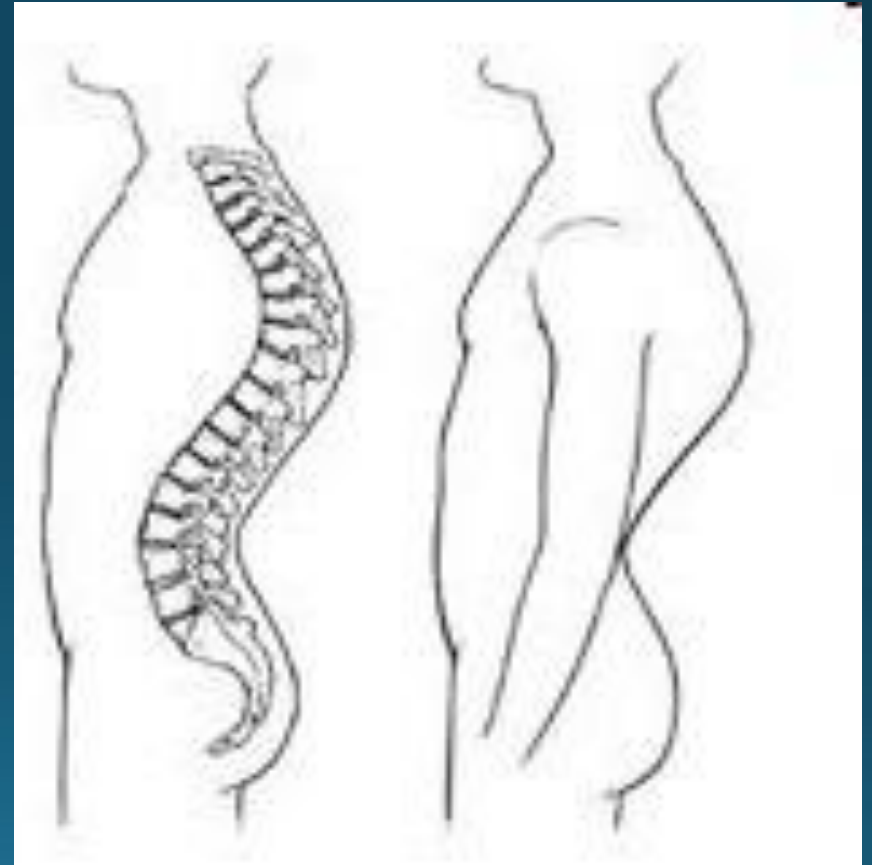


Phylogenetic disorders of skeletal system

Submitted By
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KYPHOSIS

Abnormal rounding of the spine that occurs in the upper and middle part of the back



Causes of KYPOSI

- Poor posture
- Present at birth
- Run families or genetics

RICKETS

Bone-softening disease that causes severe bowing of the legs, poor growth, and sometimes muscle pain and weakness



Causes of RICKETS

- Lack of Vitamin D
- Not enough calcium in one's diet
- kidney and liver diseases

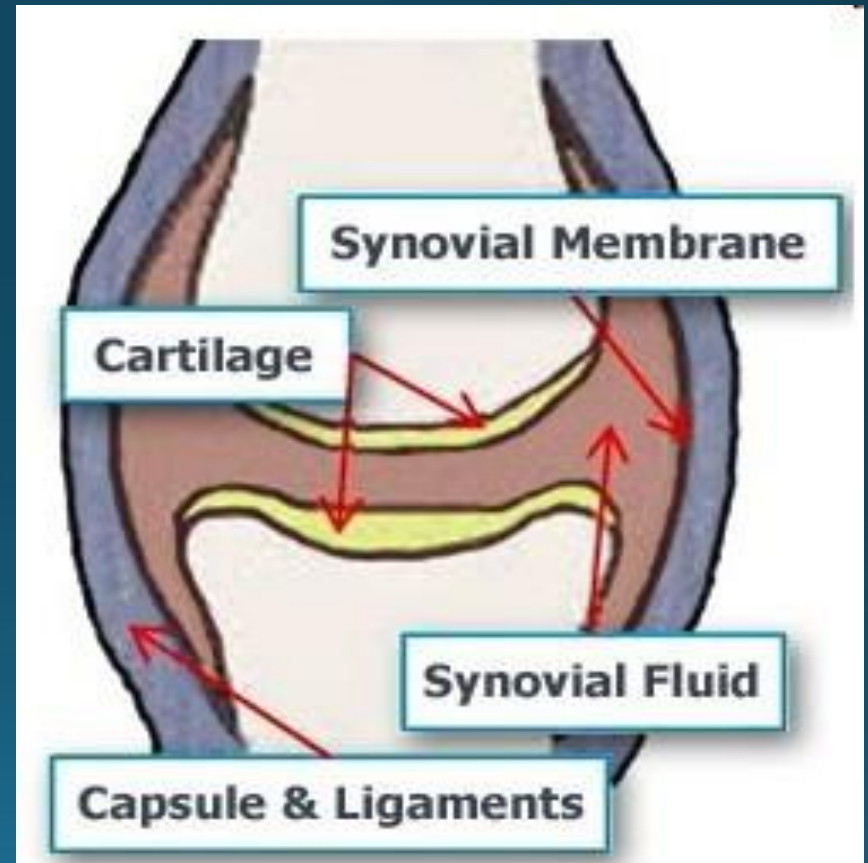
ARTHRITIS

Inflammation,
swelling, redness of a
joint



Causes of ARTHRITIS

- cartilage is wearing away
- lack of Synovial fluid
- infection

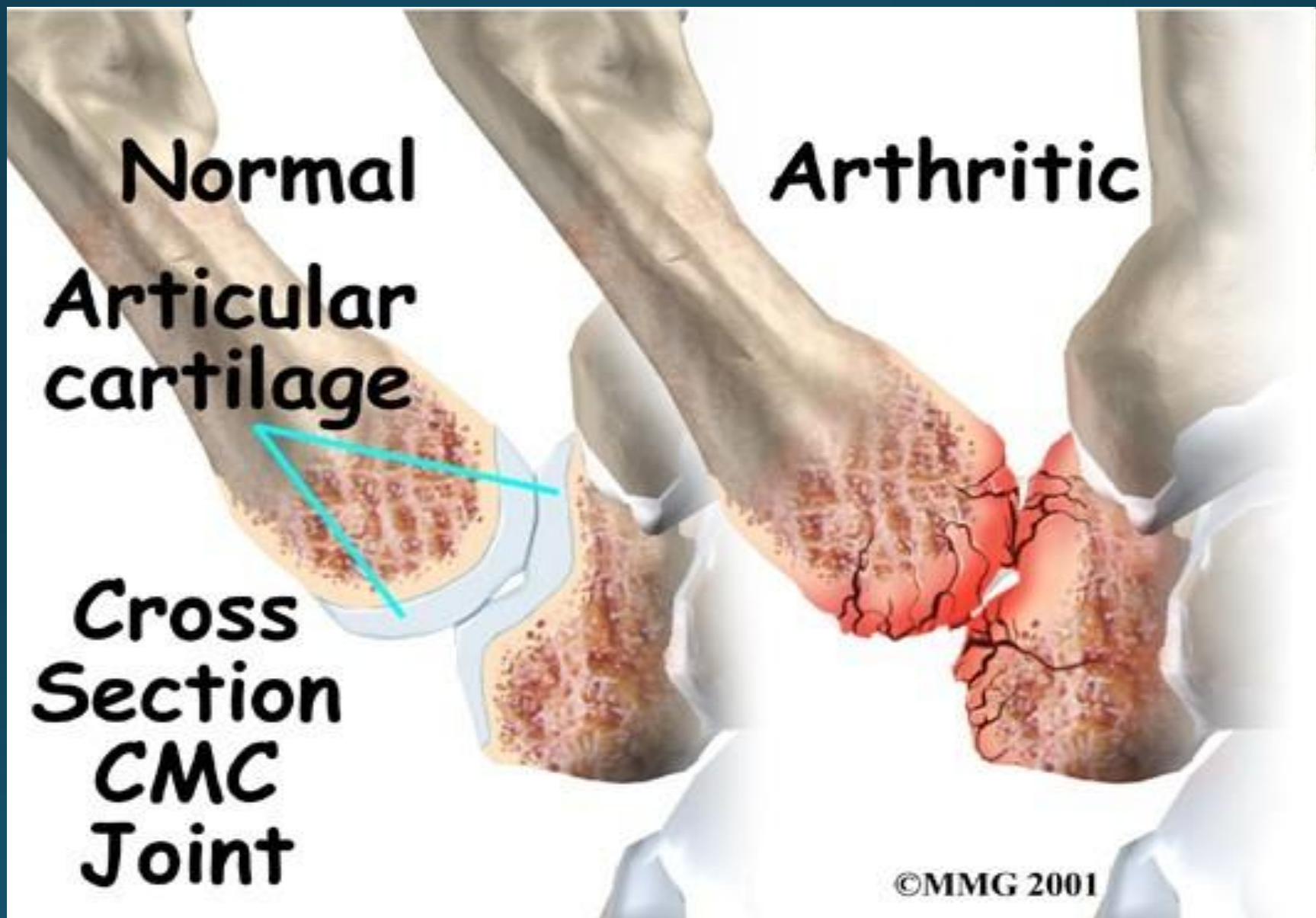


Normal



Arthritic





Normal

Arthritic

**Articular
cartilage**

**Cross
Section
CMC
Joint**

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OSTEOPOROSIS

Bone tissue
becomes brittle,
thin, and spongy



Causes of OSTEOPOROSIS

- Hereditary
- Gender
- Ethnicity
- History of broken bones
- Low body weight



BONE TUMOR

Abnormal growth of cells within the bone that may be noncancerous or cancerous

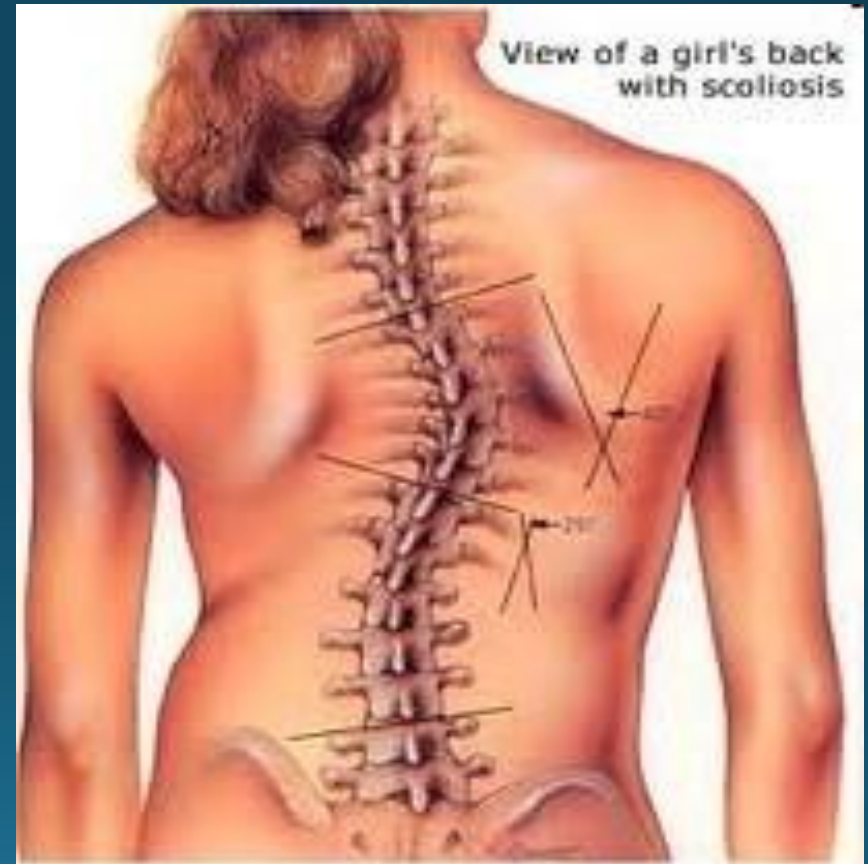


Causes of BONE TUMOR

- Hereditary
- Radiation
- Trauma

SCOLIOSIS

Causes the spine to curve to the left or right side



Causes of SCOLIOSIS

- Present at birth
- Hereditary

Scoliotic spine



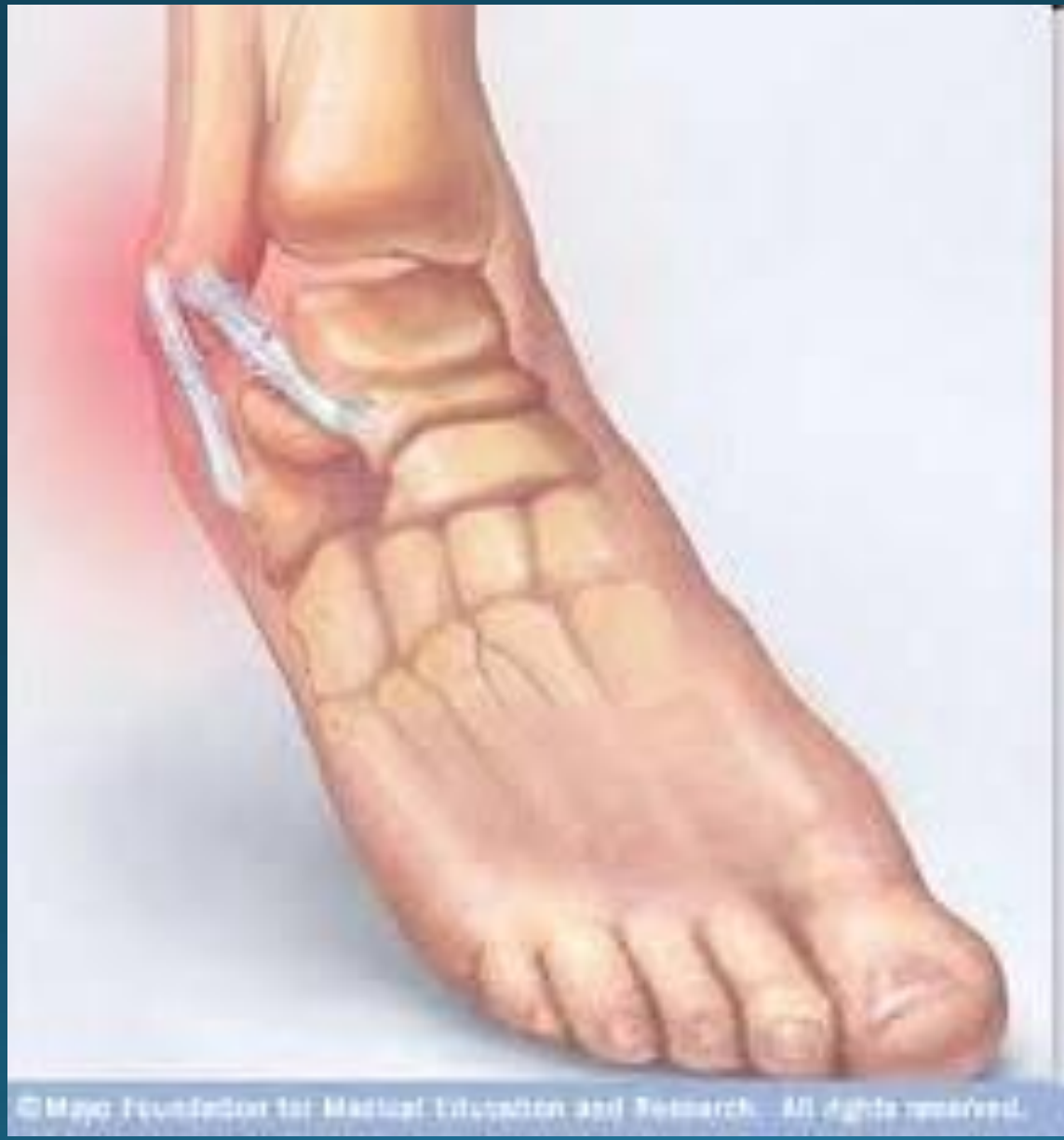
Normal spine



SPRAINS

An injury that happens when the ligaments get overly stretched or torn





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FRACTURES

Simple fracture



Comminuted fracture



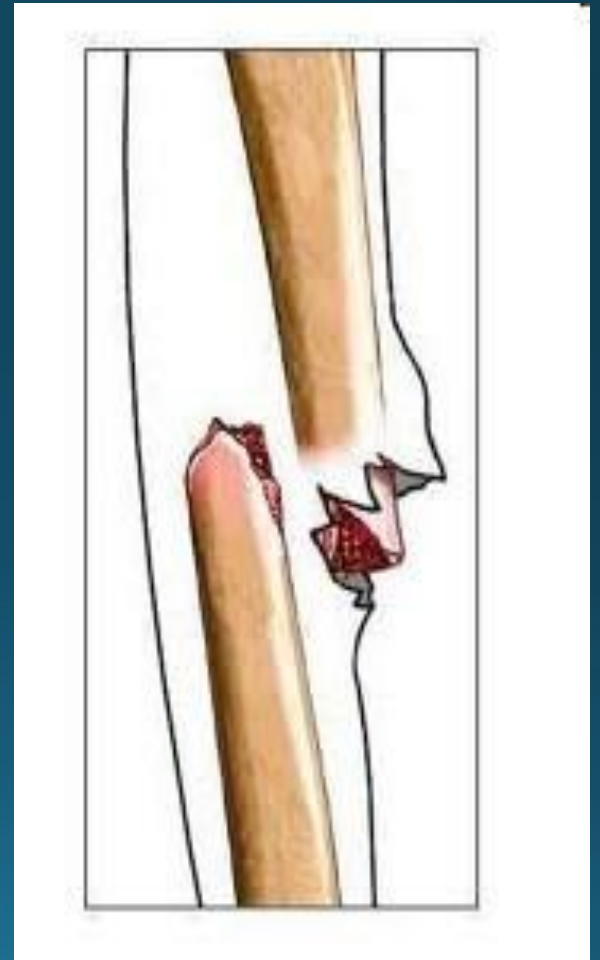
Open fracture



Fractures commonly occur when a person has fallen, an object has been dropped on them, or the bone has been twisted

Compound Fracture

A fracture in which broken bone fragments lacerate (rip, cut, tear) soft tissue and protrude through an open wound in the skin



Compound Fracture

- Need immediate treatment (because skin is broken)
- High risk of infection
- An operation is often required to clean the area of the fracture and realign the bone

Compound Fracture

Typically caused by high energy injuries such as car crashes, falls, or sport injuries

Compound Fracture (cont.)

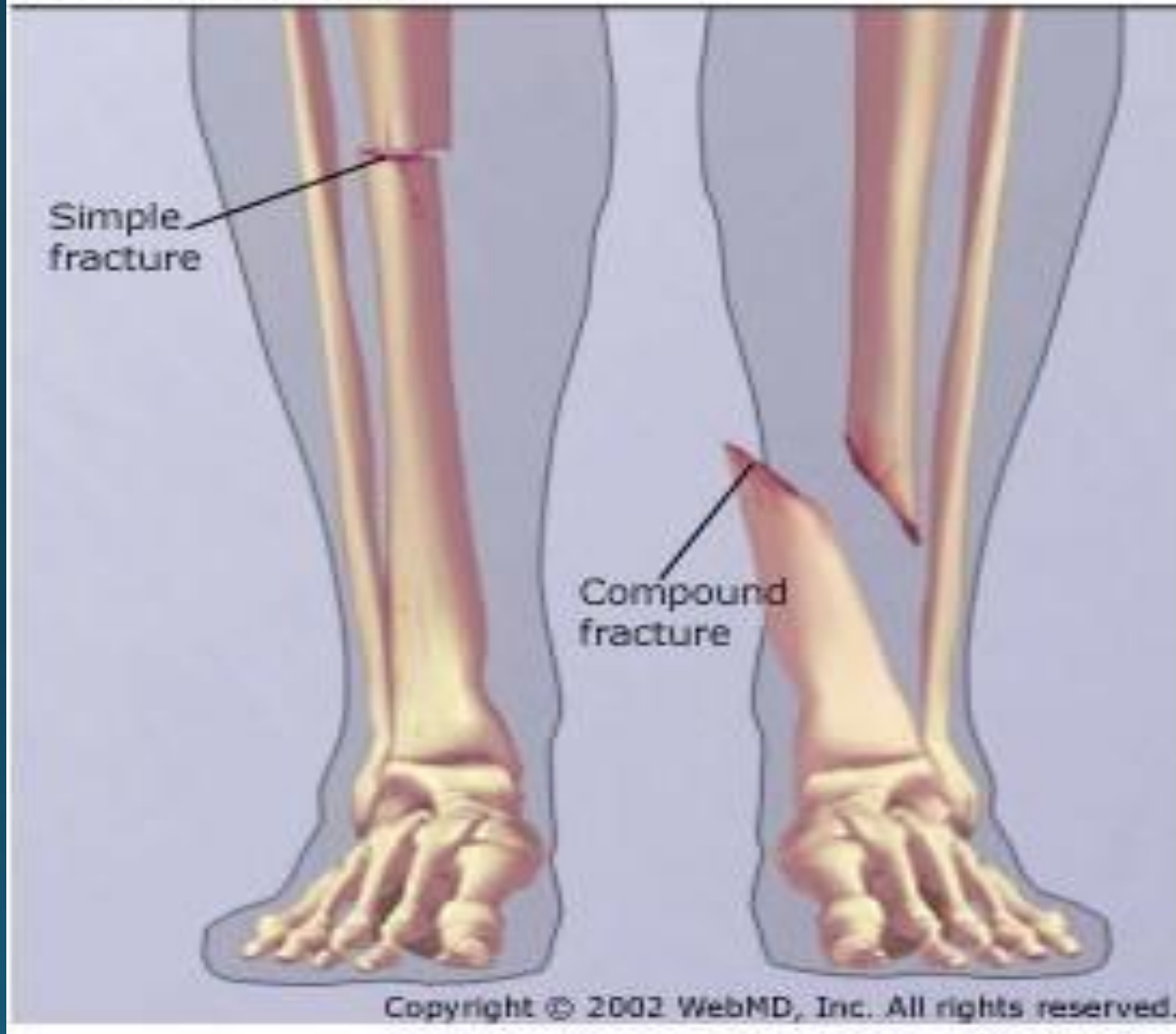


Simple Fracture

A bone that has broken into two pieces, and has not broken through the skin



Bone Fractures



Greenstick Fracture

Is a fracture in a young, soft bone in which the bone bends and partially breaks (cracks)



Greenstick Fracture

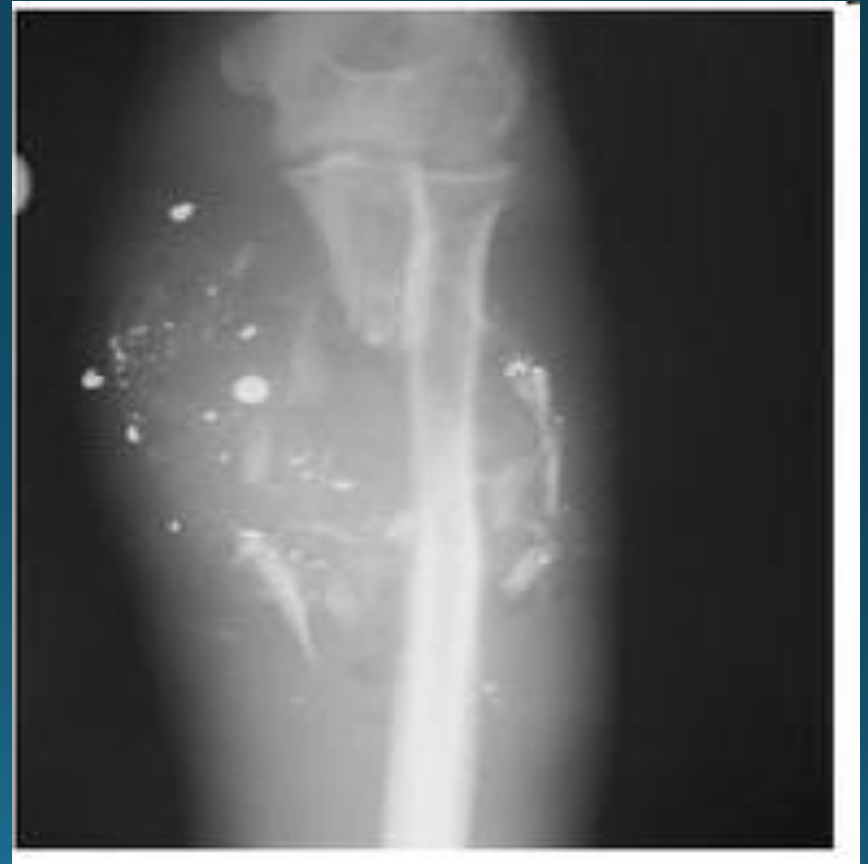
- Is a type of an incomplete fracture
- Doesn't displace the bone
- Often occurs during infancy and childhood when the bones are soft

Greenstick Fracture

- Is a result of bending forces (falls)
- Could be a result of non-accidental injury (blow on the forearm or shin)

Comminuted Fracture

Defined as a bone that has been shattered, splintered, or crushed into more than two pieces

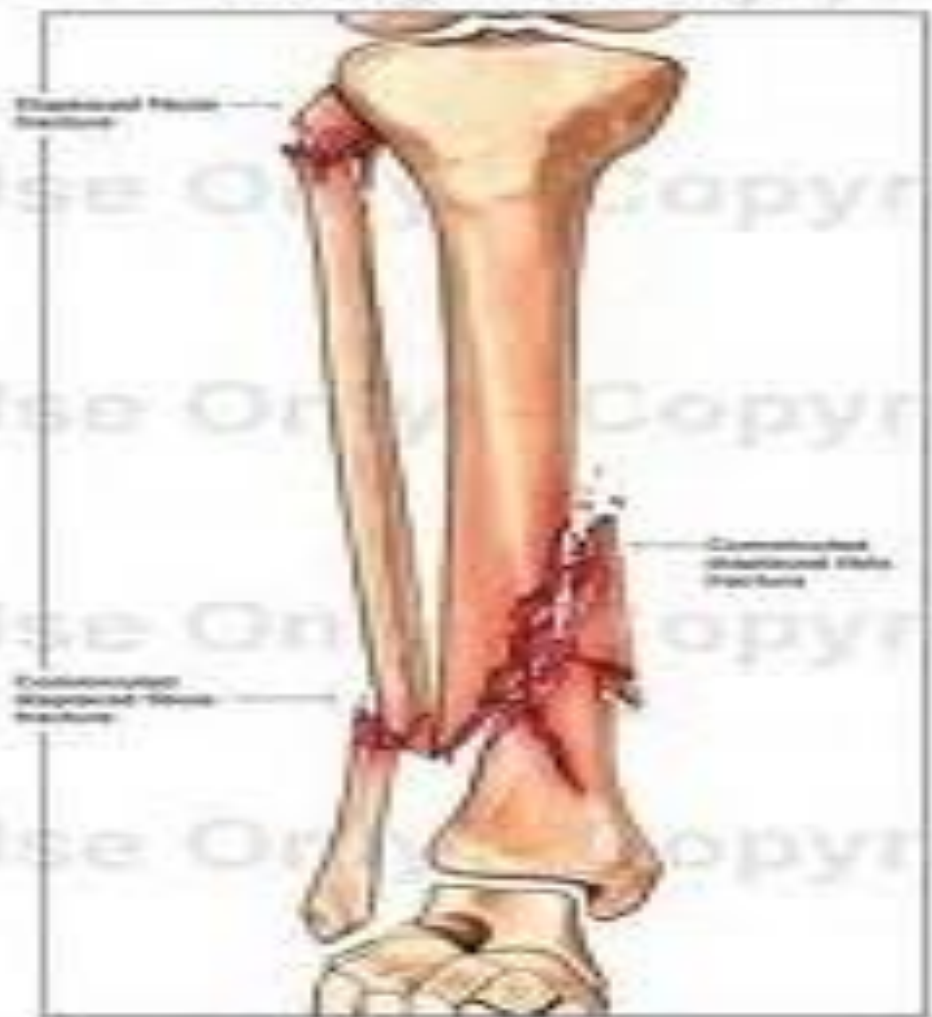


Comminuted Fracture

- Occurs when there has been some kind of crushing force on the bone and can happen anywhere along the bone
- It mostly occurs in elderly people or people who already have a bone weakening condition

Comminuted and Compressed Right Lower Leg Fractures (Pilon Fracture)
Post-accident Condition

Normal Anatomy



Anterior view of foot/leg