

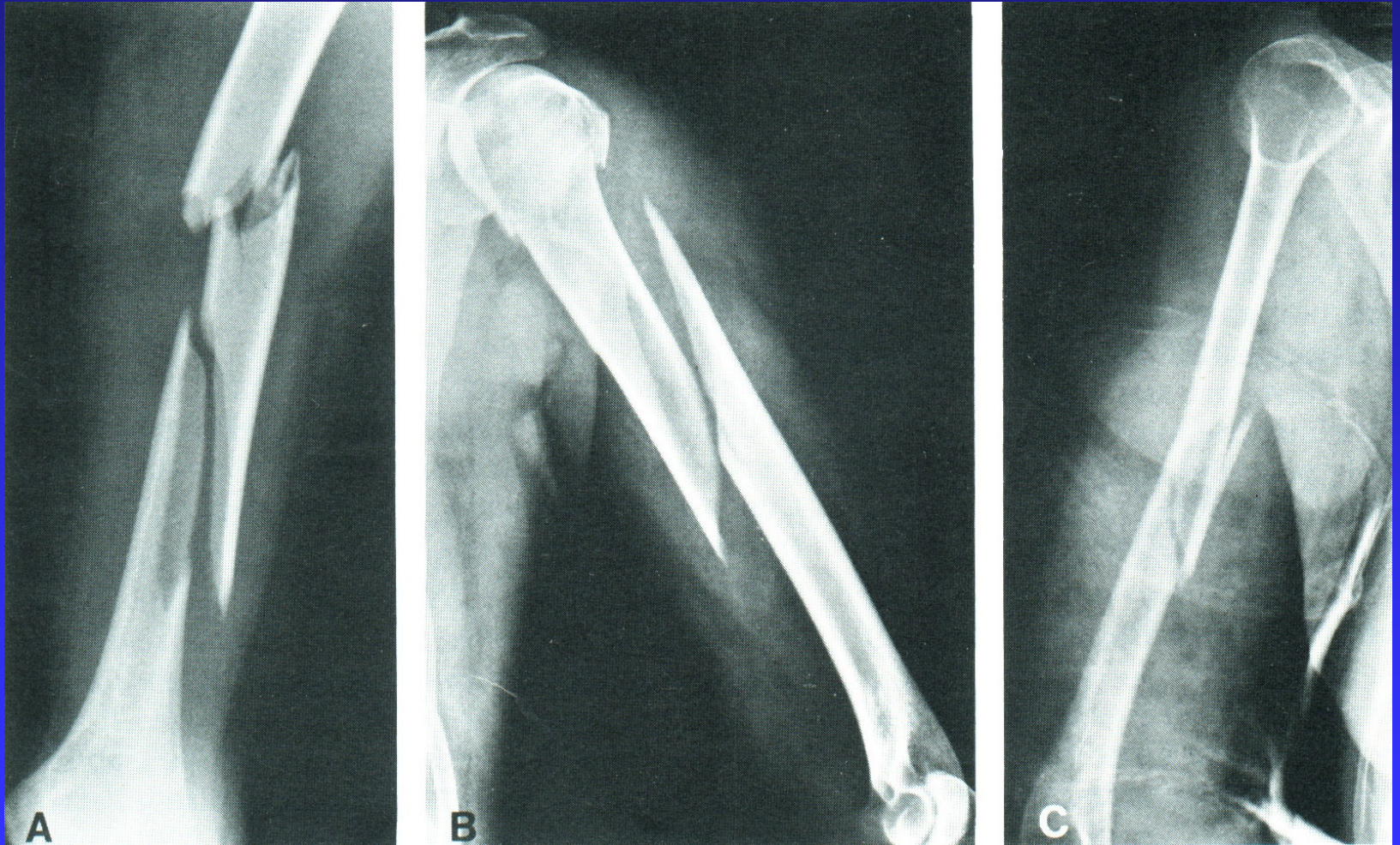
Fractures and dislocations

Z. Rozkydal

Fractures - etiology

- Traumatic (acute violence)
- Pathological (pathological lesion)
- Stress fractures

Traumatic fracture



Pathological fracture

Tumors

Infections

Osteopatias

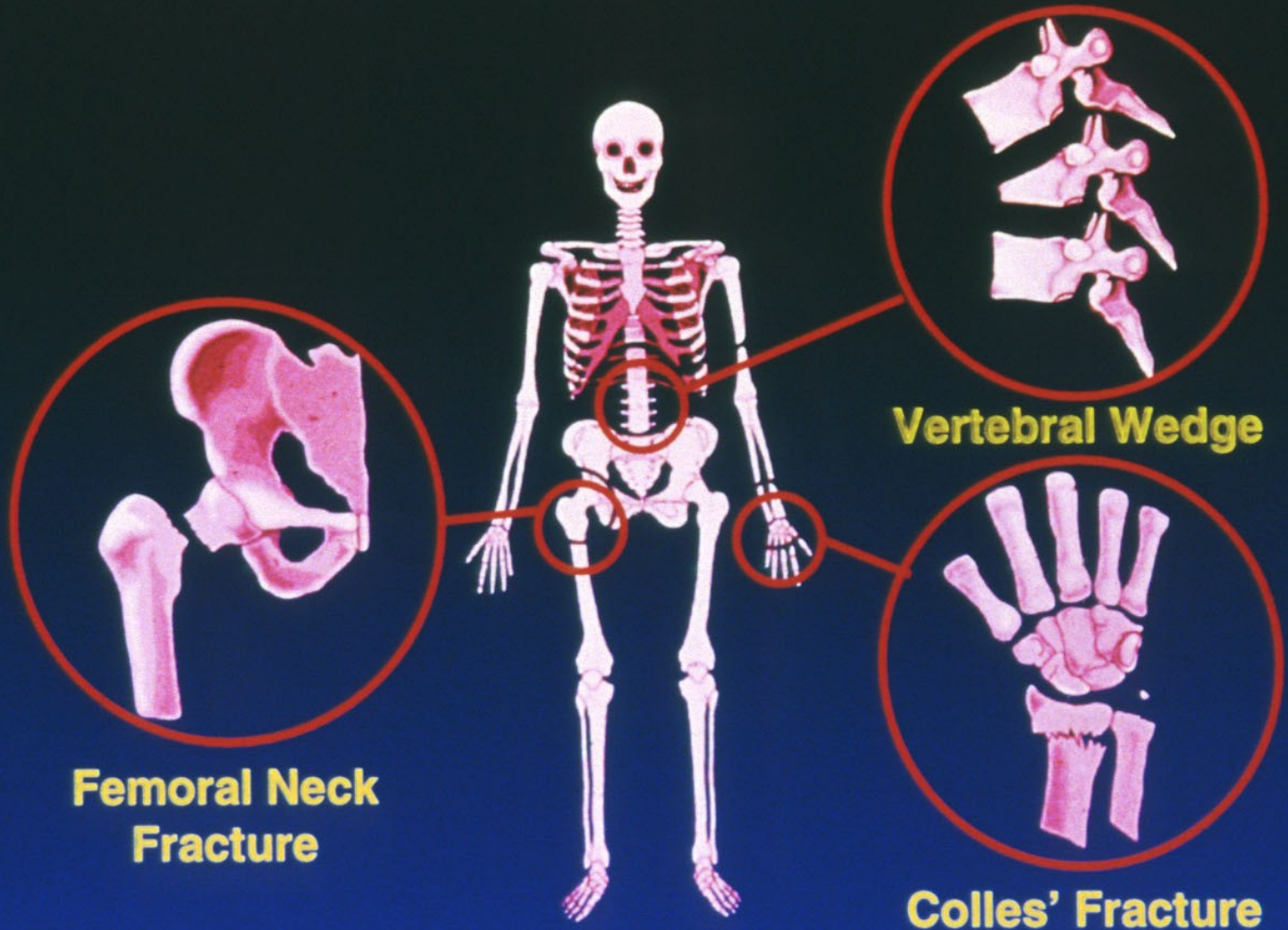
Congenital diseases



Stress fracture

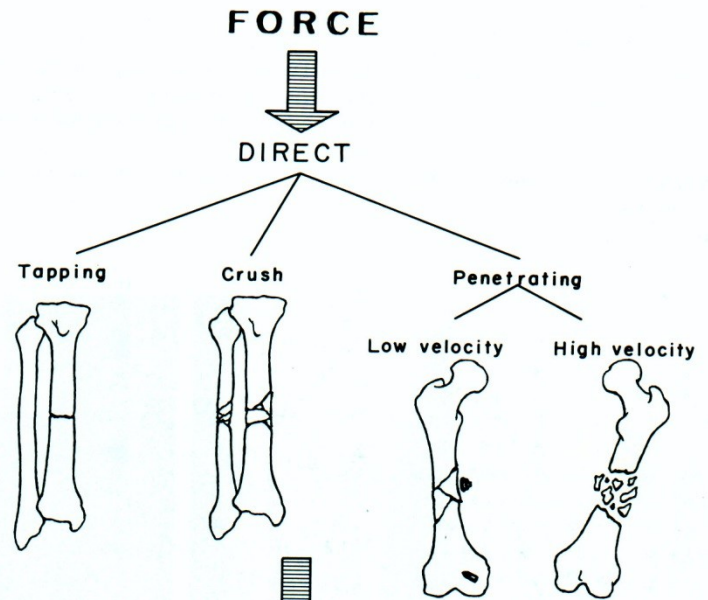


THE COMMON FRACTURES OF OSTEOPOROSIS

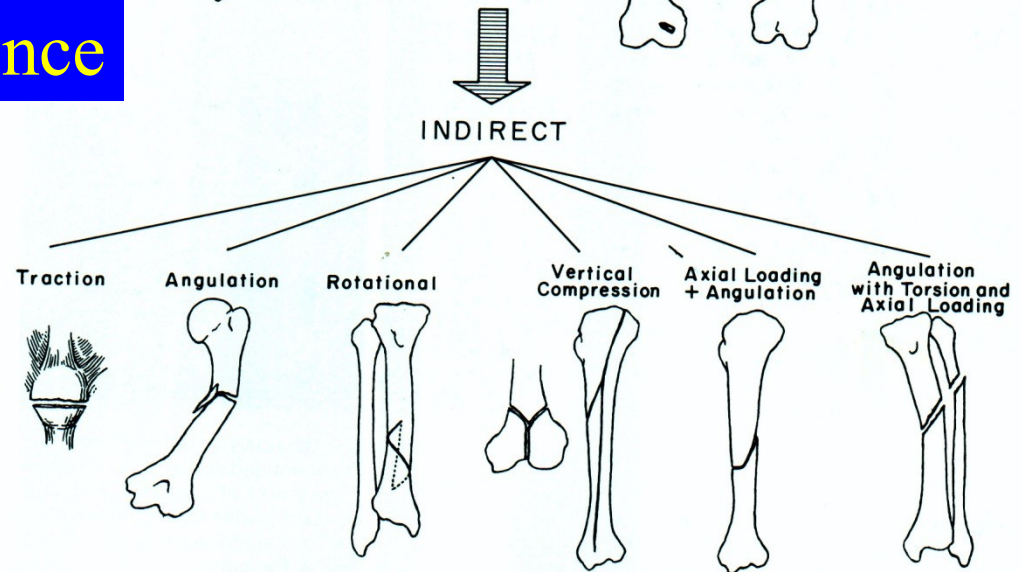


Mechanism of injury

Fractures from direct violence

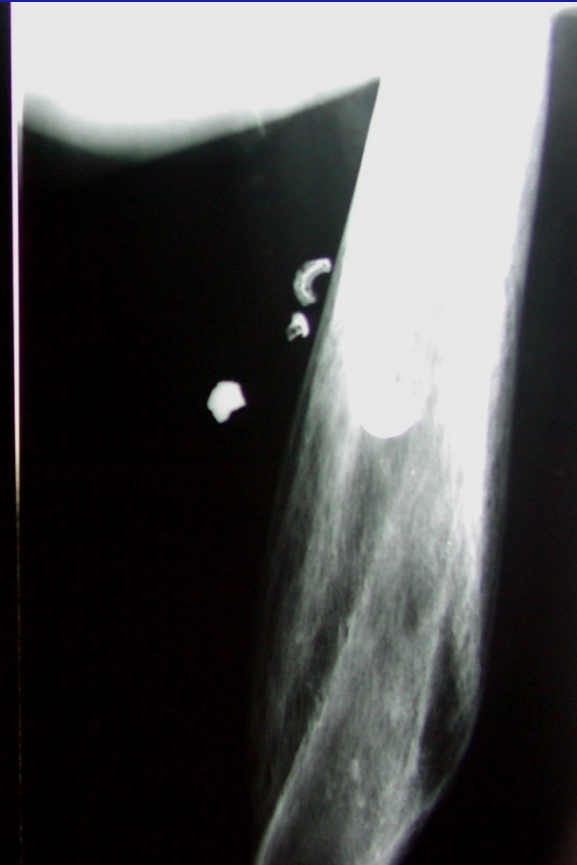
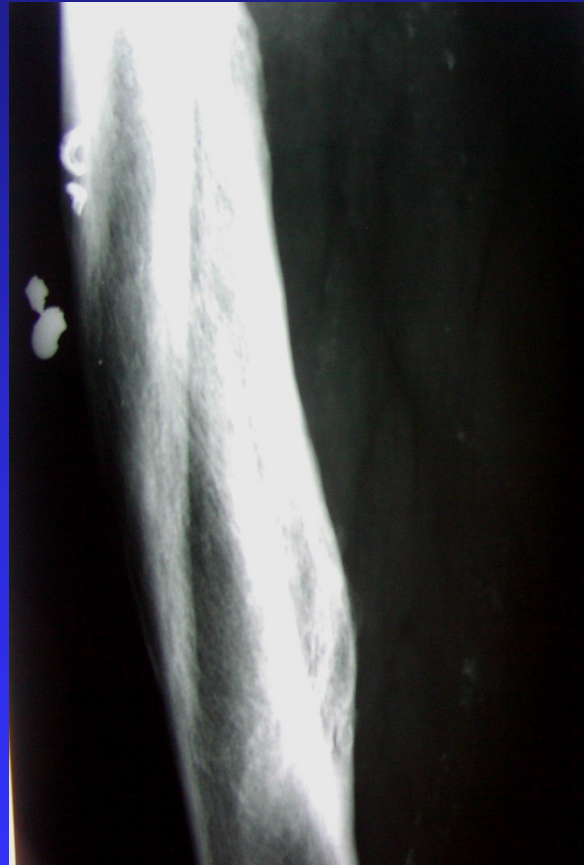
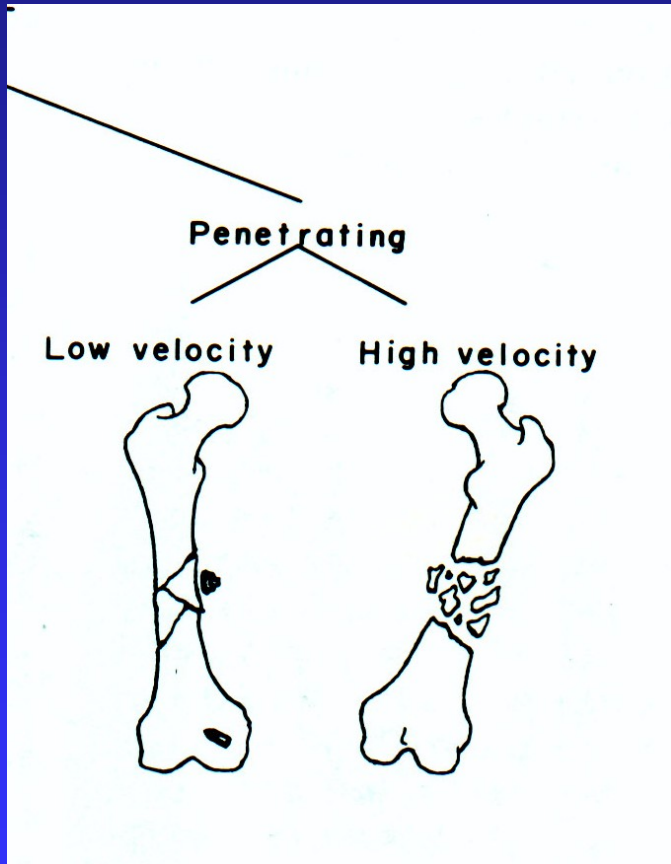


Fractures from indirect violence



- traction
- angulation
- rotation
- vertical compression
- torsion

Missile fractures



Mechanism of injury

High energy trauma – large lesion of soft tissue

Low energy trauma - small lesion of soft tissue

Classification of fractures



Complete



Incomplete

- fissures
- infractions
- impressions
- subperiosteal

Classification of fractures



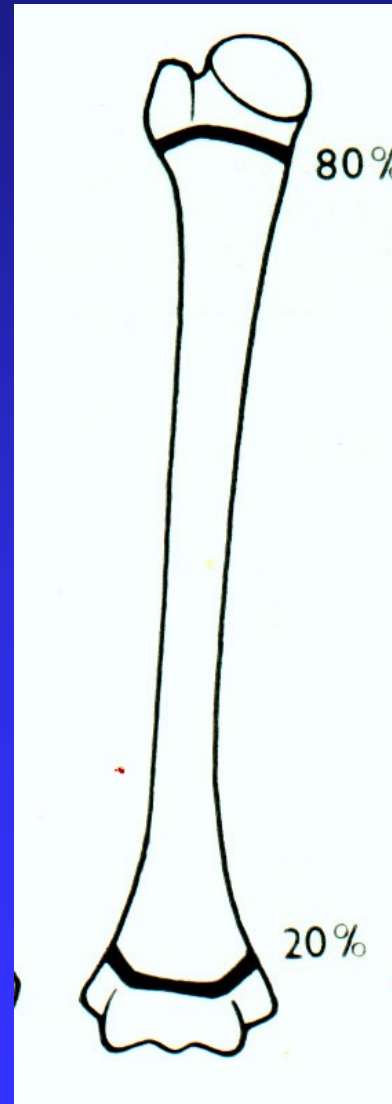
Unstable fracture
Broken end move
May damage soft tissues



Stable fracture
Broken bone ends
do not move

Localisation of fractures

- Epiphyseal
- Metaphyseal
- Diaphyseal



epiphysis
metaphysis

diaphysis

metaphysis
epiphysis

Clinical symptoms of fractures

- Pain and tenderness
- Swelling, haematoma, bruising
- Deformity, shortening or bending
- Crepitus
- Difficulty in moving the extremity
- A wound – in open fractures
- Signs of shock

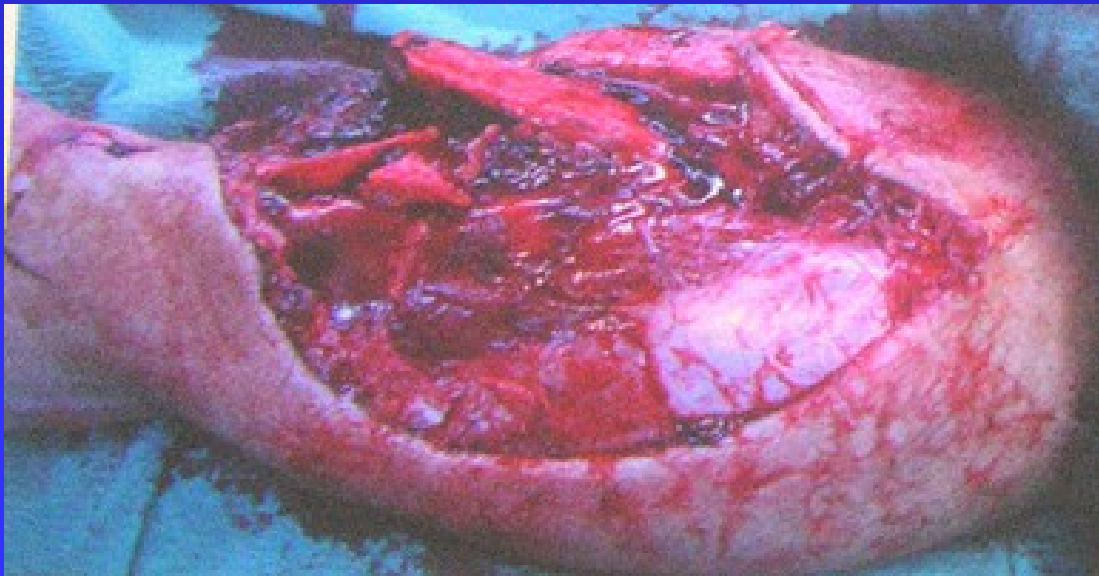
Open fractures

A wound at the fracture site

Damage of the skin

Damage of the soft tissues

Bacterial contamination



First aid

It depends on the stage of injury

Check the airways

Check the breathing

Stop bleeding

Check the answer of the casualty

CPR

Support cervical spine

Hypovolemic shock- raise the legs

Immobilisation of the extremity

Cover the wound with a sterile dressing

Check the circulation

Pneumothorax

First aid

Immobilisation

Upper limb- with a sling or bandage

Lower limb- secure it to an unaffected one

Place padding around the injury for extra support

Injury to the joints

Contusion- direct blow

Sprain - ligaments, tendons, muscles

First aid

R- rest the injured part

I - apply ice pack or a cold pad

C- provide comfortable support

E- elevate the injured part

Injury to the joints

Subluxation

Dislocation

Haemarthrosis

Signs

Pain, difficulty to move, deformity of the joint

Keep the casualty still

Do not try to reduce it

Upper limb- apply a bandage around
the chest or apply a sling

Lower limb- secure it to the unaffected one

Do not allow the casualty to drink or eat