

Fractures



Authentic medical reports

Dg:

S8220 Fr. cruris l.sin cum fr.fibulae duplex disloc.aperta TII-III
stp. OS FE 17.7. 2010
V2331 Mot.x auto,;zra.při nás.,vys.;volný čas
S730 Luxatio coxae l.sin centralis stp. repositionem 17.7.
S332 Luxatio art. SI l. sin stp. reposit. 17.7.
S3240 Fr. acetabuli l.sin transv.disloc. stp. OS 19.7.
S818 Decollement partis proximalis cruris l.sin.
S711 Vulnus lacerum reg. femoris l.sin.

OPERACE:

Datum:17.07.2010 21:00

Dg :S8221 Fract. cruris l.sin. aperta gr. II, Fr. acetabuli l. sin.
Debridement měkkých tkání, Zevní fixace na zlomeninu tibie, laváž,repozice
zlomeniny acetabula vlevo,Ki-extenze-za femur Pacient s otevřenou
zlomeninou levého bérce II. st., decollement
prox.poloviny bérce a kolenního kloubu, dislokovaná zlomenina acetabula
vlevo, leze SI kloubu - typ B - zadní vaz drží - vlevo
Urgentní operační výkon, pac. navezen přímo z OUP.

collement = severe damage of soft tissues

Fractura pathologica

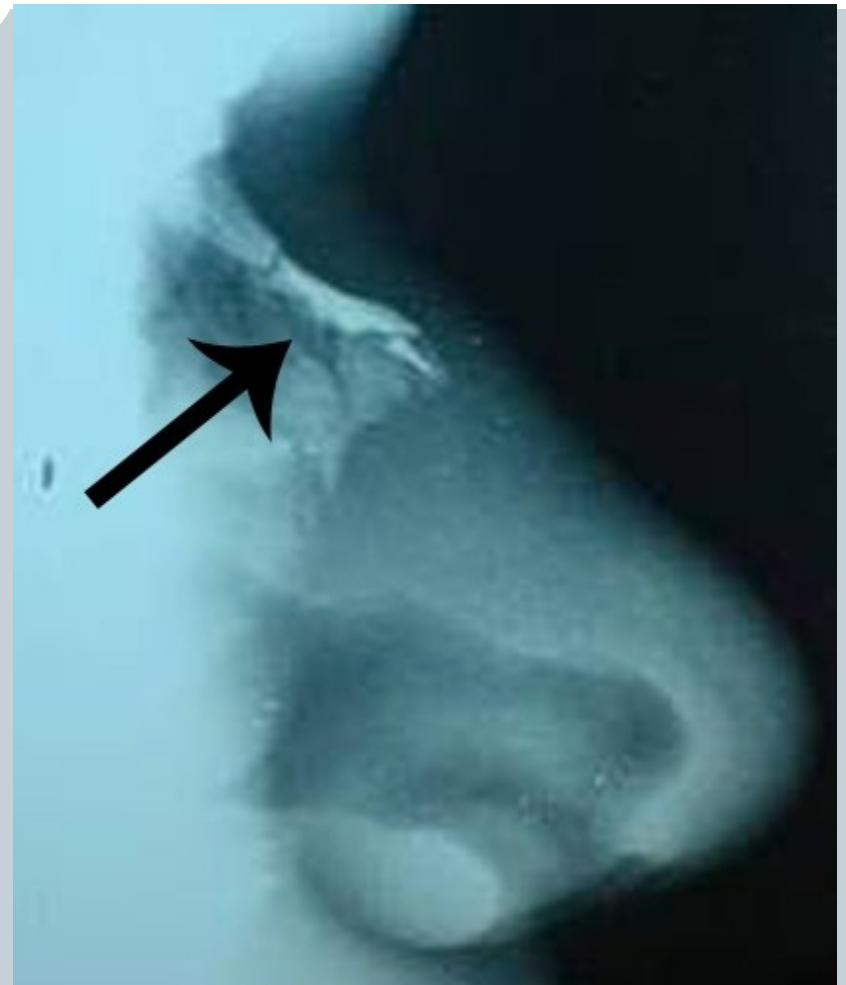


Click image to align with the top of the page

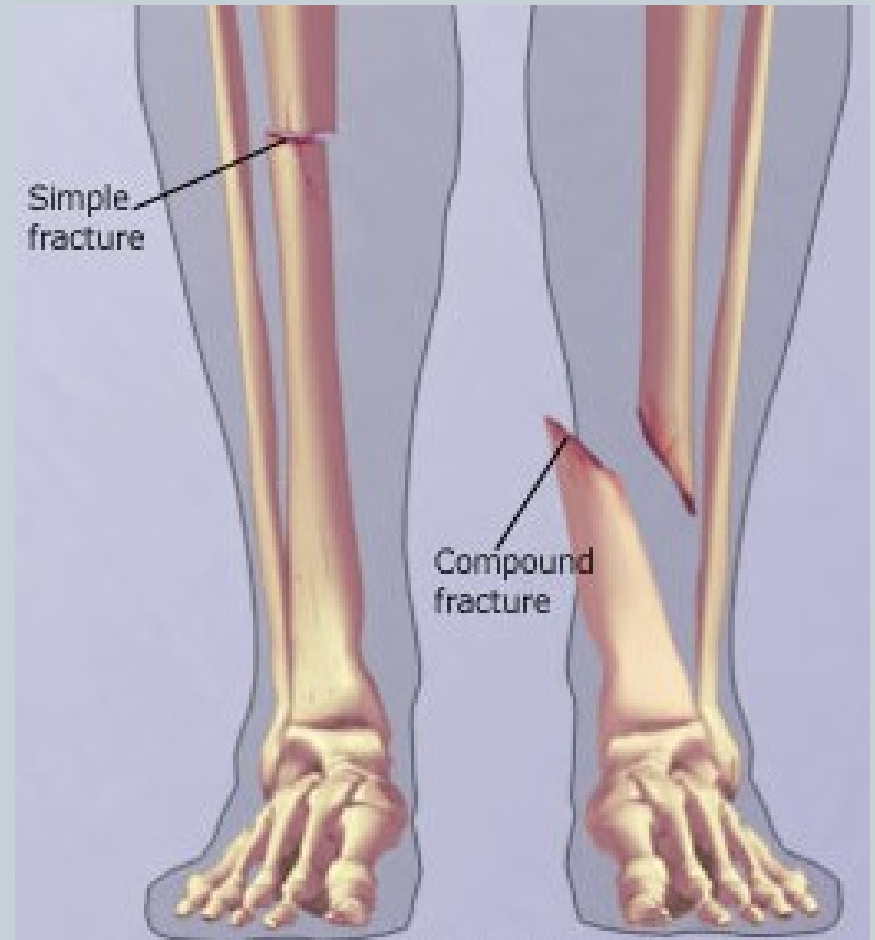


Myeloma -The plasma membrane of a muscle fiber

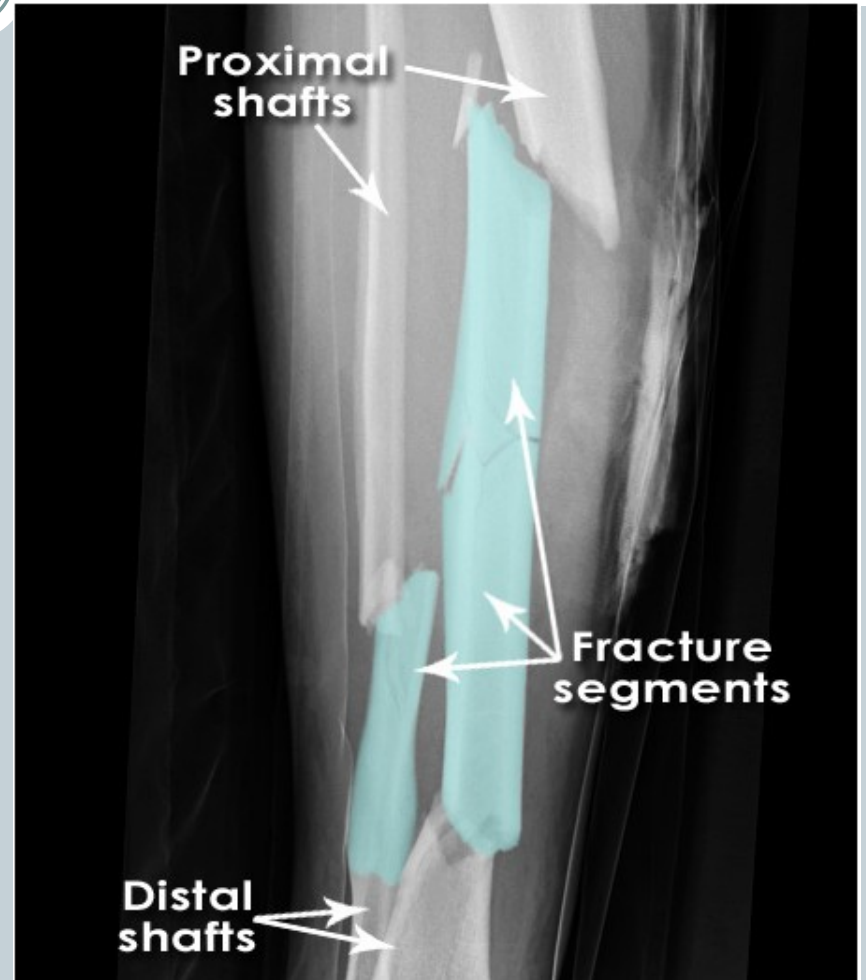
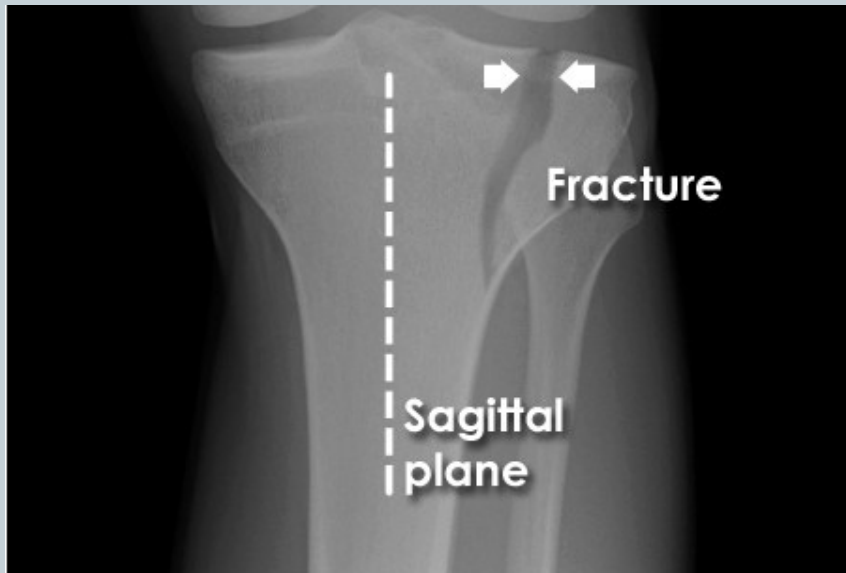
Fractura traumatica



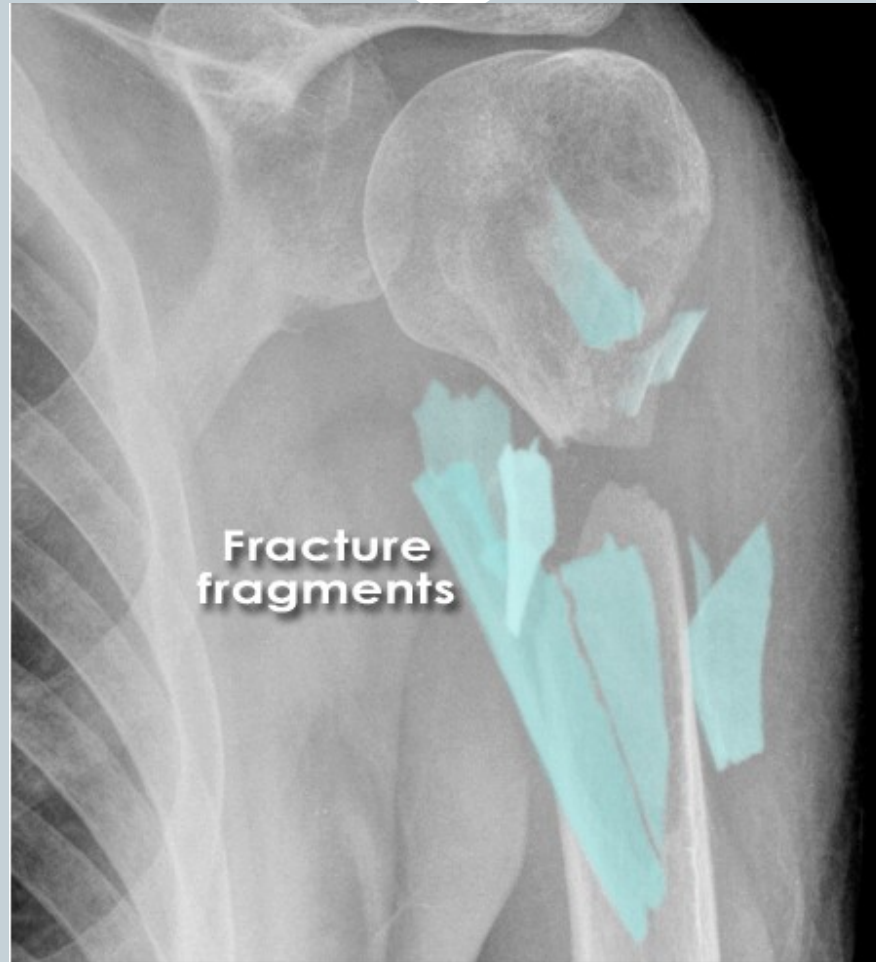
Fractura aperta/clausa



Fractura simplex/multiplex



Fractura comminutiva



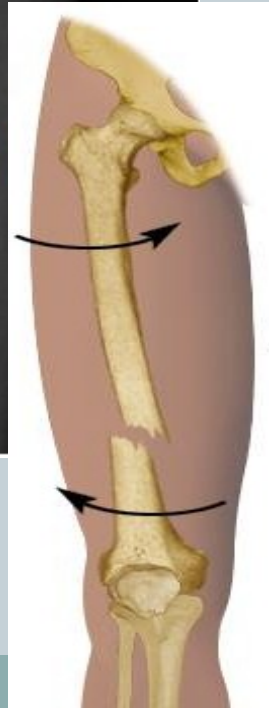
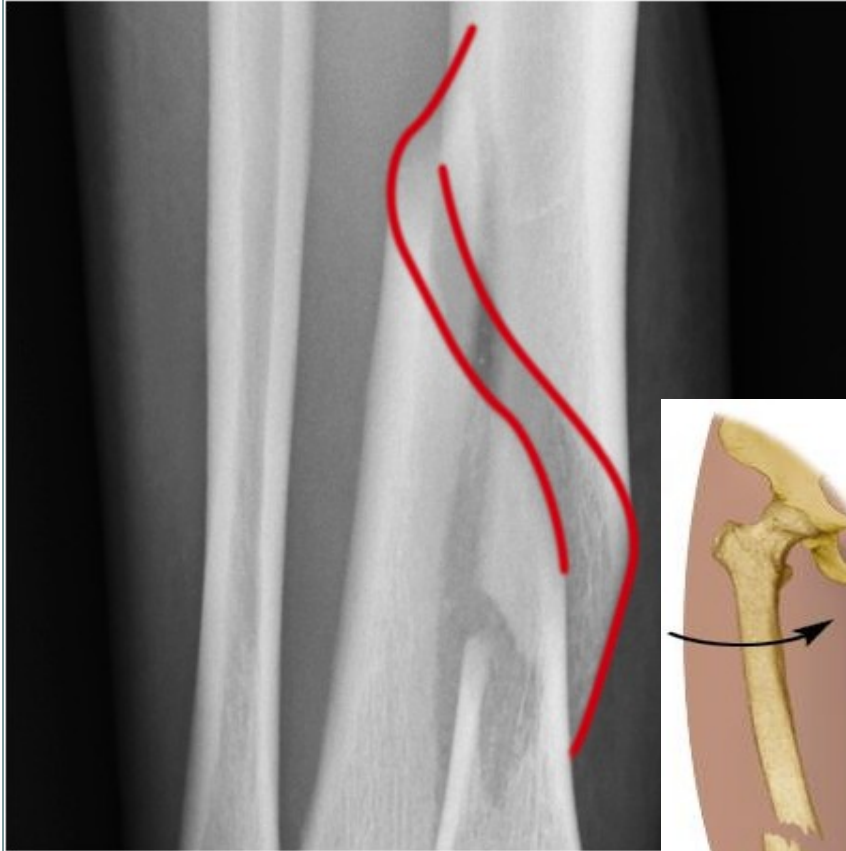
Fractura transversa/obliqua



Fractura spiralis

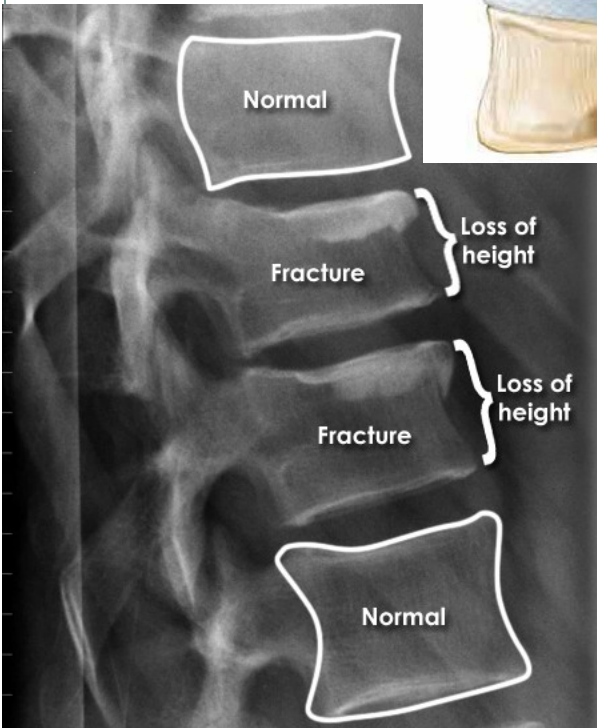
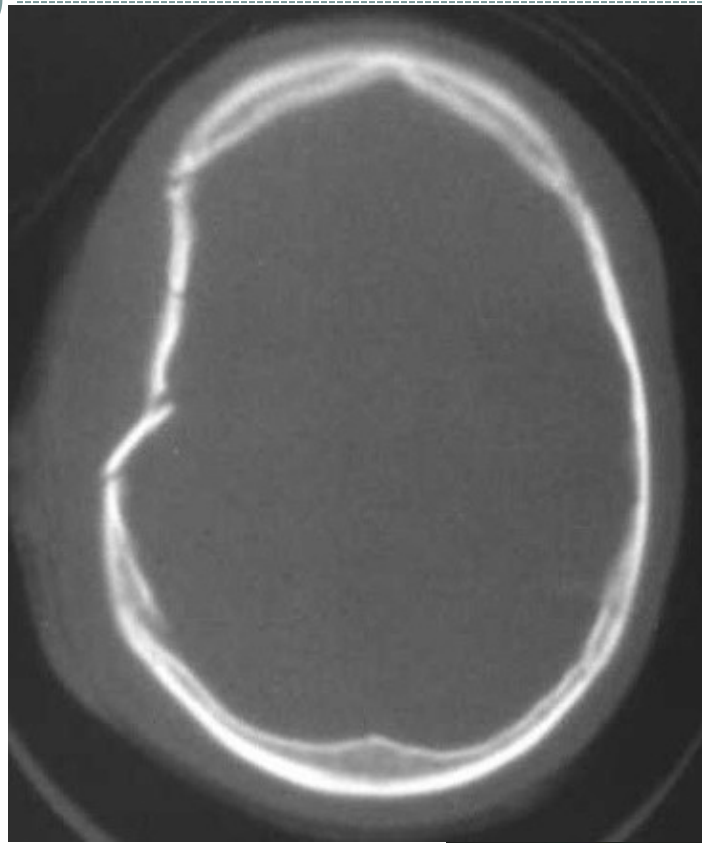
/

longitudinalis

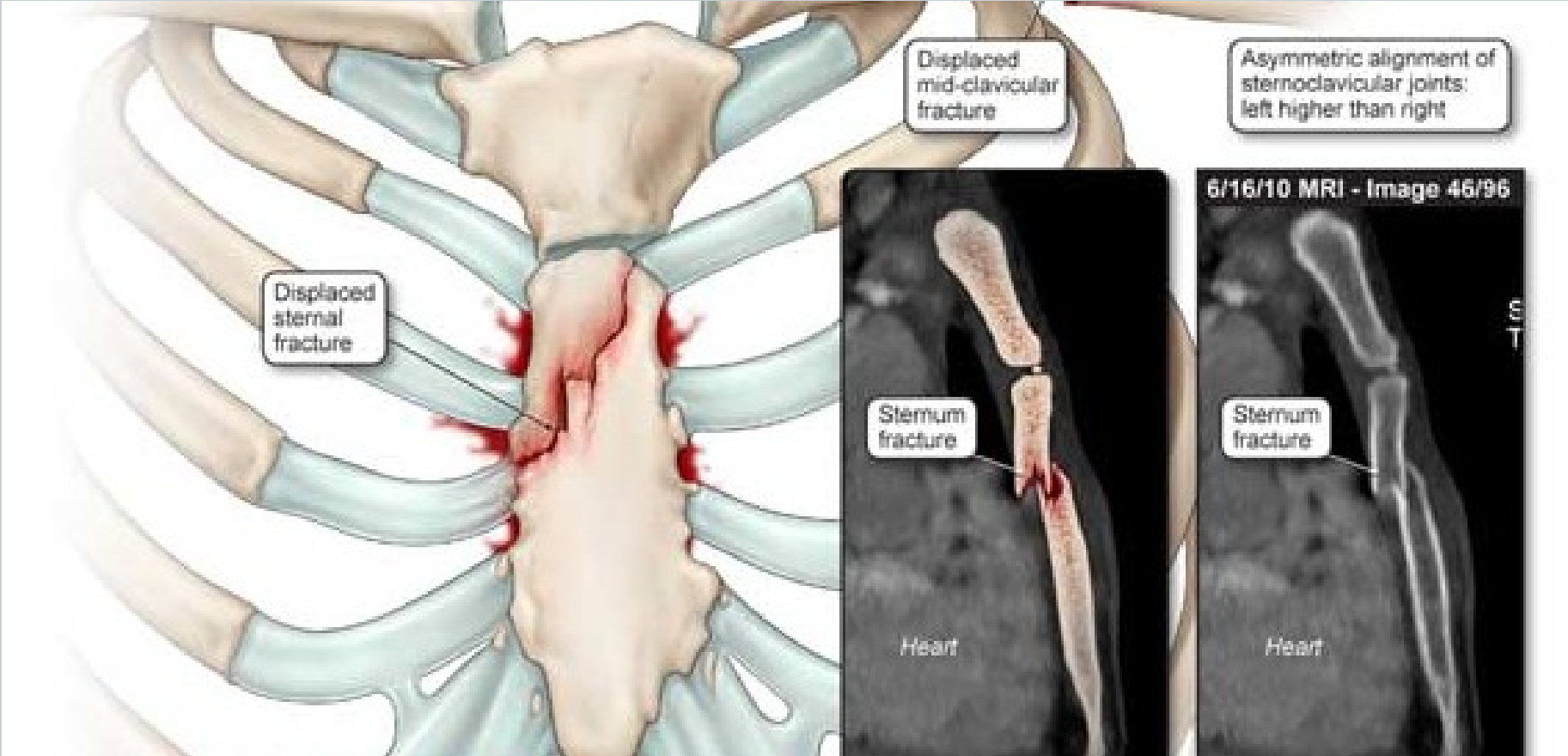


Fractura compressiva

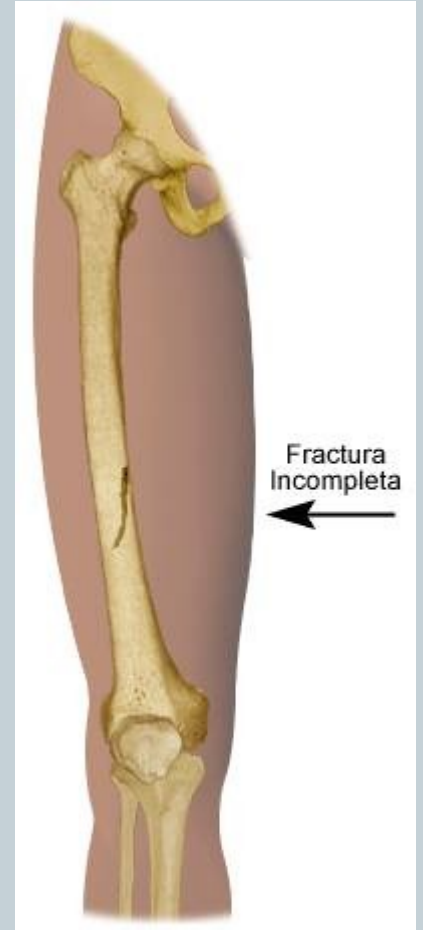
/ impressiva



Fractura incuneata



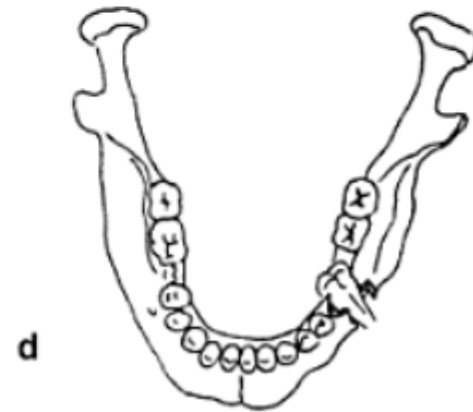
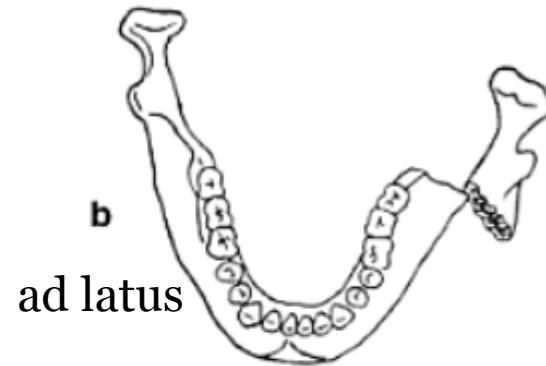
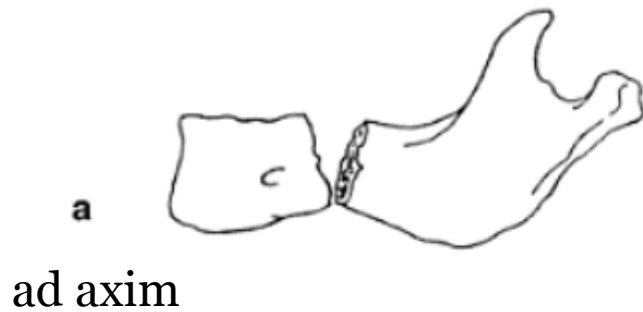
Infractio = f. partialis = f. incompleta



Fractura
Incompleta



Fractura cum dislocatione



ad longitudinem cum contractione ad longitudinem cum distractione

Authentic reports :1

Dg: T068 Polytrauma
I259 Srdeční selhání
S3200 Fractura corporis vertebrae lumbalis II.
S2240 Fractura costarum IV.-XII. l.sin.
S2700 Pneumothorax l.sin.
S2710 Haemothorax l.sin.
S3240 Fractura acetabuli l.sin.
S3210 Fractura massae later. l.sin. ossis sacri
S3250 Fractura rami superior et inferior ossis pubis l.sin.
S7200 Fractura subcapitalis femoris l.sin.
S4241 Fractura epicondyli ulnaris humeri l.sin. aperta Tscherne I
W1311 Pád z bud., konstr.n.propad.; obytné instituce; volný čas

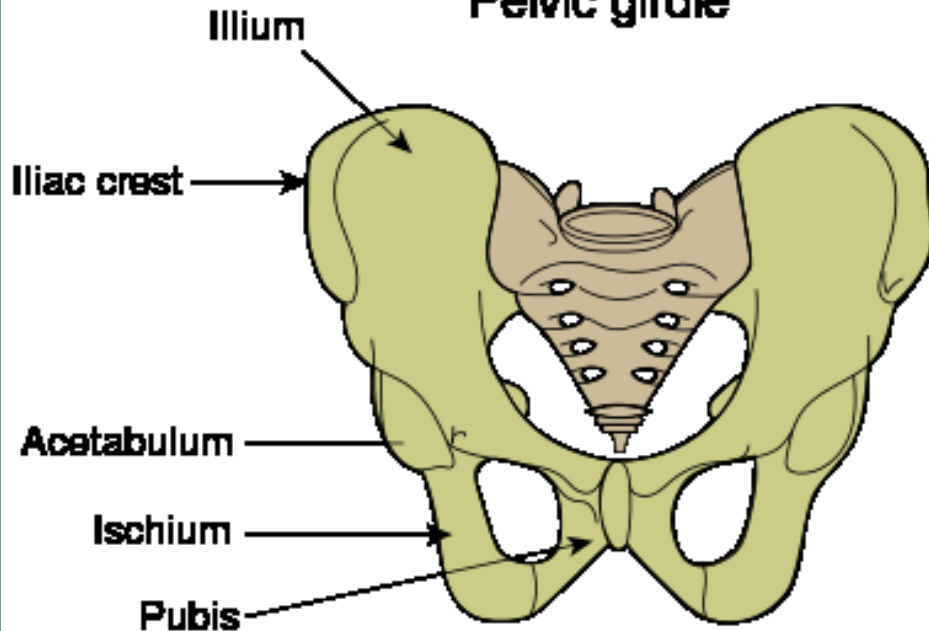


Fr. aperta TSCHERNE I

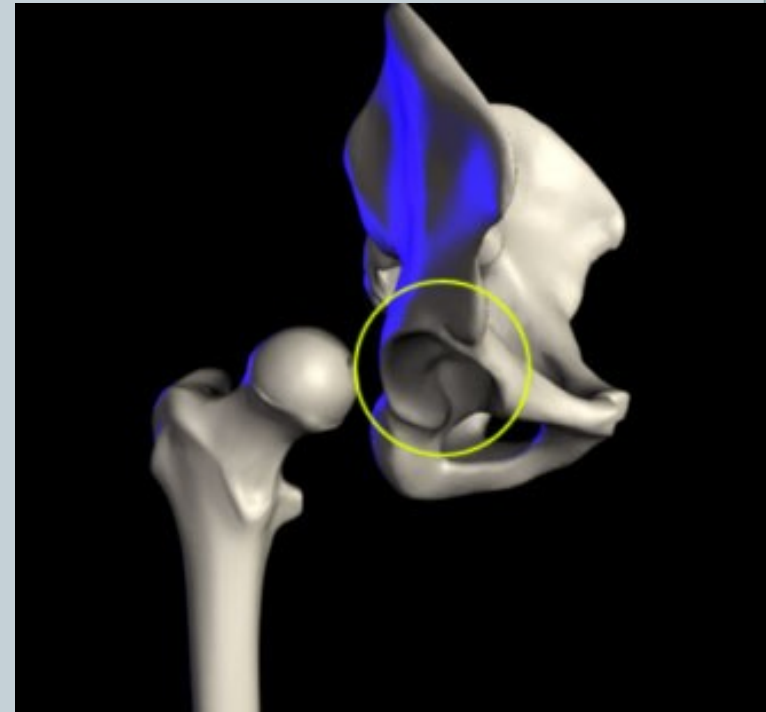
- open fracture with small skin injury without its contusion
- negligible bacterial contamination

Profesor Dr. Harald **Tscherne** (1933), Traumatology Clinic, Hannover: *Classification of fractures* published in 1982, T. divides fracture into open and closed. The most important is for him the degree of the soft tissues damage.

Pelvic girdle



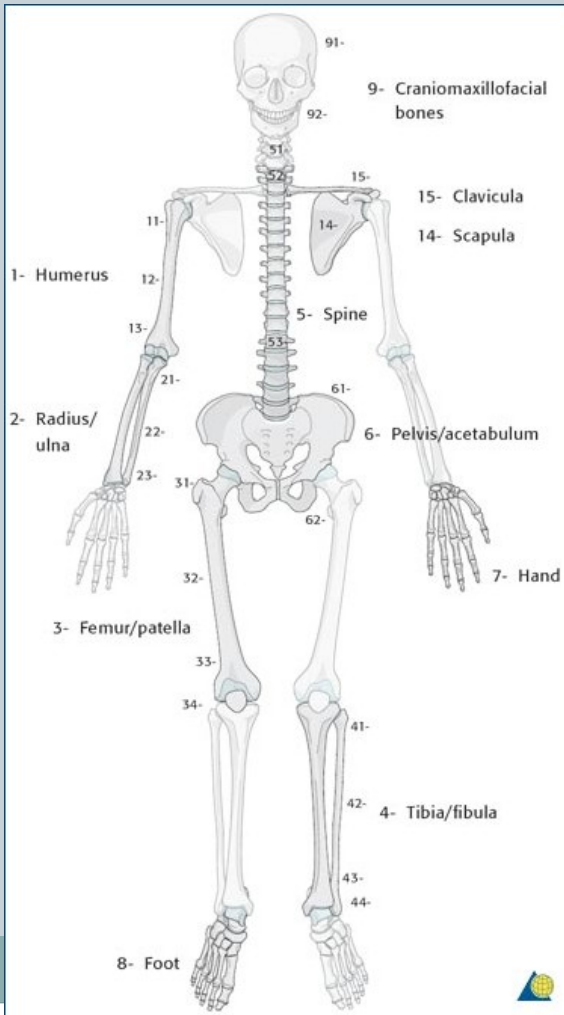
The **acetabulum** (cotyloid cavity) is a concave surface of the pelvis. The head of the femur meets with the pelvis at the acetabulum, forming the hip joint.



AO Classification of fractures



S 4220 Fractura colli chirurgici humeri l. dx. comminutiva AO 11-C3



1 Proximal

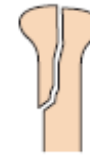
A



Extraarticular

No involvement of displaced fractures extending into the articular surface

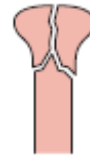
B



Partial articular

Part of the articular component is involved, leaving the other part attached to the meta-/diaphysis

C



Complete articular

Articular surface involved, metaphyseal fracture completely separates articular component from the diaphysis

2 Diaphyseal



Simple

One fracture line, cortical contact between fragments exceeds 90% after reduction



Wedge

Three or more fragments, main fragments have contact after reduction



Complex

Three or more fragments, main fragments have no contact after reduction

3 Distal



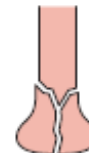
Extraarticular

No involvement of displaced fractures extending into the articular



Partial articular

Part of the articular component is involved, leaving the other part



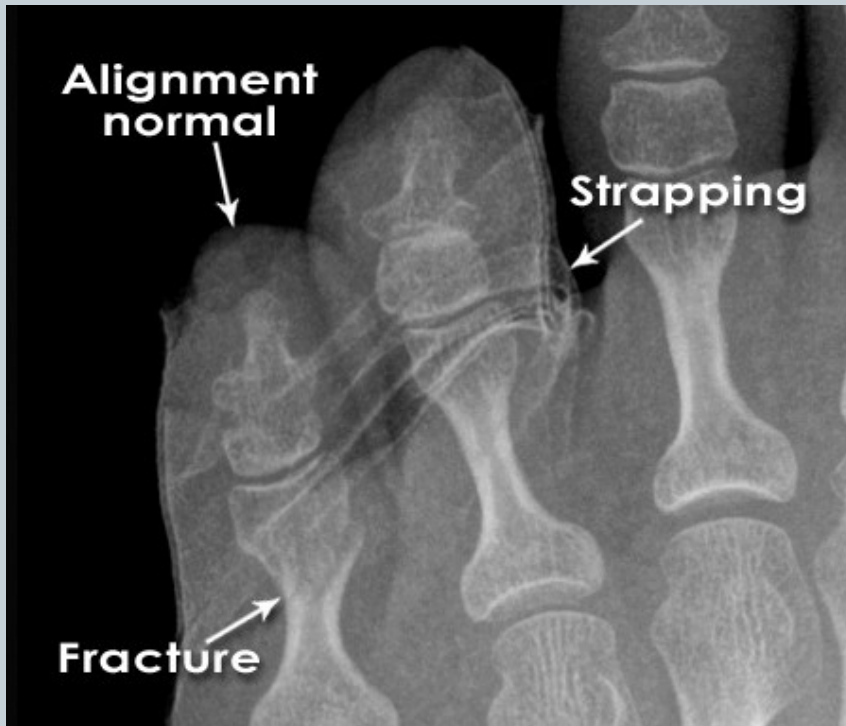
Complete articular

Articular surface involved, metaphyseal fracture completely

Fracture Healing:

1: REPOSITIO = REDUCTIO fragmentorum

CLOSED (short /long term)

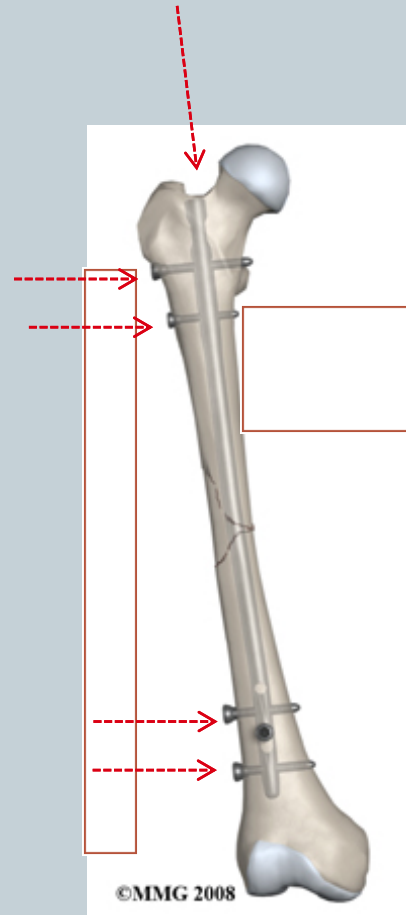


Fracture Healing:

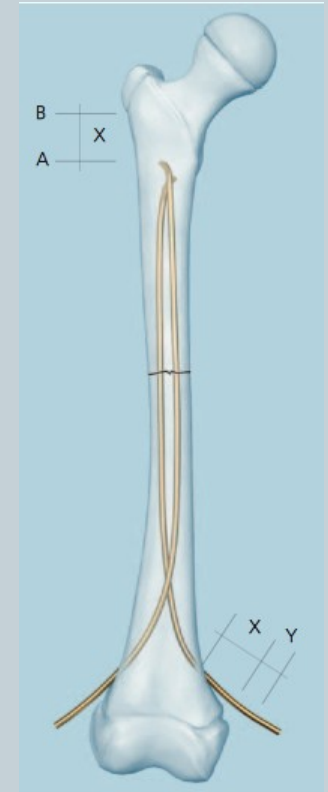
2: FIXATIO = STABILISATIO fragmentorum



PLASTER CAST



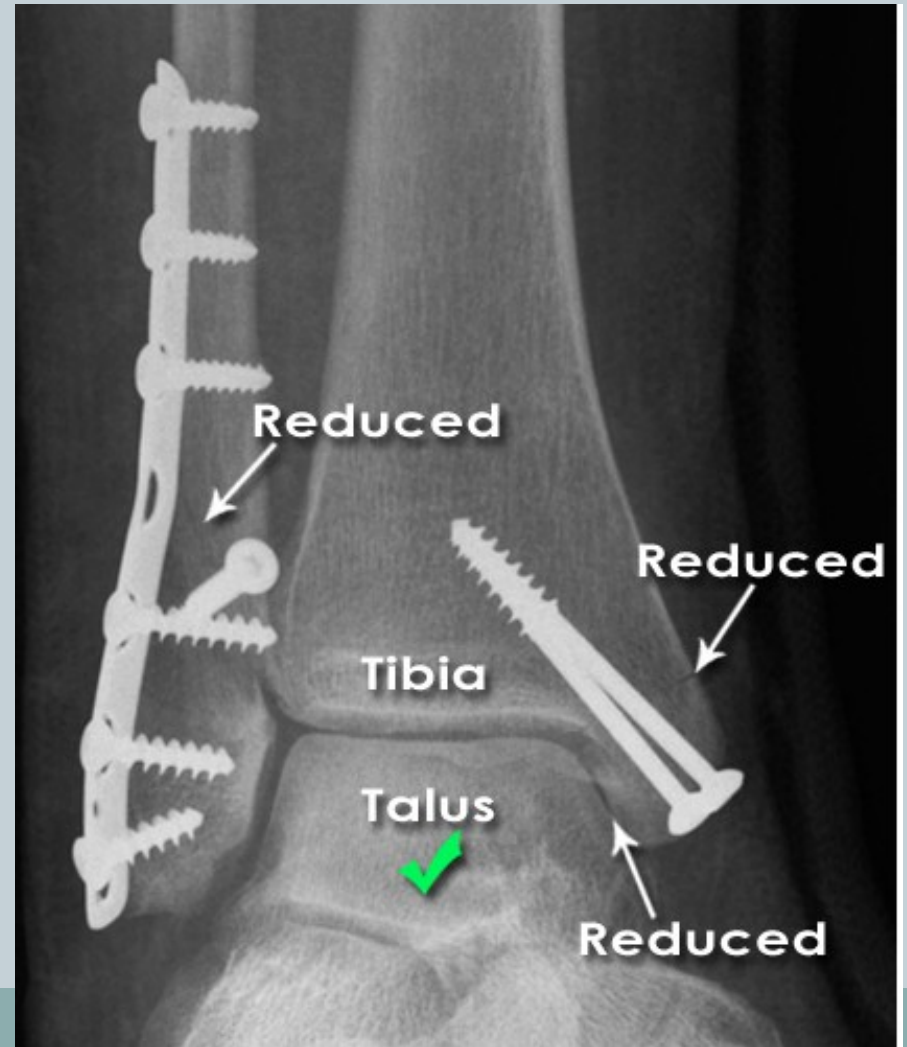
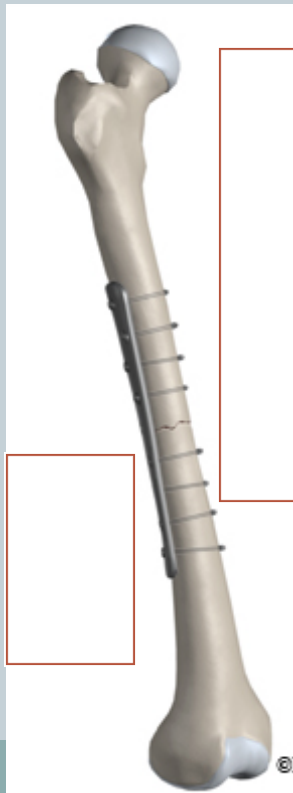
INTERNAL FIXATION



Fracture Healing:

2: FIXATIO = STABILISATIO fragmentorum

INTERNAL FIXATION

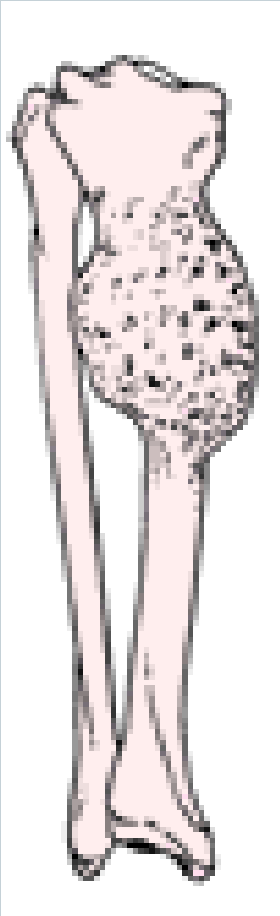


Fracture Healing:

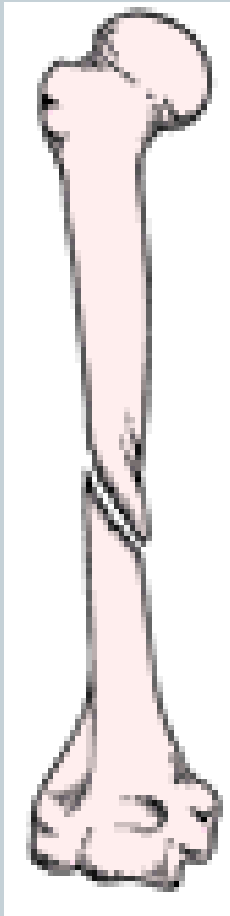
2: FIXATIO = STABILISATIO fragmentorum



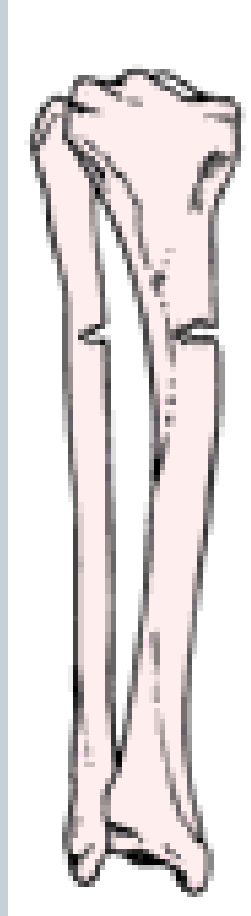
Name the type of fracture



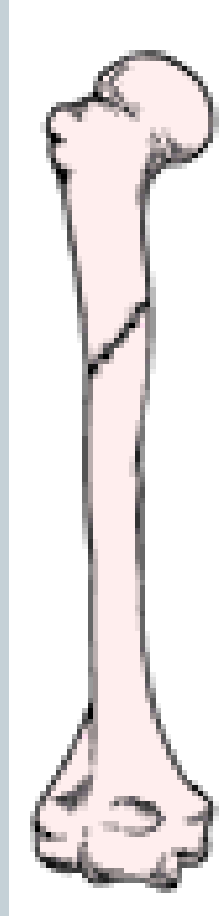
A



B



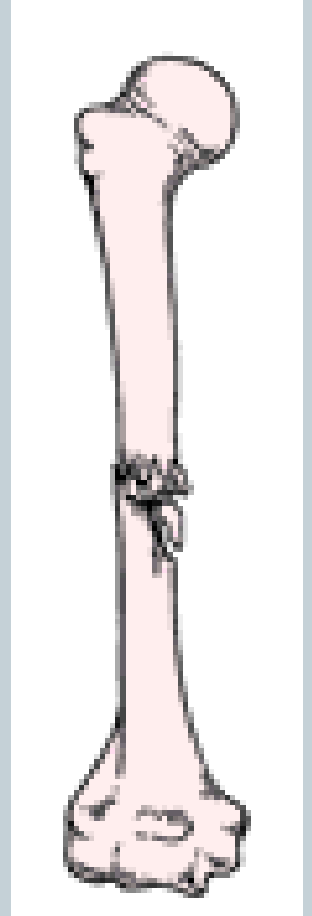
C



D



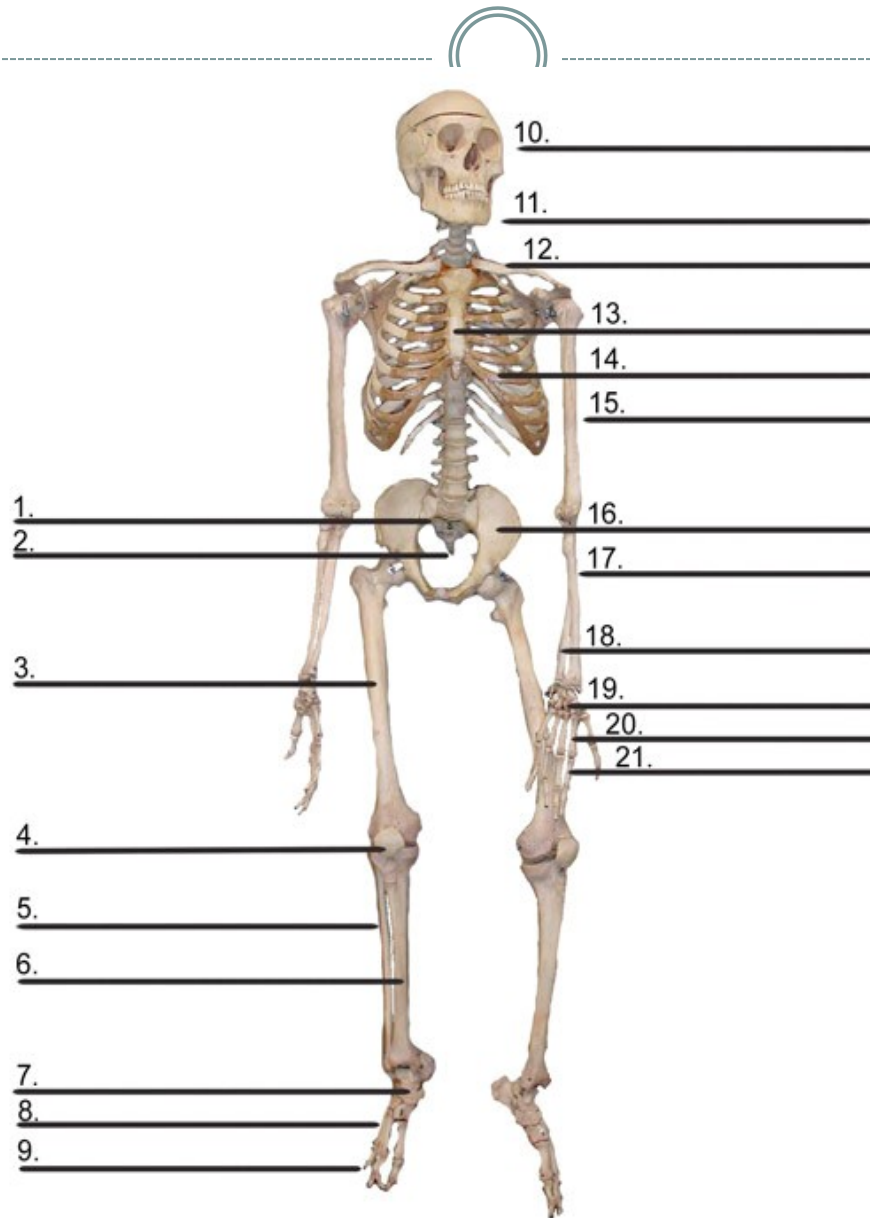
E



F

A) Name different bones of the human body

B) Write down different types of fractures of named bones

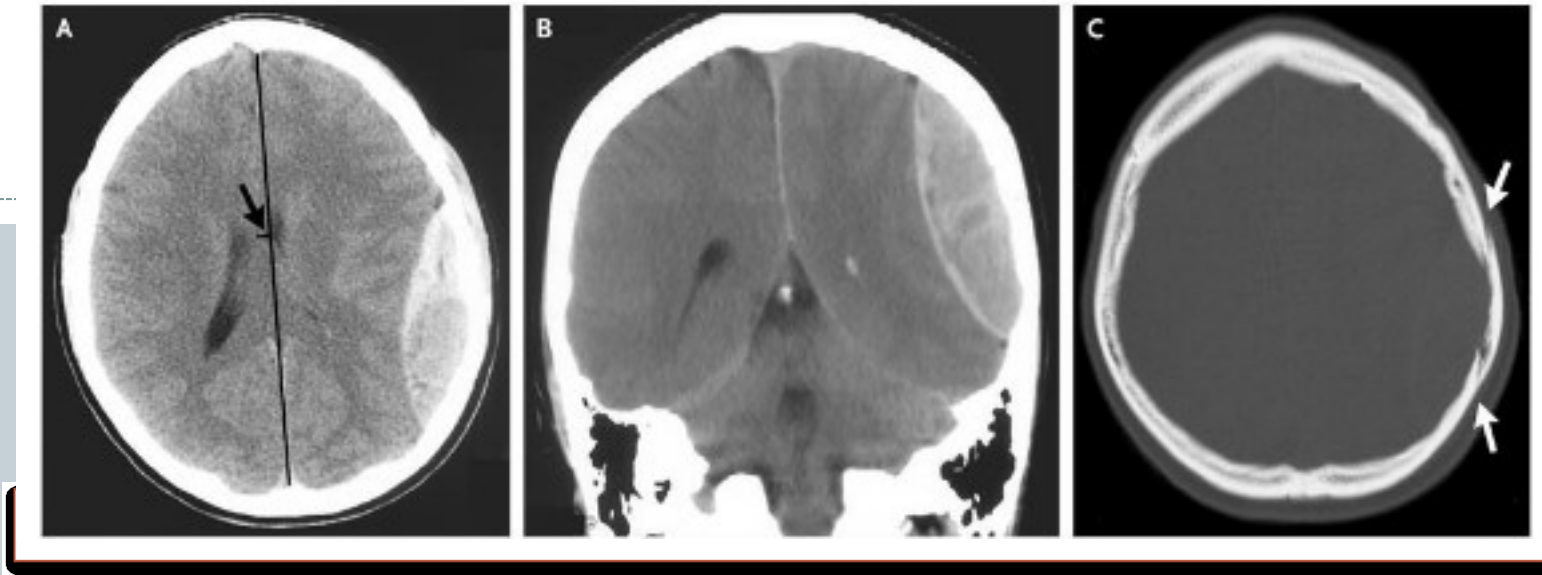


1



A 45-year-old woman presented with a 3-month history of generalized body pains nonresponsive to analgesic agents. Along with low back pain, she had progressive difficulty in getting up from sitting and supine positions and in walking. There was no history of trauma or any medication intake. She is an orthodox believer who wears a black veil outdoors and is completely covered, with little exposure to the sun. An anteroposterior radiograph of the pelvis showed an *undisplaced transverse fracture of the shaft of both femurs*. The patient was treated with therapeutic doses of calcium and vitamin D supplements.

2



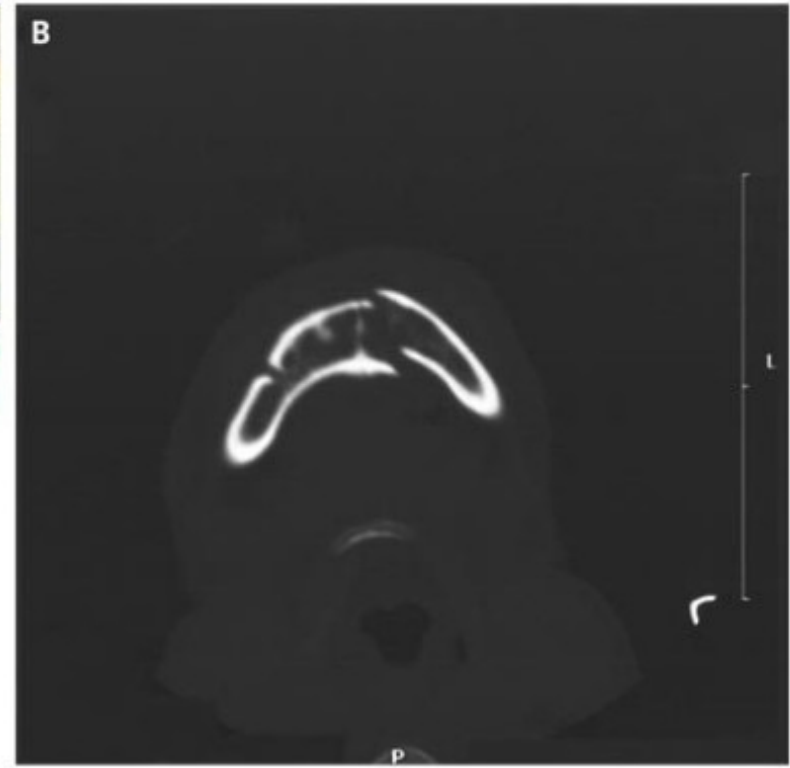
An 18-year-old slightly intoxicated man was assaulted with a glass bottle on the left parietal region of his head and had a 5-minute loss of consciousness. Two hours after the injury he was presented to a local emergency with severe headache, nausea, and repeated vomiting. Computed tomography of the head revealed a 2.5-cm *epidural hematoma in the left parietal region* (Panels A and B) *underlying a linear nondisplaced skull fracture* (Panel C, arrows).

3

A 21-year-old man presented after being struck with a gun on his right lower jaw.

Examination revealed displacement of the

left half of his mandible with malocclusion on biting (Panel A). Computed tomography showed a **fracture of the left mandible and a fracture of the right mandibular body and angle** (Panel B). Given the U shape of the mandible, it is common for contralateral fractures to result from major injury. Intravenous analgesics and antibiotics were given; the patient underwent *open reduction with internal fixation of his fractures*.



Authentic reports :1



Dg:

S8220 Fr. cruris l.sin cum fr.fibulae duplex disloc.aperta
stp. OS FE 17.7. 2010
V2331 Mot.x auto,;zra.při nás.,výs.;volný čas
S730 Luxatio coxae l.sin centralis stp. repositionem 17.7
S332 Luxatio art. SI l. sin stp. reposit. 17.7.
S3240 Fr. acetabuli l.sin transv.disloc. stp. OS 19.7.
S818 Decollement partis proximalis cruris l.sin.
S711 Vulnus lacerum reg. femoris l.sin.

collement = severe damage of soft tissues

Check the authentic medical report



Dg: T068 Polytrauma
V1701 Cykl.řid.x pev.přek.;neprov.neh.;volný čas
S0640 Haemorrhagia epidurale reg. temporale l.sin
F100 Ebrietas aethylica
S0601 Commotio cerebri
S0240 Fr.compl. zygomaticomaxillaris l.sin cum hemosir
S4201 Fr.claviculae l.sin apeta
S4210 Fr. scapulae l.sin comminutiva
S0210 Fr.allae ossis sphenoidalis l.sin cum hemosinus
S2240 Fr.costarum II-IV hemithoracis l.sin
S2700 Pneumothorax traum. reg. dorsobasale l.sin /dle
S2720 Fluidothorax l.sin. min. dle RTG
S2730 Contuio pulmonisl.sin, reg.dorsobasale
S407 Excoriationes extrem.super. l.sin multipl.
S607 Excoriationes digitorum manuum bilat.
S013 Dilaceratio auriculae l.sin

Literature



- Mazánek, J.: Traumatologie orofaciální oblasti. Praha : Grada, p. 24
- <http://radiologymasterclass.co.uk>
- <http://anthropology.si.edu>
- <http://nejm.org> (The New England Journal of Medicine)