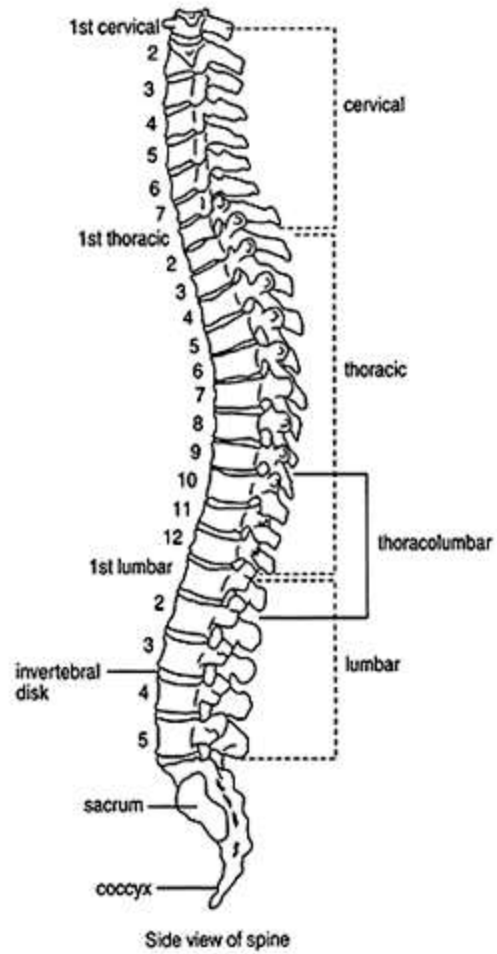


SCOLIOSIS

Normal Spine





Normal vs. Scoliosis

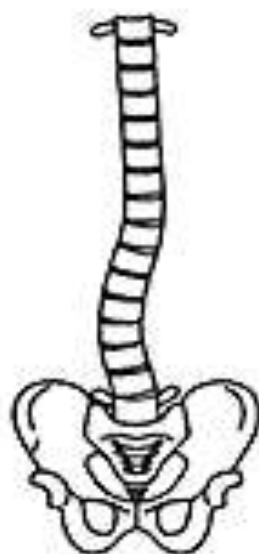




Curve Patterns



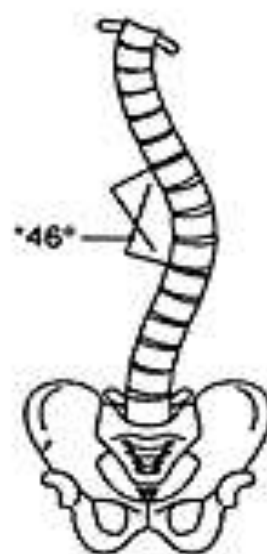
Thoracic



Lumbar



Thoracolumbar



Double

Signs of scoliosis



Normal spine



Deformity from scoliosis



Milwaukee Brace



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A scoliosis brace is usually worn under clothing and is one method used to try to improve the exaggerated curvature of the spine as seen in scoliosis









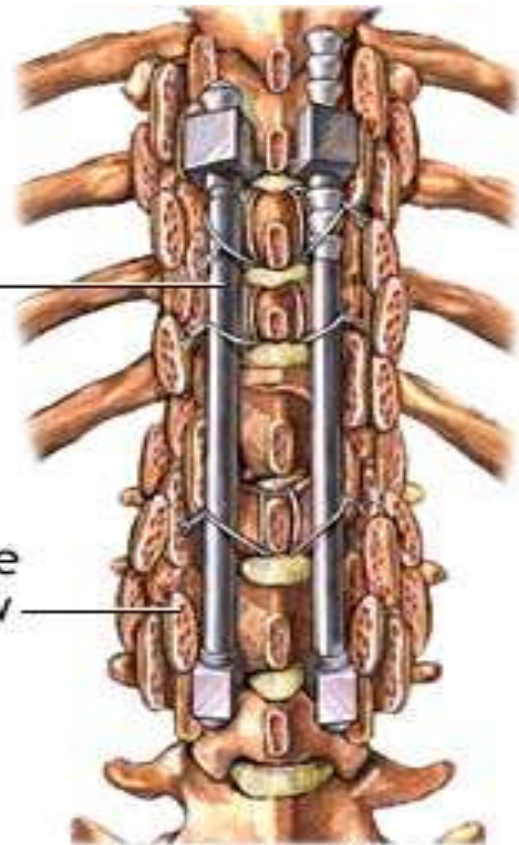


Scoliotic spine

Spinal fusion

Steel rods help support the fusion of the vertebrae

Bone grafts are placed to grow into the bone and fuse the vertebrae



KYPHOSIS

Humpback or hunchback



Definition

- Kyphosis, also known as a round back or hunchback, is a condition in which the spine in the upper back has an excessive curvature.

Causes

- Defective posture
- Congenital anomaly
- Diseased spine- TB, syphilis
- Malignancy
- Juvenile rheumatic arthritis
- Compression fracture
- Idiopathic

Treatment

- Orthotic devices
- Orthopedic surgery

LORDOSIS

Definition

- The term **lordosis** refers to the normal inward curvature of the lumbar and cervical regions of the spine
- commonly referred to as **sway back**, **hollow back** or **saddle back**,

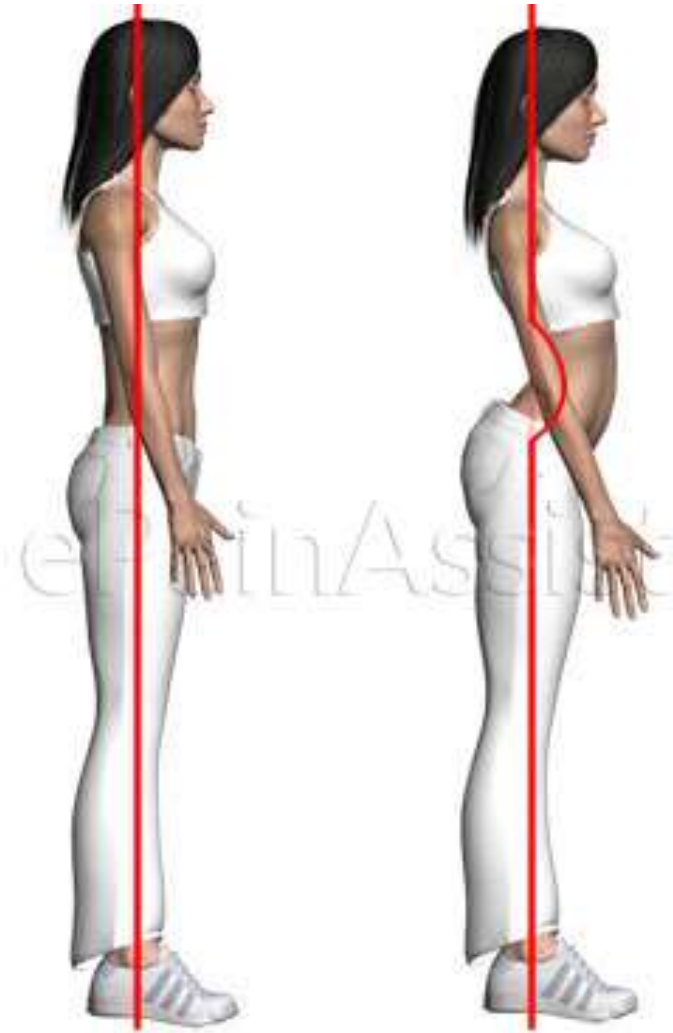
Normal spine



Lordosis of the spine



Exaggerated lumbar curve



Good Posture

Lumbar Lordosis

Causes

- Imbalances in muscle strength and length such as weak [hamstrings](#), or tight [hip flexors](#)
- [Achondroplasia](#) (a disorder where bones grow abnormally which can result in short stature as in dwarfism),
- [Spondylolisthesis](#) (a condition in which vertebrae slip forward)
- [osteoporosis](#)
- obesity,
- kyphosis

Diagnosis

- complete medical history,
- physical examination
- X-rays
- CT scans
- MRI
- bone scans

Treatment

- medication to reduce pain and swelling
- physical therapy (to help build strength in the core muscles)
- yoga (to increase body awareness, strength, flexibility, and range of motion)
- weight loss
- braces (in children and teens)
- surgery (in severe cases)

Genu Varus (Bow leg)



Genu Valgum (knock knee)



A



B

