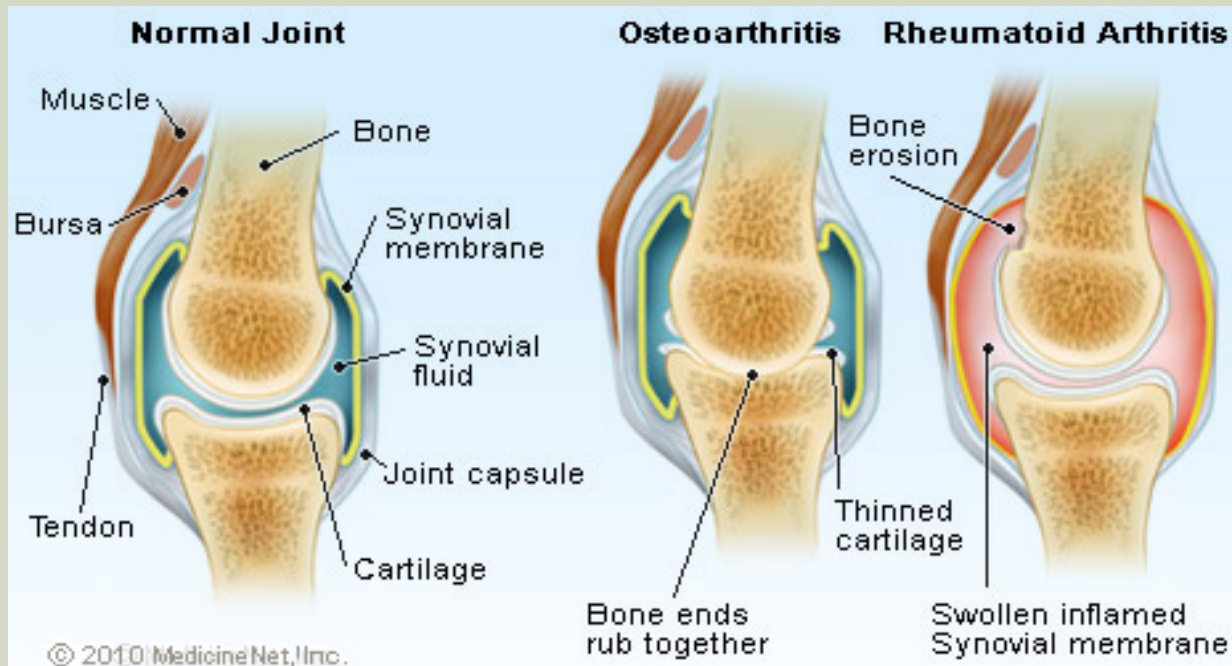


SKELETAL SYSTEM: DISEASES AND ABNORMAL CONDITIONS



Normal and Arthritic Joints

ARTHRITIS

INFLAMMATION
IN THE JOINT

CAN BE VERY
DISABLING

CAUSES:

- WHERE ON
CARTILAGE
- INJURY
- DECREASED
FLUID IN
JOINT

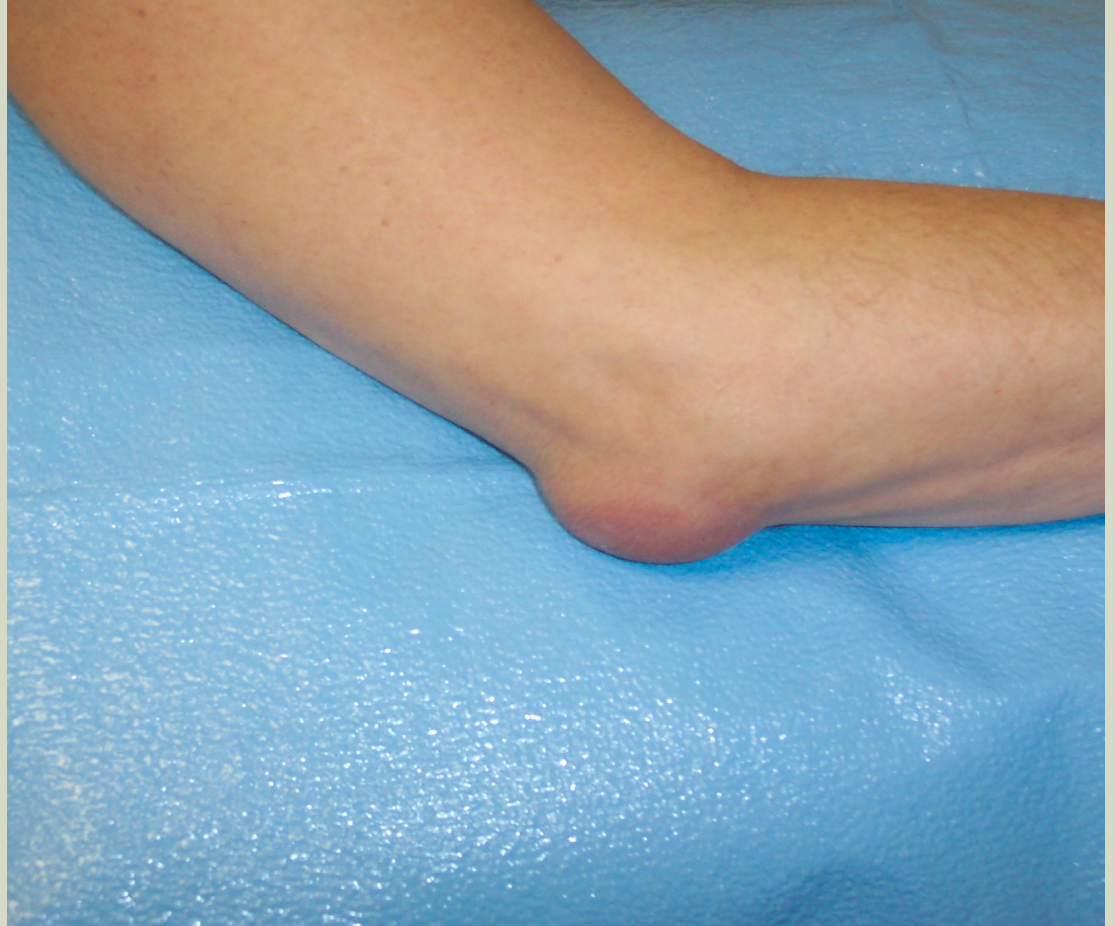
BURSITIS

- INFLAMMATION IN THE BURSA SAC
- SEVERAL BURSA SACS LOCATED AROUND EACH JOINT
- CAUSED BY:
 - DIRECT CONTACT
 - FRICTION FROM A TENDON



BURSITIS

- CAN ALSO BE CAUSED BY INFECTION



FRACTURES

- **VARIOUS TYPES OF FRACTURES**

- **TWO MAJOR CLASSIFICATIONS:**

- OPEN
- CLOSED

- **TYPES OF FRACTURES:**

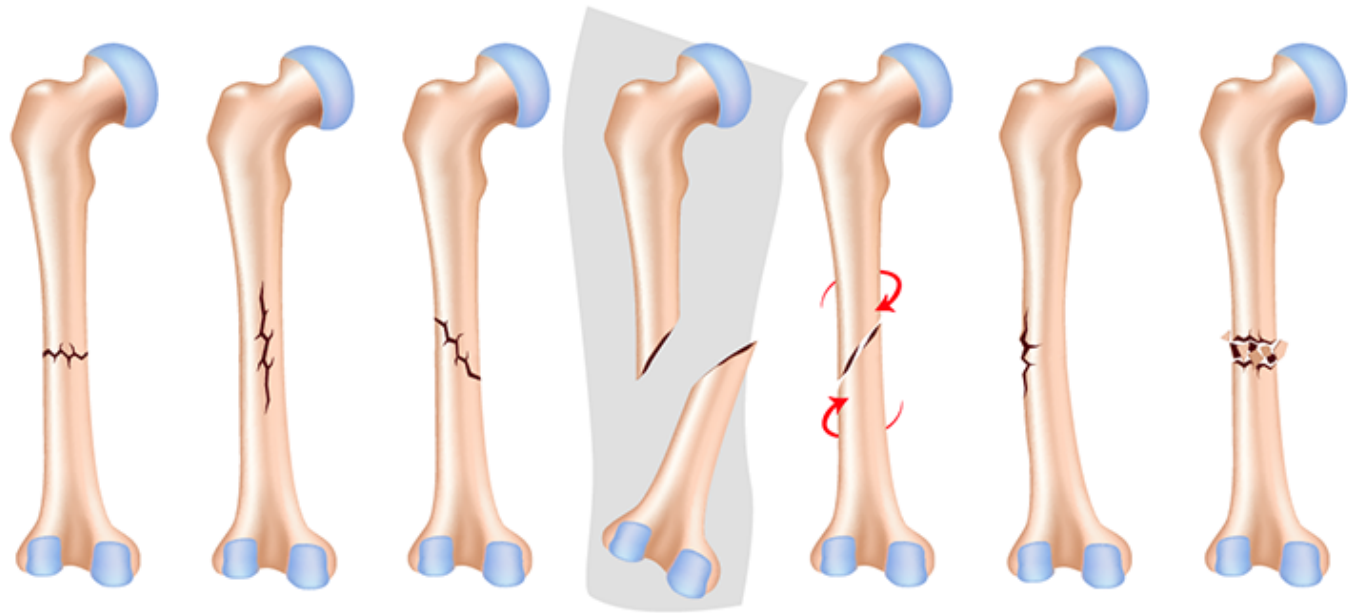
- **SIMPLE:**
 - COMPLETE: CLEAN (NO SEPERATION)
 - INCOMPLETE: GREENSTICK
- **COMPOUND:** SEPERATED WITH EDGES
- **COMMINUTED:** MULTIPLE PIECES

OPEN VS. CLOSED



FRACTURES

Types of Bone Fractures



Transverse

Linear

Nondisplaced

Displaced,
Compound

Spiral

Greenstick

Comminuted

FRACTURES: A FEW OTHERS



DISLOCATION

- **DISLOCATION:** WHEN THE BONE ENDS SEPARATE AND COME OUT OF JOINT AND STAY OUT OF JOINT
- **CAUSES:**
 - DIRECT CONTACT
 - FALLING ON AN OUTSTRETCHED ARM

SUBLUXATION: WHEN THE BONE ENDS SEPARATE AND COME OUT OF JOINT BUT RELOCATE ON THEIR OWN

SAME CAUSE AS DISLOCATION: DEPENDANT ON THE FORCE

DISLOCATION/SUBLUXATION

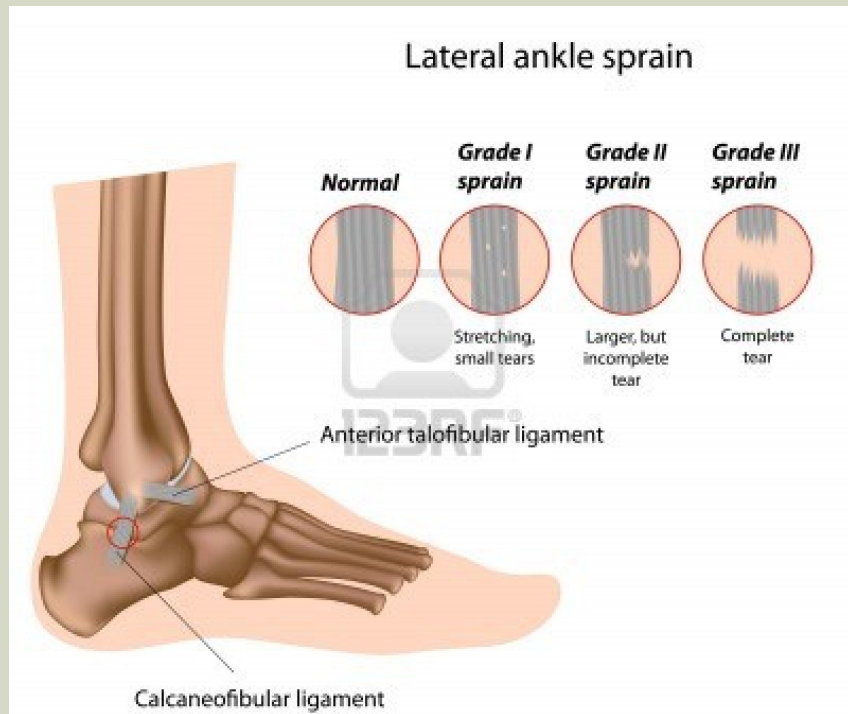


SPRAIN

- OCCURS WHEN THE JOINT IS PUSHED PAST ITS NORMAL RANGE OF MOTION (ROM)
- STRESS OCCURS WHERE THE LIGAMENT IS ATTACHED
- THIS CAUSES PARTIAL OR FULL TEARING OF THE LIGAMENT
- CAUSES:
 - DEPENDS ON THE JOINT: TERMS RELATE TO EACH JOINT
 - STRESS OCCURS FROM THE OUTSIDE OR INSIDE OF THE JOINT

SPRAIN

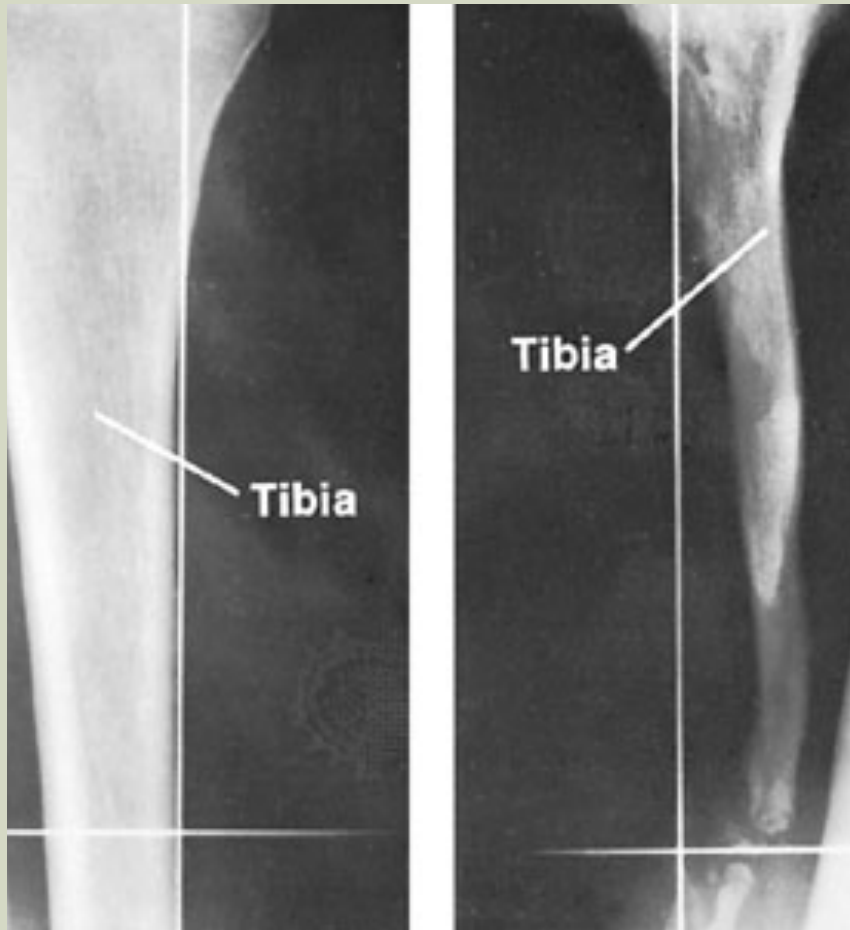
Lateral ankle sprain



OSTEOMYELITIS

- INFECTION IN THE BONE
- CAUSED BY:
 - BACTERIA
 - CAN BE CAUSED BY FUNGI AND OTHER FOREIGN SUBSTANCES

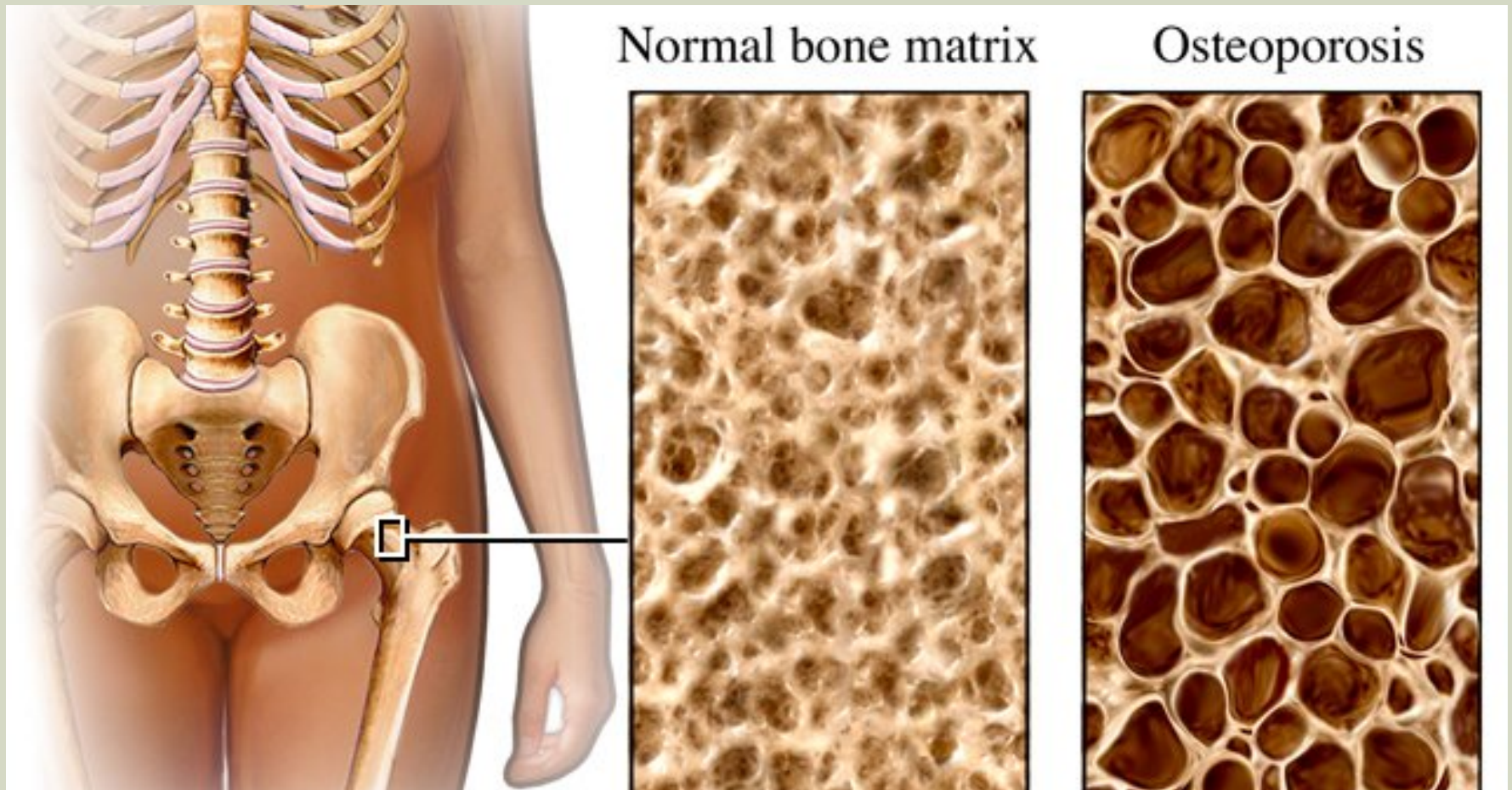
OSTEOMYELITIS



OSTEOPOROSIS

- **DECREASE IN BONE DENSITY**
- **DUE TO LACK OF CALCIUM PRODUCTION**
- **LACK OF PRODUCTION IS CAUSED BY MANY THINGS**
- **PRIMARILY:**
 - **AGING**
 - **DECREASE OF HORMONES**
 - **IMPROPER NUTRITION: EATING DISORDERS**

OSTEOPOROSIS



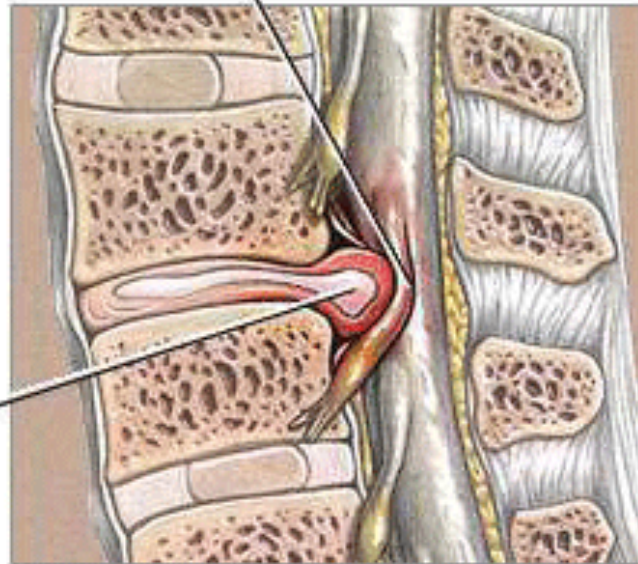
RUPTURED DISC

- When intervertebral discs are damaged by:
- Injury, disease, or normal wear and tear
- Associated with aging
- They may bulge or rupture, becoming a herniated disc (sometimes called a slipped or ruptured disc).

RUPTURED DISC



Compressed lumbar
spinal nerve



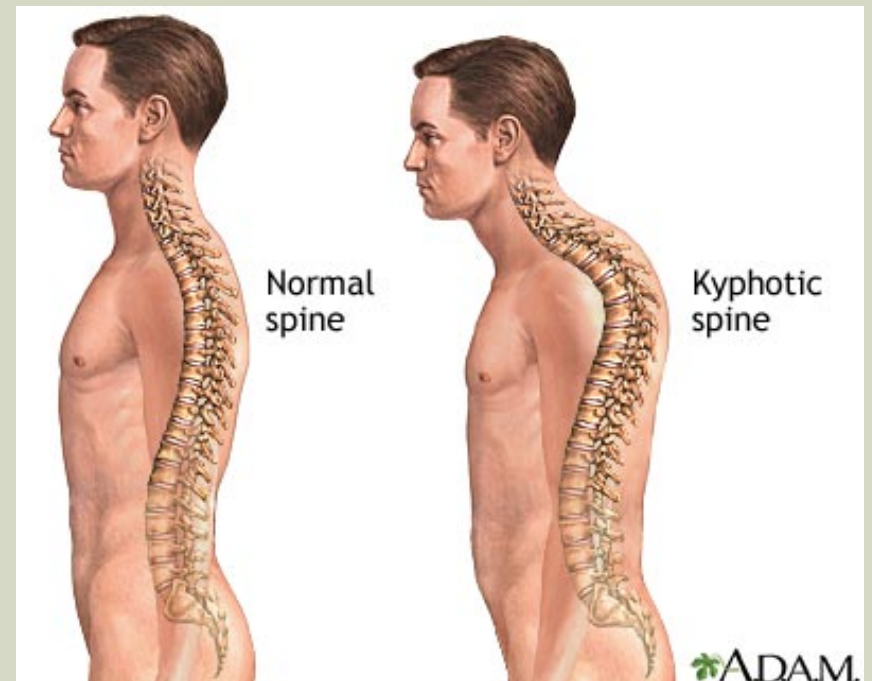
Herniated disc

SPINAL DEFORMITIES

- Abnormal curvature of spine
 - Kyphosis
 - Scoliosis
 - Lordosis

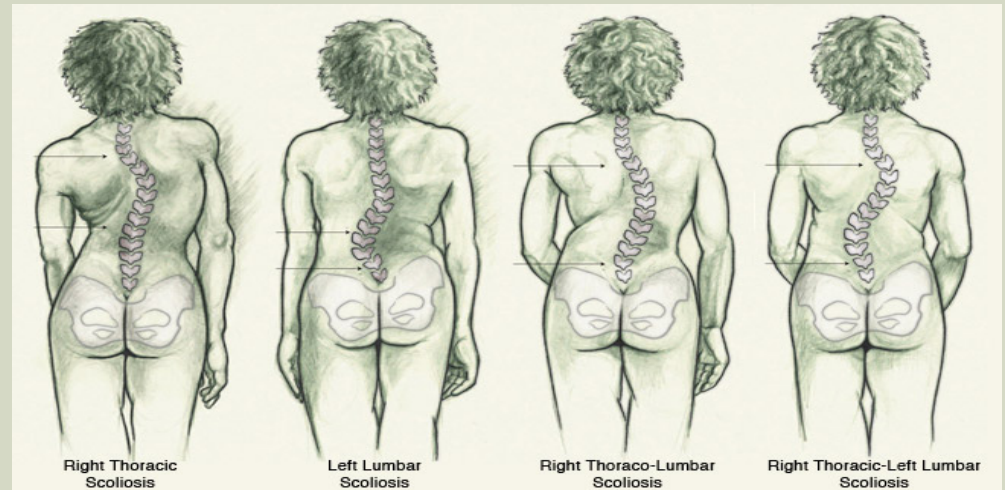
KYPHOSIS

- FORWARD ROUNDING OF THE THORACIC SPINE
- SOMETIMES CALLED ROUNDBACK OR HUNCHBACK
- CAUSES:
 - OSTEOPOROSIS: AGING
 - BIRTH DEFECT
 - CANCER OR CANCER TREATMENT
 - DISK DEGENERATION

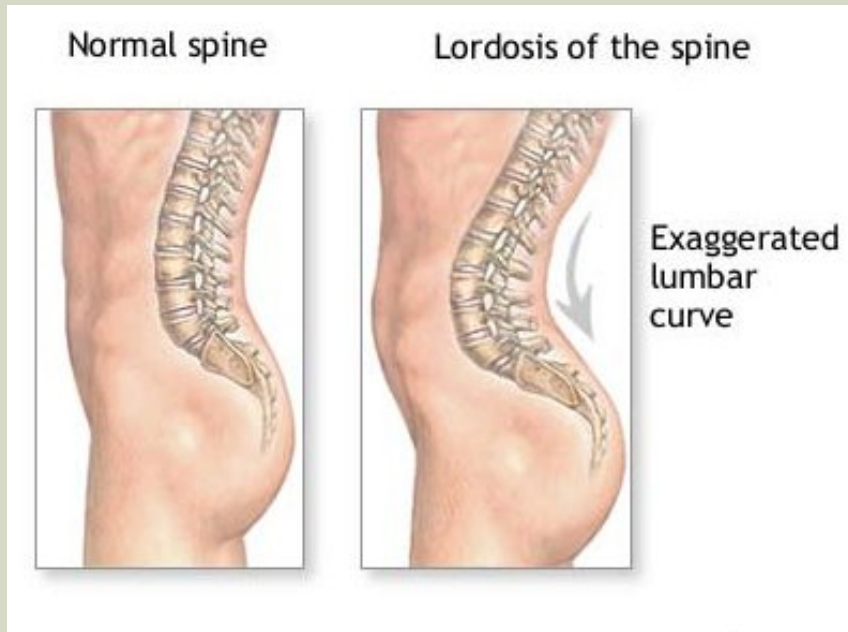


SCOLIOSIS

- **SIDEWAYS CURVATURE OF THE SPINE**
- **CAN AFFECT THORACIC AND LUMBAR SPINE**
- **S-SHAPED**
- **OR C-SHAPED**
- **CAUSES:**
 - **IDIOPATHIC: UNKNOWN**



LORDOSIS



- WHEN THE SPINE CURVES TOO FAR INWARD IT IS CALLED LORDOSIS OR SWAYBACK
- CAUSES:
 - OSTEOPOROSIS
 - SPONDYLOLISTHESIS
 - OBESITY