Collège Hospitalier et Universitaire de Chirurgie Pédiatrique

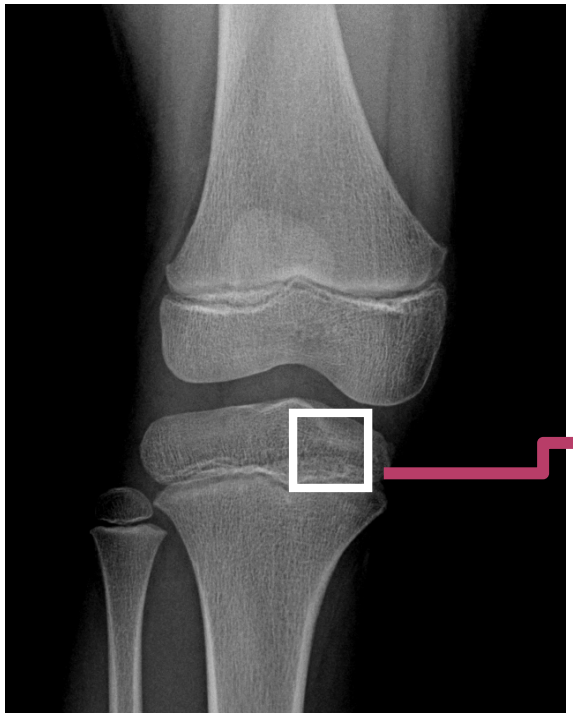
DESC de Chirurgie Pédiatrique

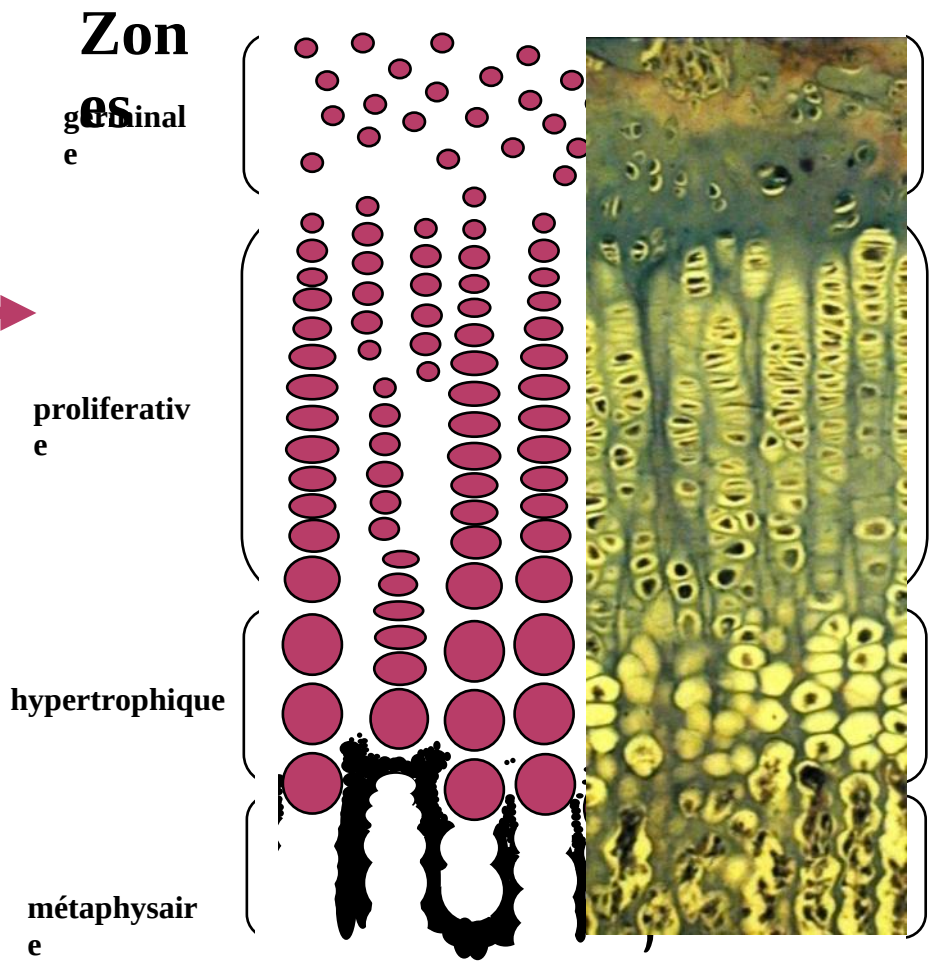
Session de mars 2011 - PARIS

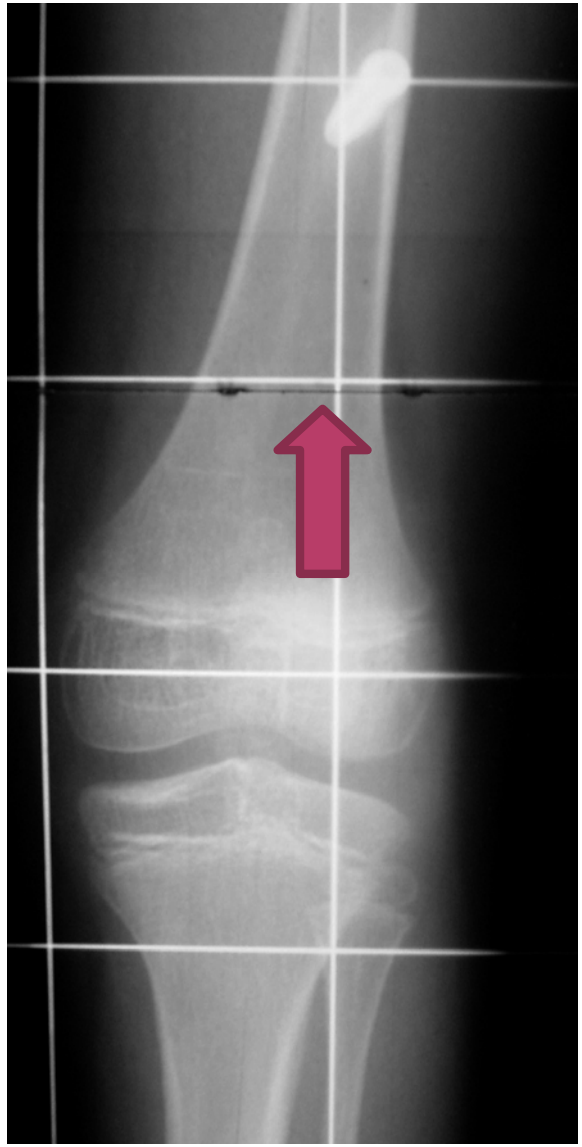
Fractures-décollement epiphysaires autour du genou

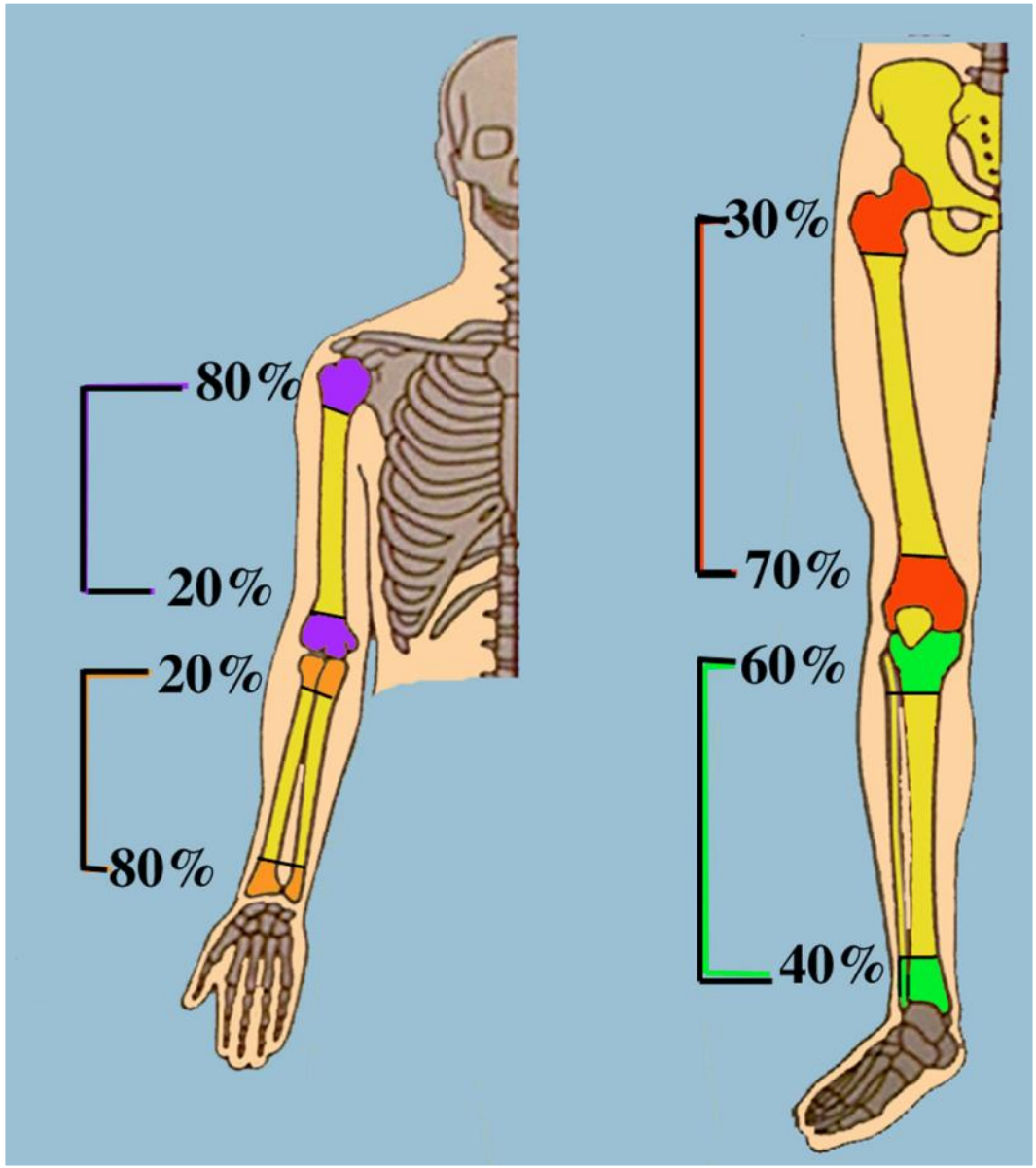
Franck ACCADBLED

Cartilage de croissance = physe

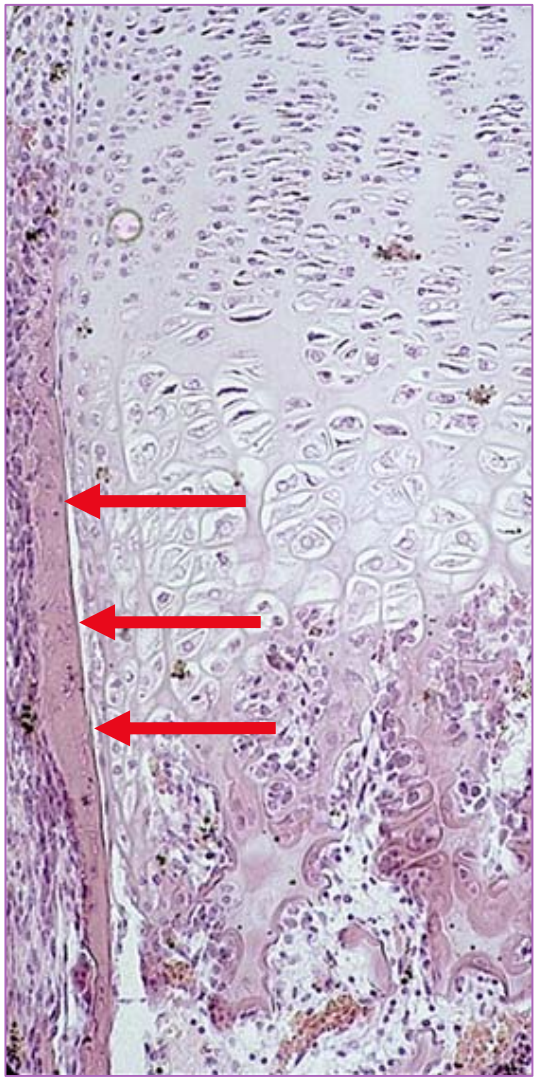






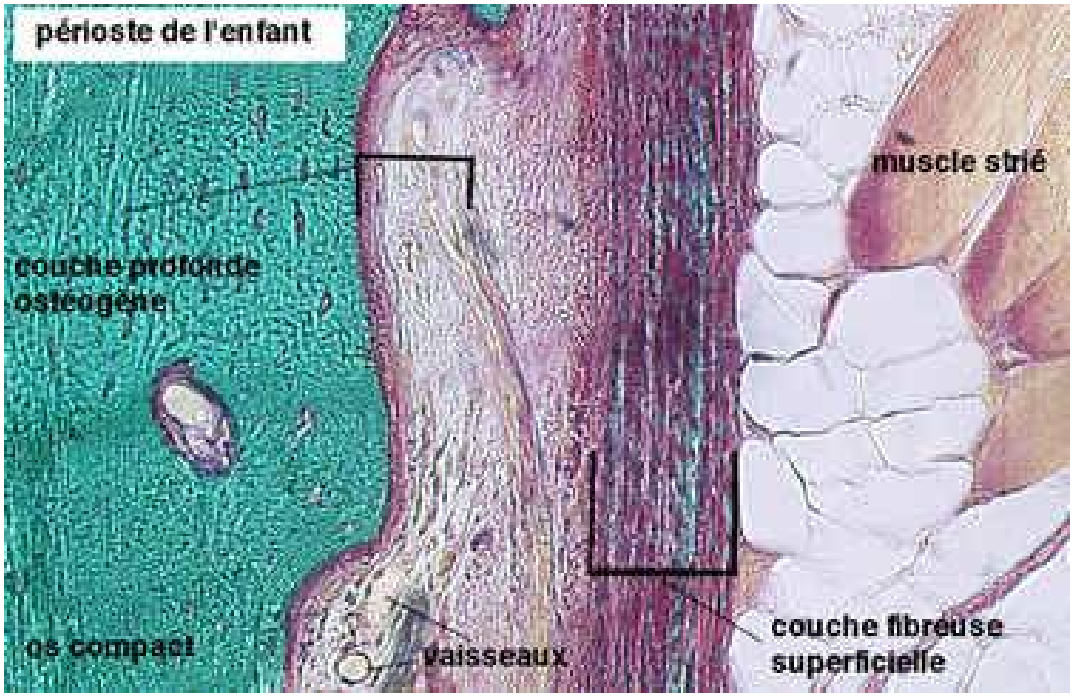

80%
20%
20%
80%
30%
70%
60%
40%

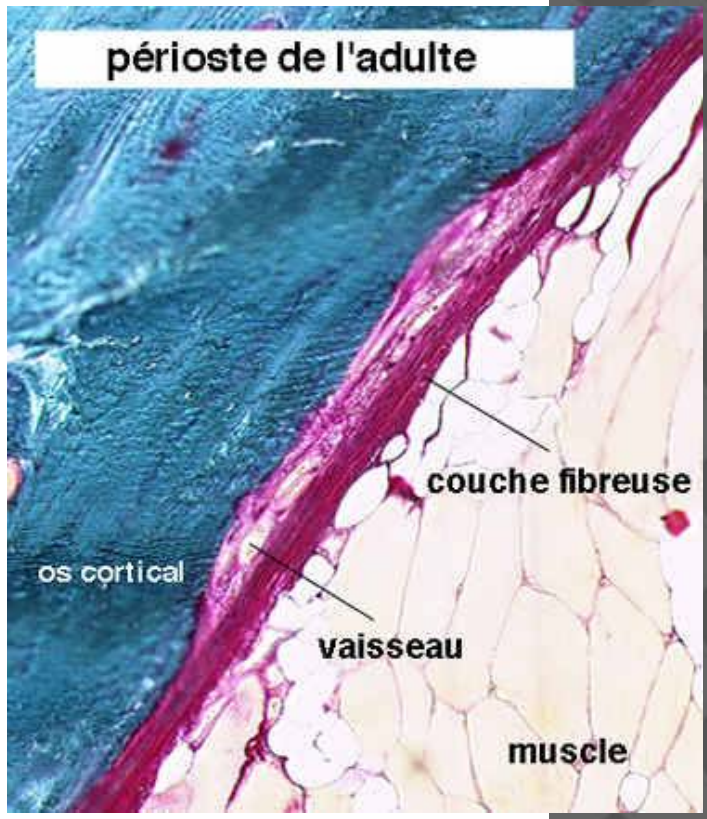
Virole périchondrale



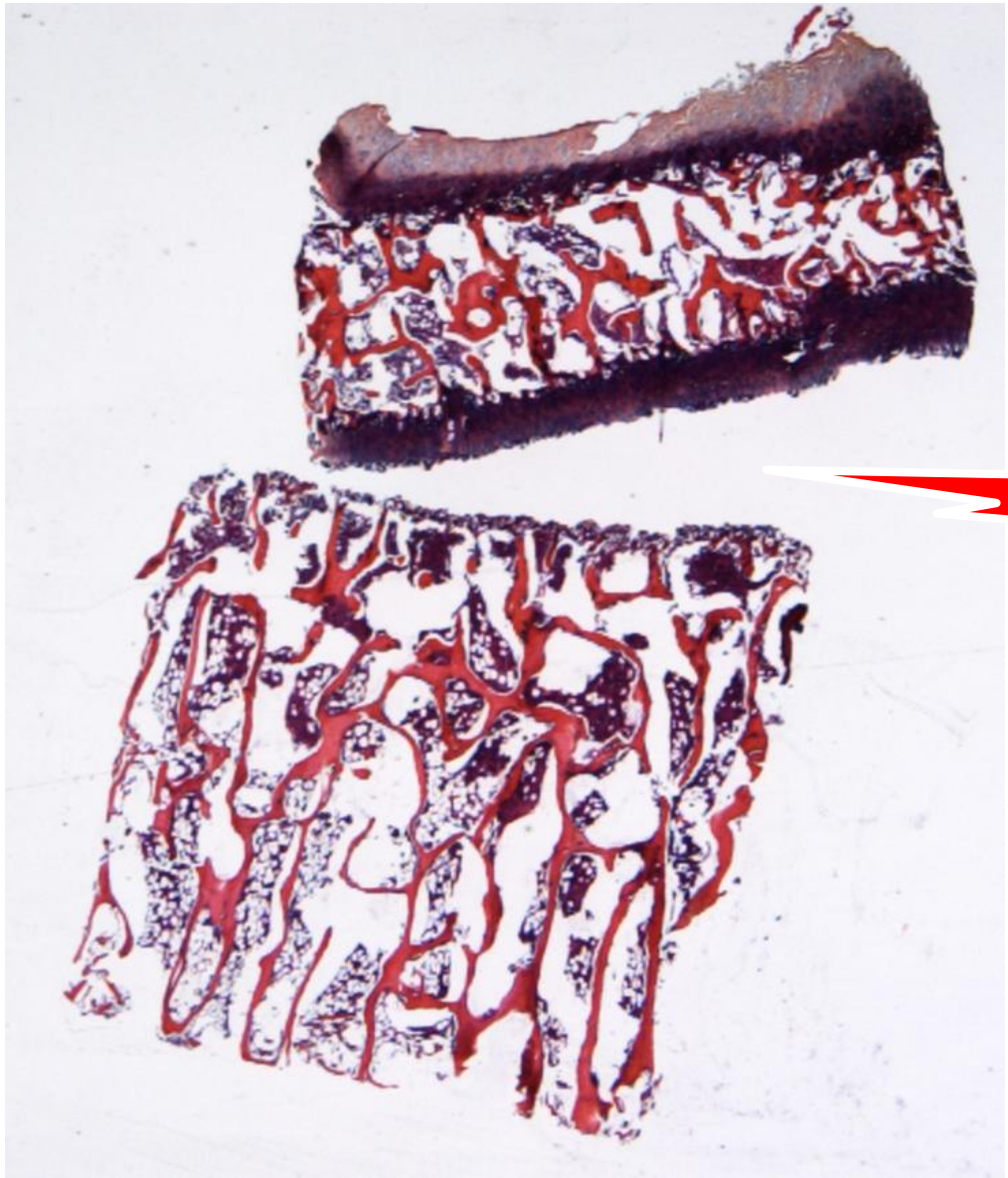
- Limite et soutient latéralement le cartilage de croissance
- cellules mésenchymateuses participant au développement en surface du cartilage de croissance

périoste

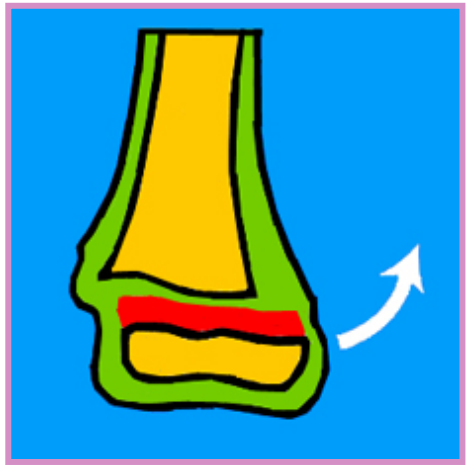

périoste de l'enfant
muscle strié
couche profonde ostéogène
os compact
vaisseaux
couche fibreuse superficielle


périoste de l'adulte
couche fibreuse
os cortical
vaisseau
muscle

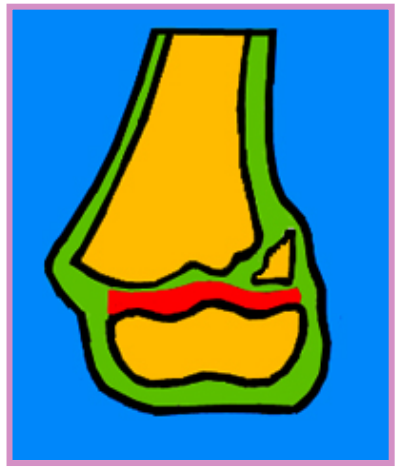
Point faible



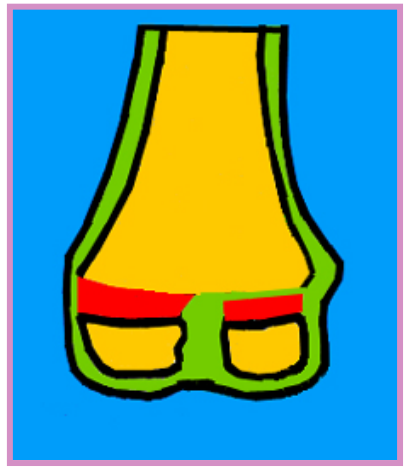
Classification de salter et harris



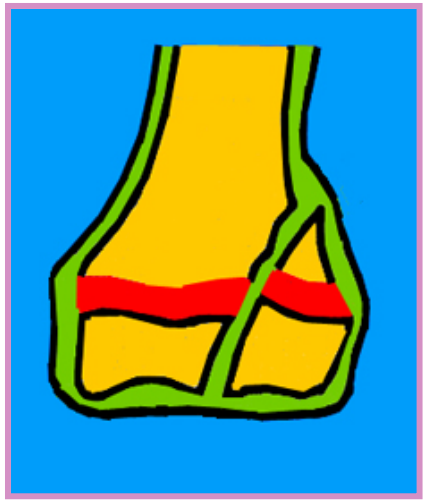
Type 1



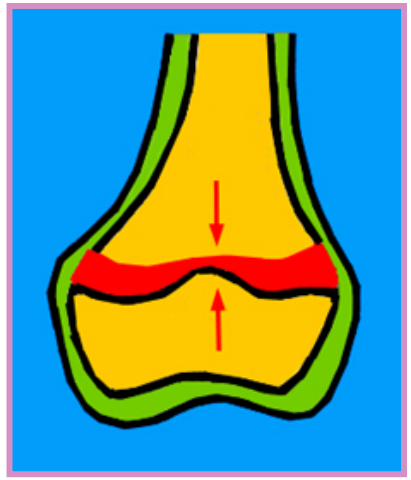
Type 2



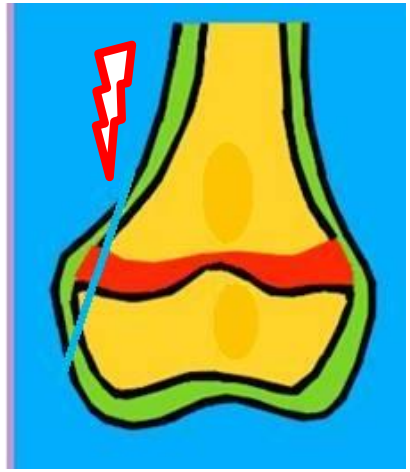
Type 3



Type 4



Type 5

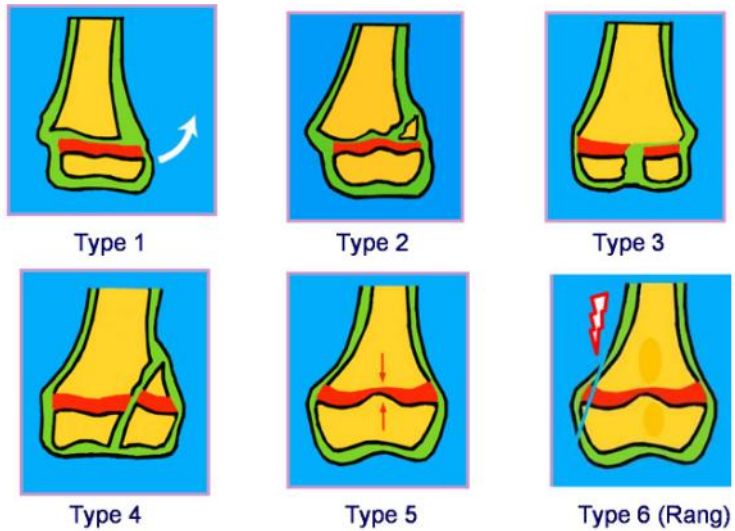


Type 6

fRACTURE-décollement épiphysaire

- Le plus souvent >8 ans
- 18% des fractures de l'enfant
- Fréquence relative *Mizuta T. JPO 1987*

  - **I**: 8,5%
  - **2**: 73%
  - **3**: 6,5%
  - **4**: 12%
  - **5 et 6**: <1%



fRACTURE-décollement épiphysaire

- Fréquence par sites *Mizuta T. JPO 1987*

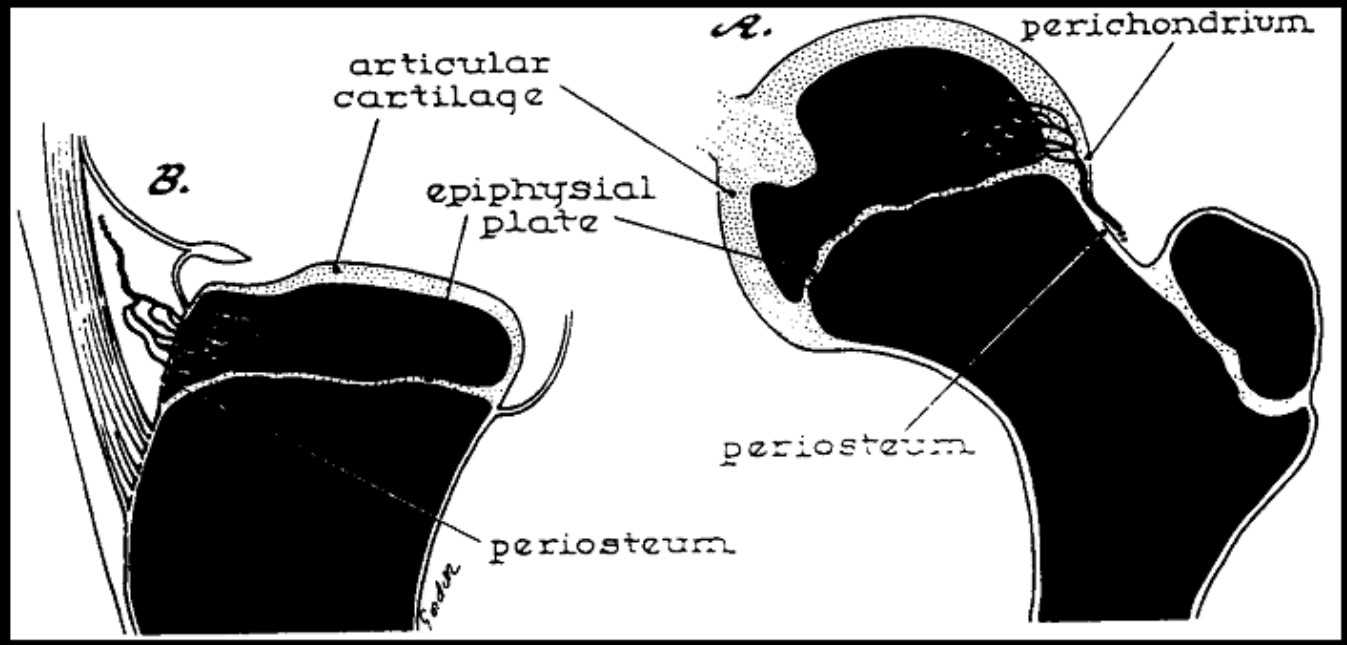
Physis	No. of injuries	
Distal radius	100	(28.3%)
Phalanges (fingers)	91	(25.8%)
Distal tibia	33	(9.4%)
Phalanges (toes)	25	(7.1%)
Distal humerus	24	(6.8%)
Distal ulna	16	(4.5%)
Proximal radius	16	(4.5%)
Metacarpals	15	(4.2%)
Distal fibula	12	(3.4%)
Proximal humerus	7	(2.0%)
Metatarsals	5	(1.4%)
Proximal tibia	4	(1.1%)
Lateral clavicle	3	(0.9%)
Proximal ulna	1	(0.3%)
Distal femur	1	(0.3%)
Total	353	(100.0%)

enjeux

- Lésion artérielle
- Syndrome de loge

enjeux

- Vascularisation épiphysaire *Dale GB. JBJS Br 1958*



- Epiphysiodèse
  - Surtout types 3, 4, 5 et 6 de SH

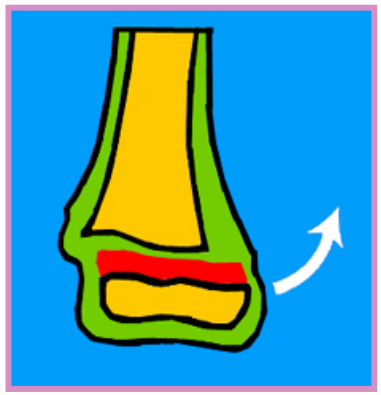
mais pas seulement!

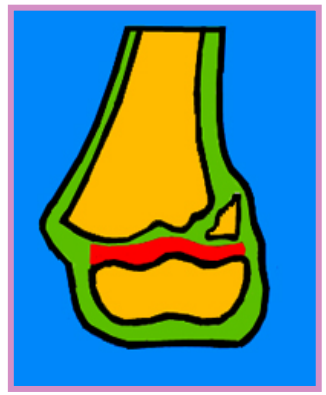
- Epiphysiodèse
  - Raccourcissement ou déviation axiale

- Réduction articulaire: arthrose
  - Types 3 et 4 de SH

Traitement

- SH 1 et 2





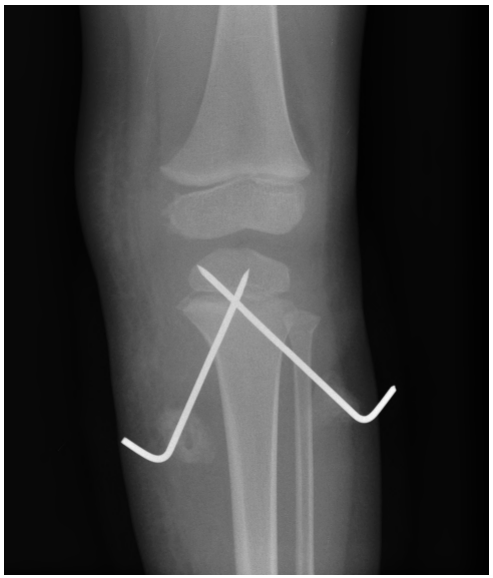
Réduction

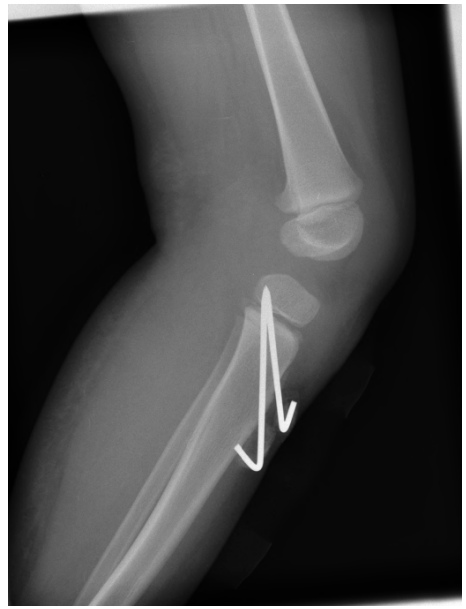
Immobilisation plâtrée

Si instable: embrochage ou vissage percutané

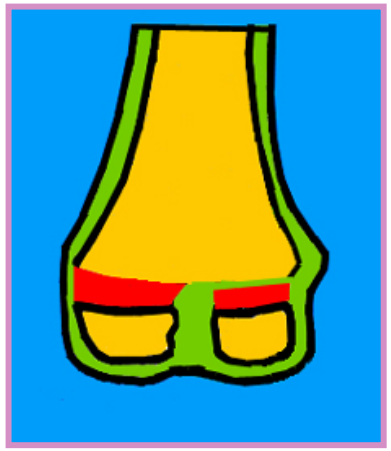
Immobilisation 4 semaines

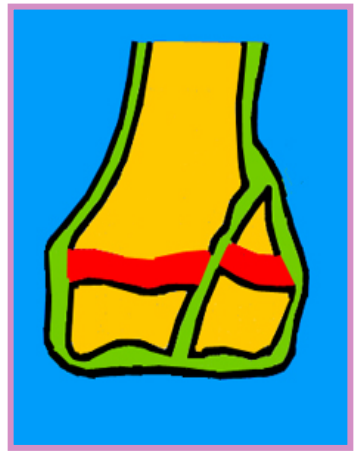
♀ 2 ans 1/2 1/2





Traitement



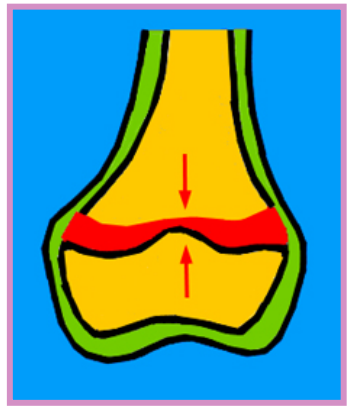


- SH 3 et 4

- **Bilan Scanner ou IRM**
- **Réduction anatomique** à foyer ouvert ou arthroscopie
- **Ostéosynthèse** (vis en compression ou broches)
- Durée d'immobilisation 5 semaines

♂ 14 ans choc direct / valgus au rugby

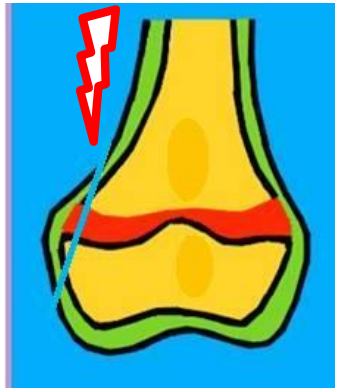
Traitement



- SH 5

Immobilisation plâtrée sans appui

Traitement



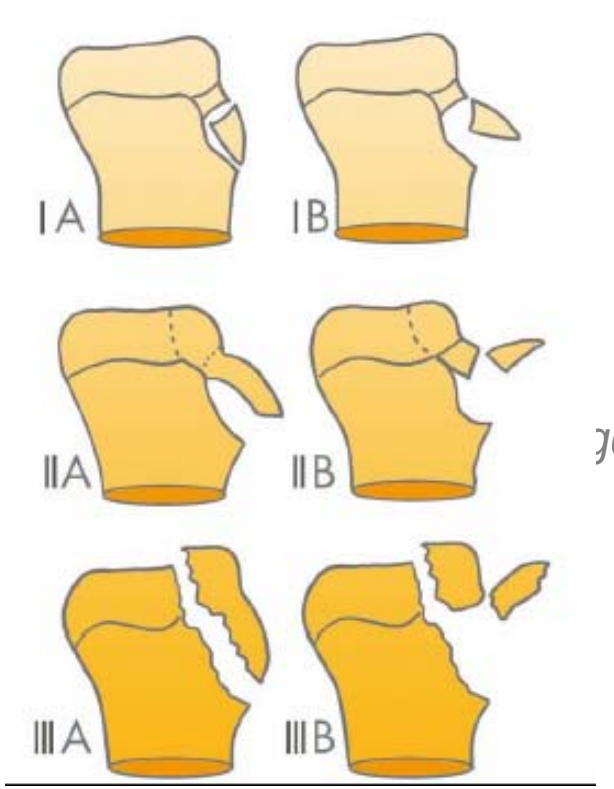
- SH 6
- Immobilisation
- Prise en charge des lésions cutanées souvent associées

<u>Alternative</u>

Curetage/interposition préventive *Foster B. JPO 2000*

Tubérosité tibiale

- Fracture apophysaire
- Avulsion par contraction du Quadriceps contre résistance



gden JA. JBJS Am 1980

- Osgood Schlatter prédisposant?

→ Non Bauer RCO 2005

- Type I non déplacé: immobilisation
- Déplacé: réduction/vissage percutané
- Type III: **Exploration articulaire**

A RETENIR

- Classification de Salter et Harris
- Haute cinétique /grand déplacement: DANGER
- SH 1 et 2, fréquentes, souvent faciles à réduire mais INSTABLES
- SH 3 et 4: fractures articulaires
- Informer et **SURVEILLER** une EPIPHYSIODESE