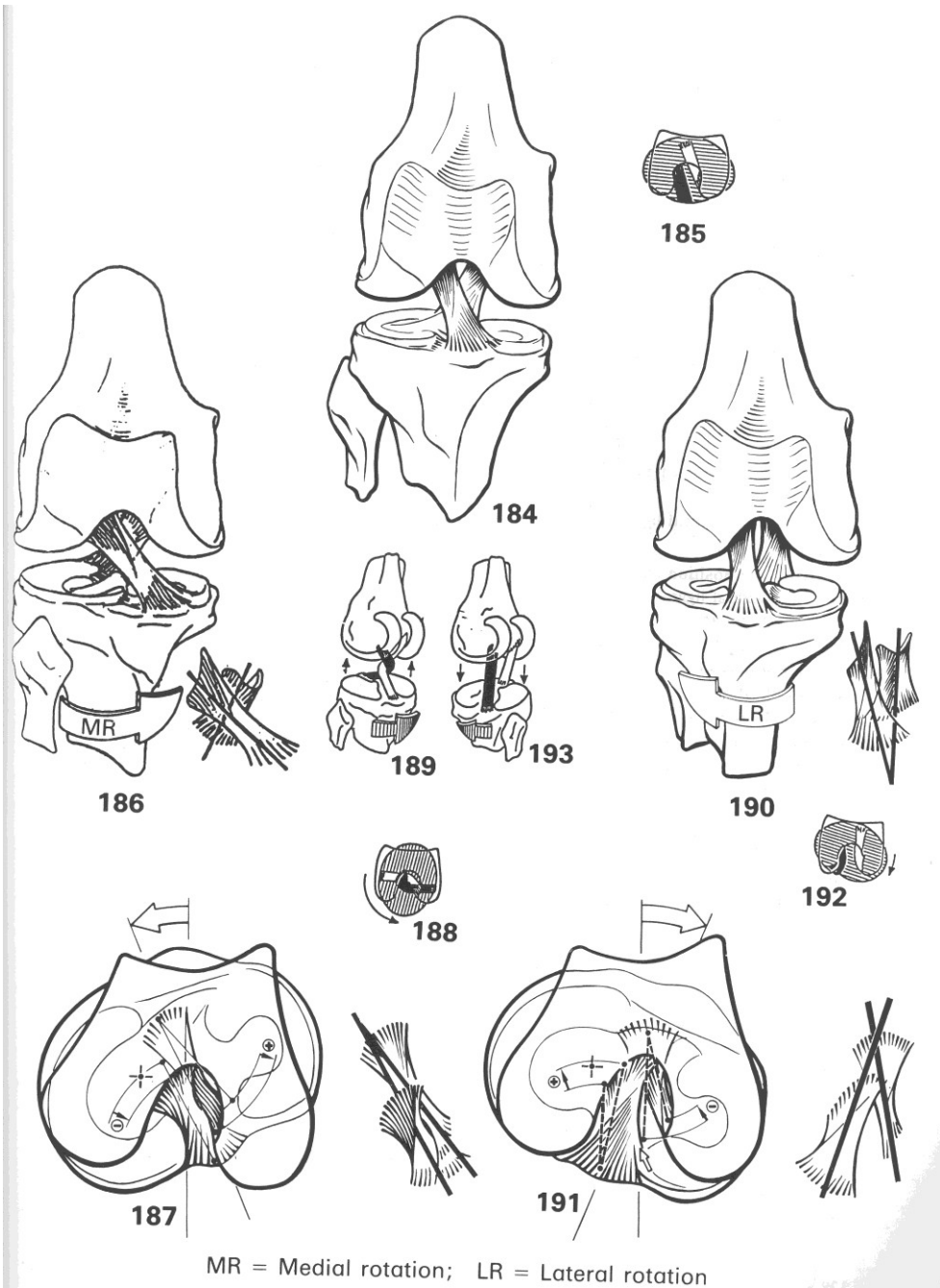
AP stabilita kolene ve

flexi / extenzi



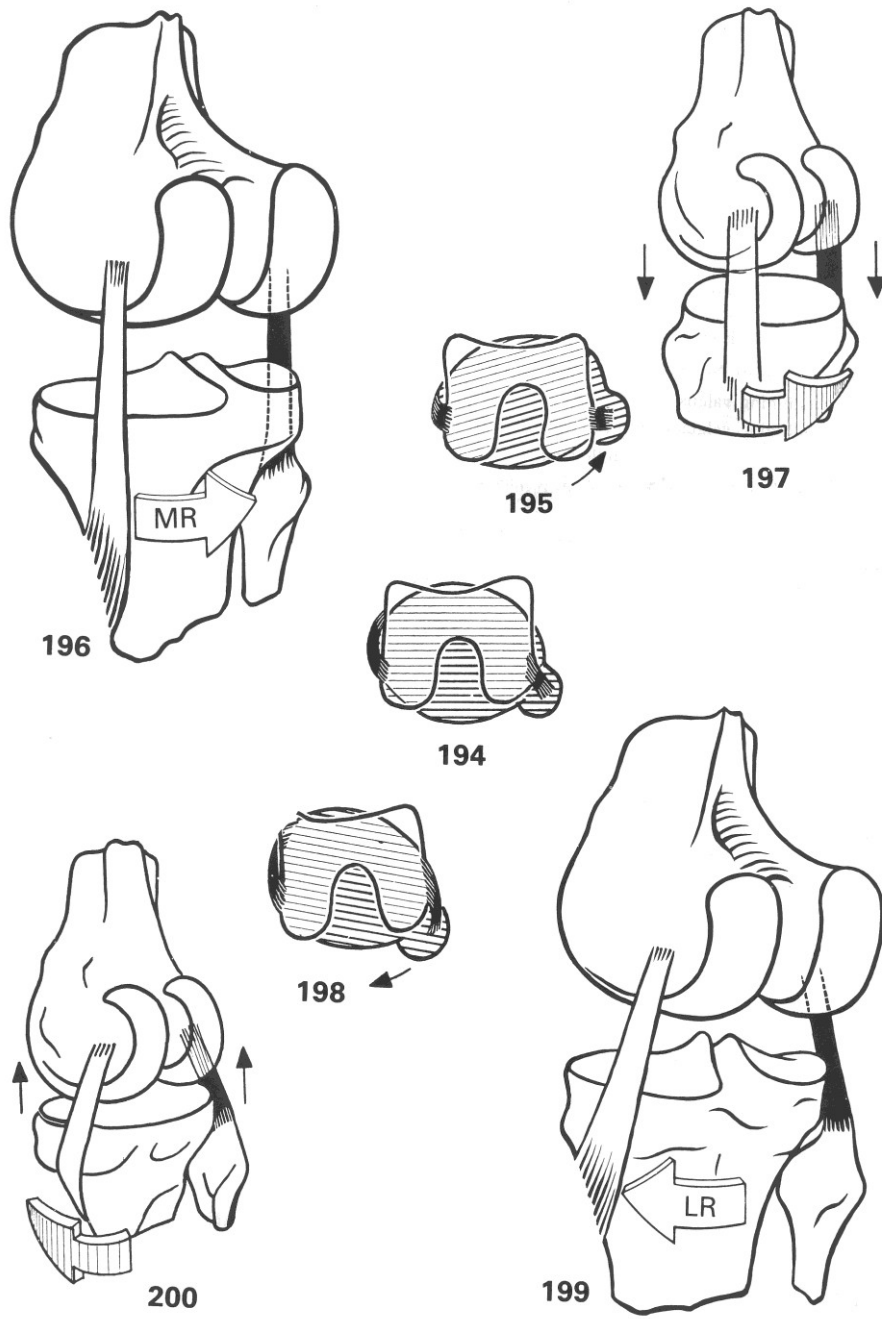
ZKŘÍŽENÉ VAZY

rotační stabilita kolene v extenzi



KOLATERÁLNÍ VAZY

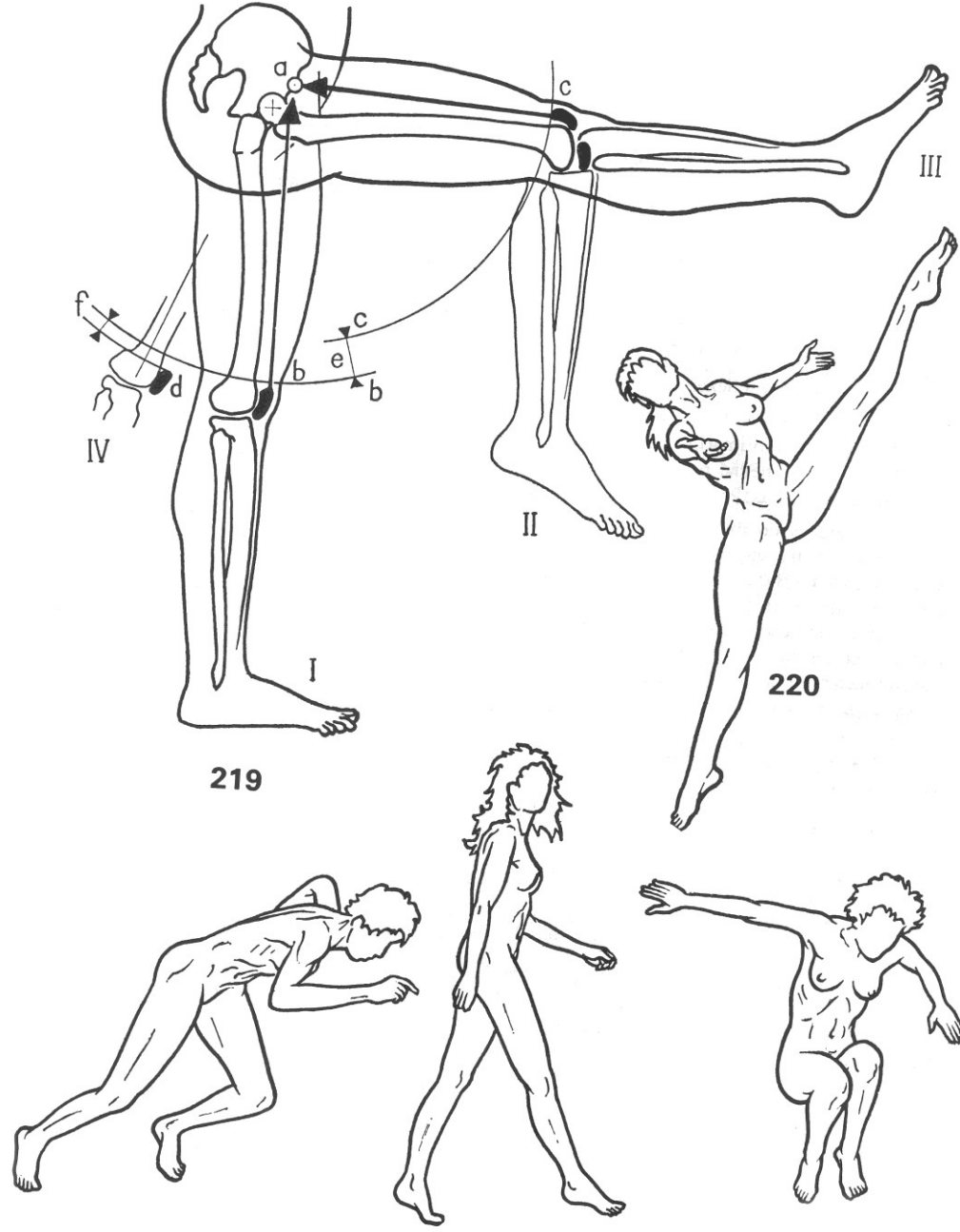
rotační stabilita kolene
v extenzi



EXTENZE KOLENE

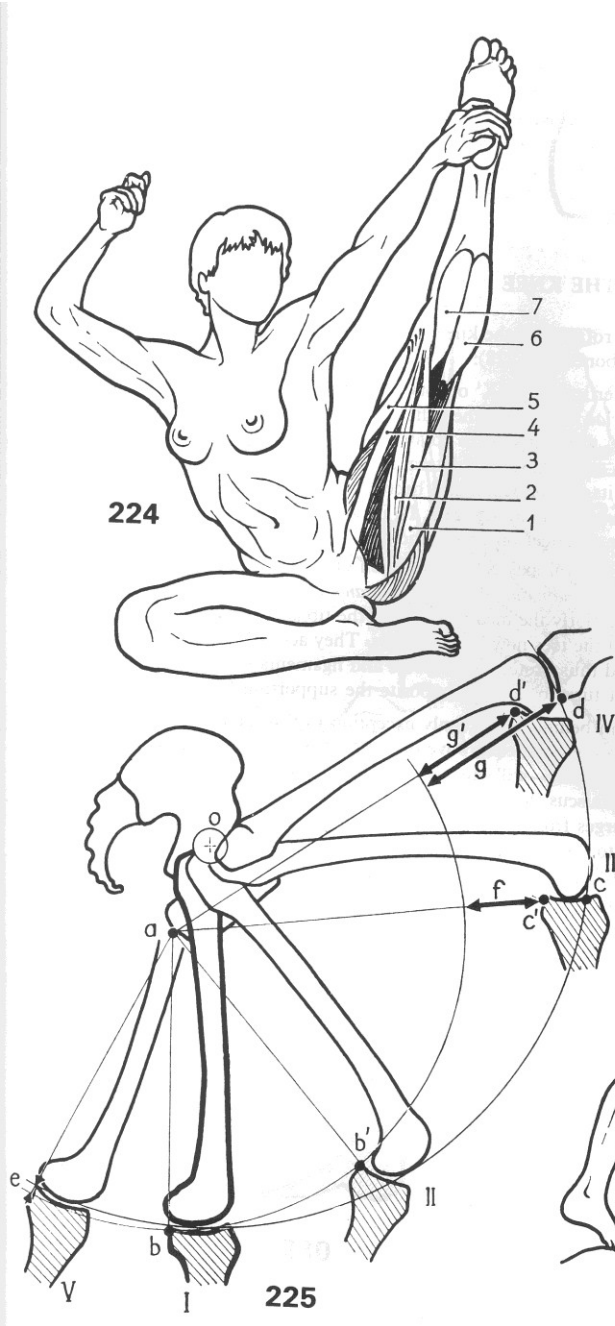
m. rectus femoris

- vztah k m . gluteus max



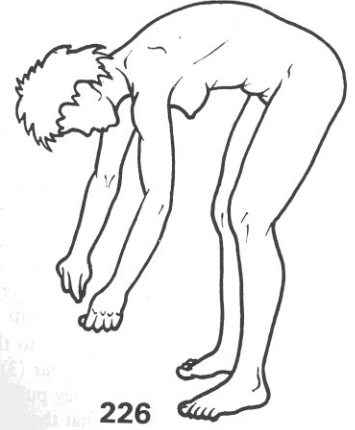
FLEXE KOLENE

HAMSTRINGY - M. GLUTEUS MAX.

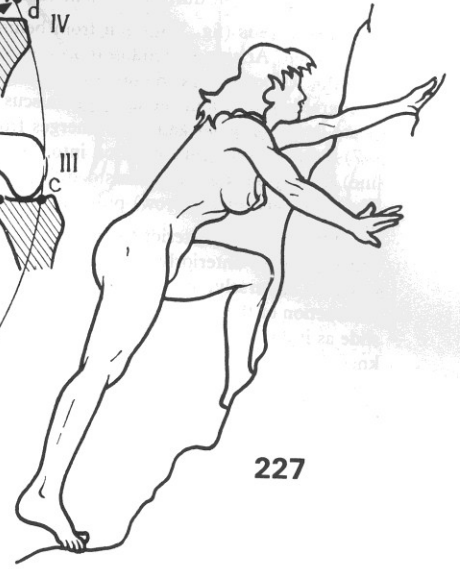


224

225



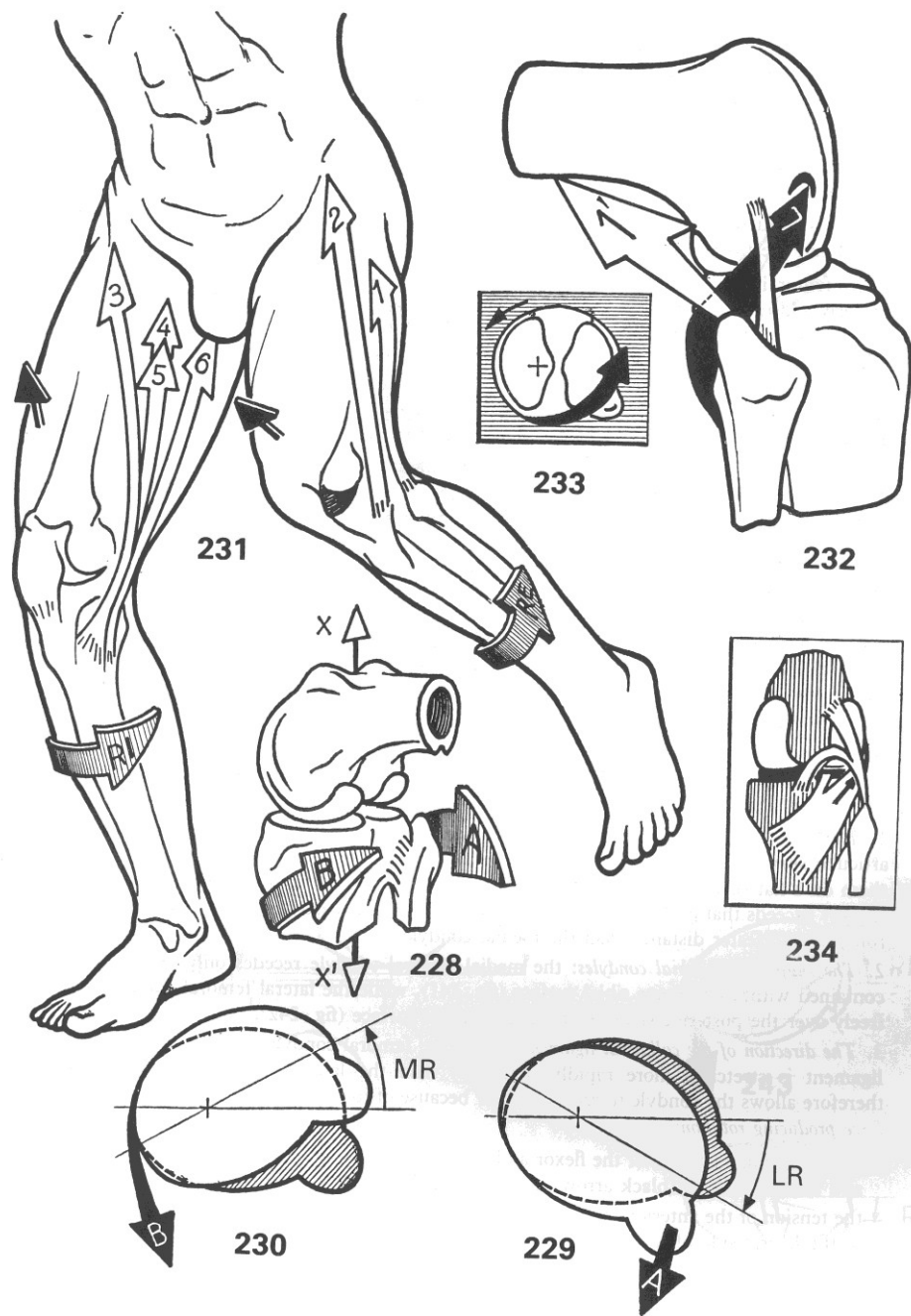
226



227

ROTACE KOLENE

aktivní komponenta



ROTACE KOLENE

pasivní komponenta

flexe / extenze

