

A photograph of a baseball player in a white pinstriped uniform sliding into a base. The player is wearing a red helmet and is in a dynamic, low-to-the-ground position. The background is a blurred green field. The text is overlaid on the right side of the image.

Concepts of Athletic Training

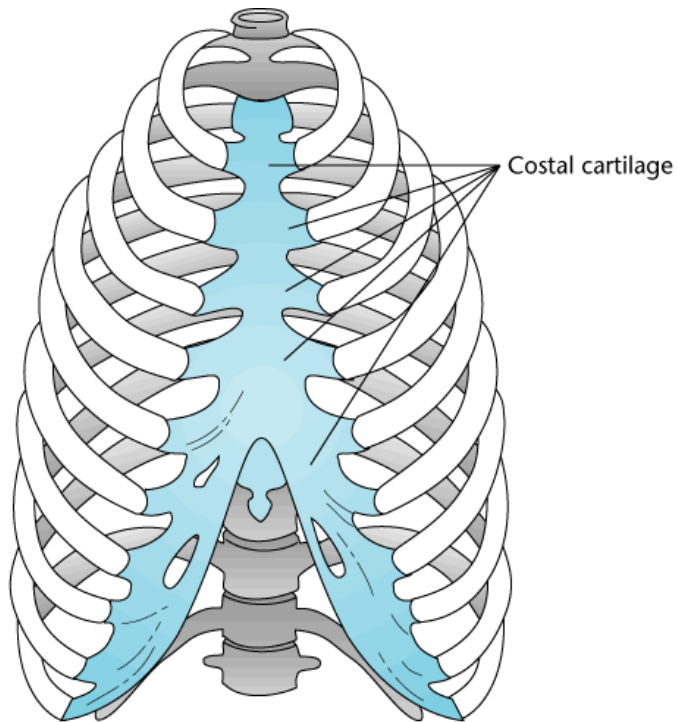
**FIFTH
EDITION**

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Chapter 10

Injuries to the Thoracic Through Coccygeal Spine

Anatomy Review of the Thoracic Spine



Common Sports Injuries

Skeletal Injuries of the Thoracic Vertebrae

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- Such fractures usually occur at junction of thoracic and lumbar spine.
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- Scheuermann's disease is adolescent condition characterized by kyphosis. Children with chronic thoracic pain should be evaluated.

Rib Fractures

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- The ribs commonly fracture near the anatomic angle, which is the weakest point.
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Rib Fractures (cont.)

Signs and symptoms include:

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Rib Fractures (cont.)

First Aid

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Sprains

Sprains:

- Evaluation of a sprain to the thoracic spine is difficult.
- A consistent symptom is painful respiration.

First Aid

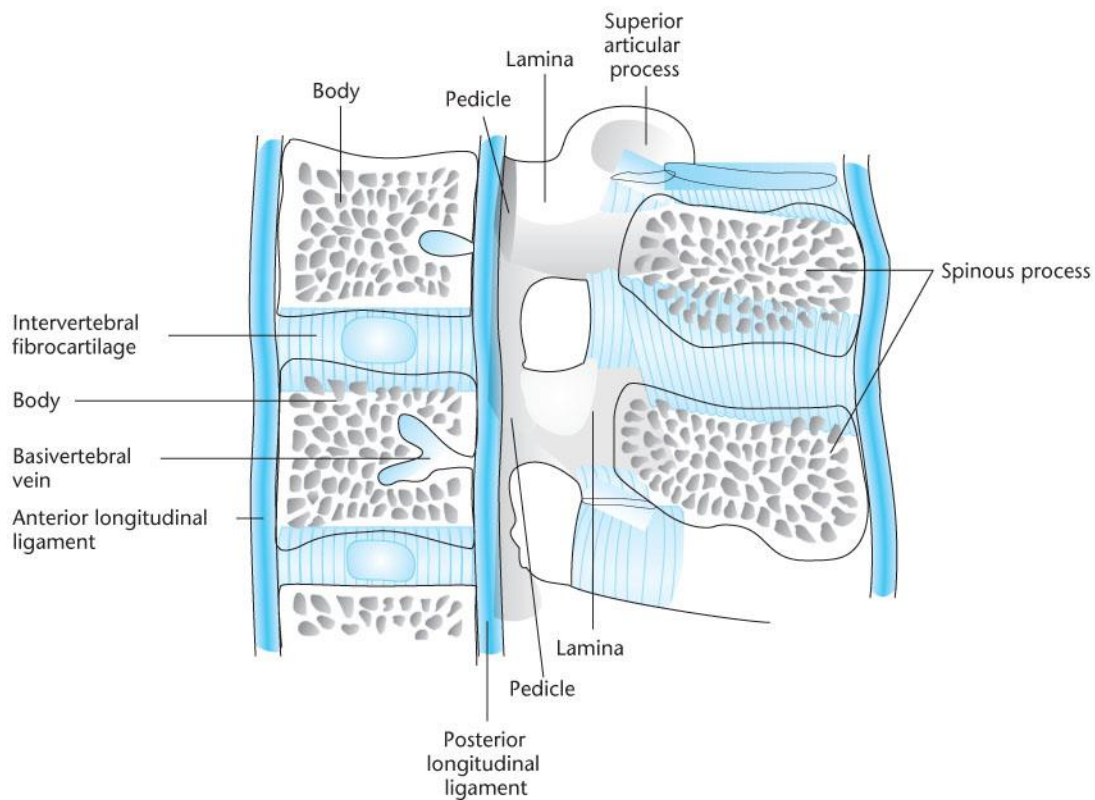
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Strains

Strains:

- - Are related to maximal exertions.
 - Result in muscle spasm and point tenderness.
- **First Aid**
 - Application of RICE to the injured area.

Lumbar Spine Region

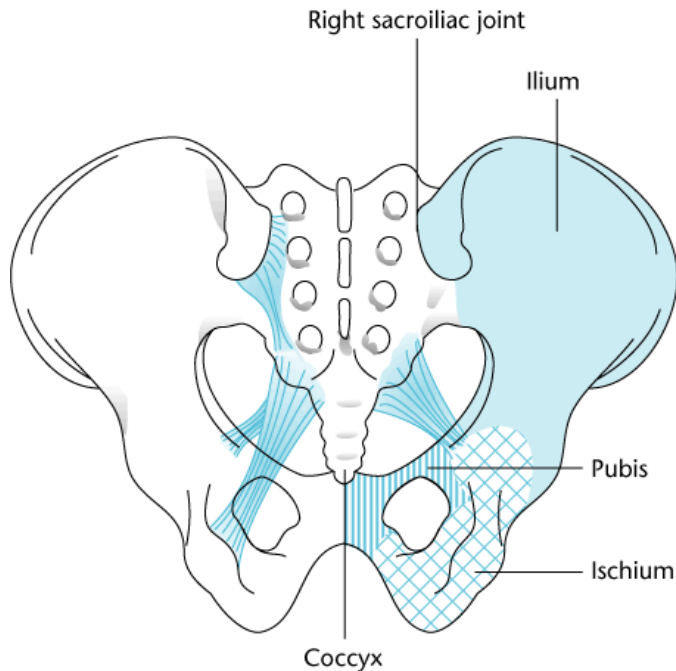


Anatomy Review

- Five vertebrae are in lumbar spine.
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Lumbar Spine Region

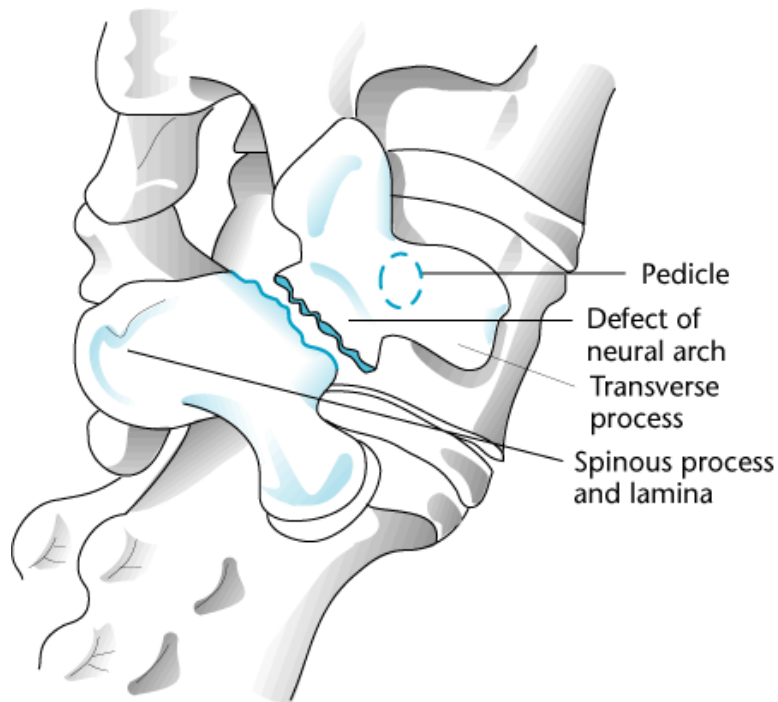
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Right and left sacroiliac (SI) joints are formed by the union of the sacrum and pelvis.

Coccyx (tailbone) is most distal portion of the vertebral column.

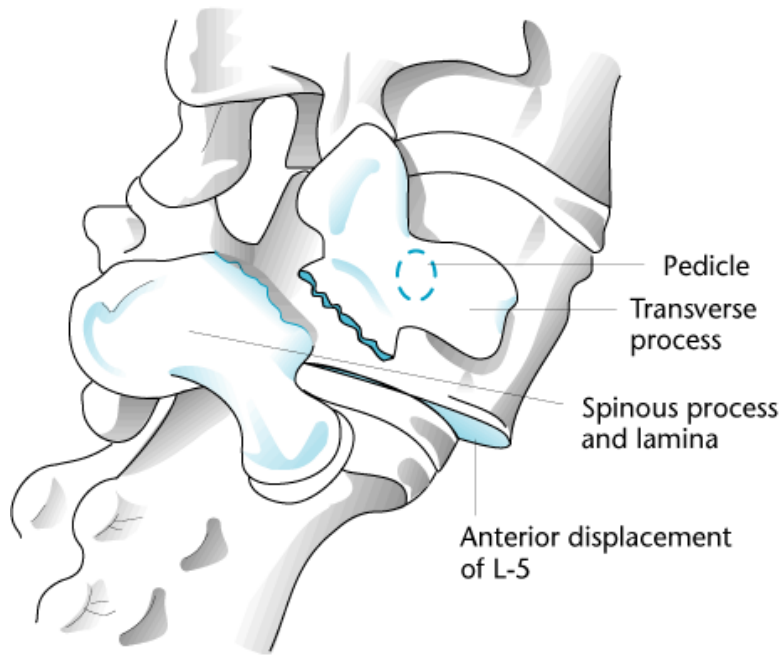
Spondylolysis and Spondylolisthesis



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- If the condition is bilateral, the affected vertebra can slip forward resulting in spondylolisthesis.

Spondylolysis and Spondylolisthesis (cont.)

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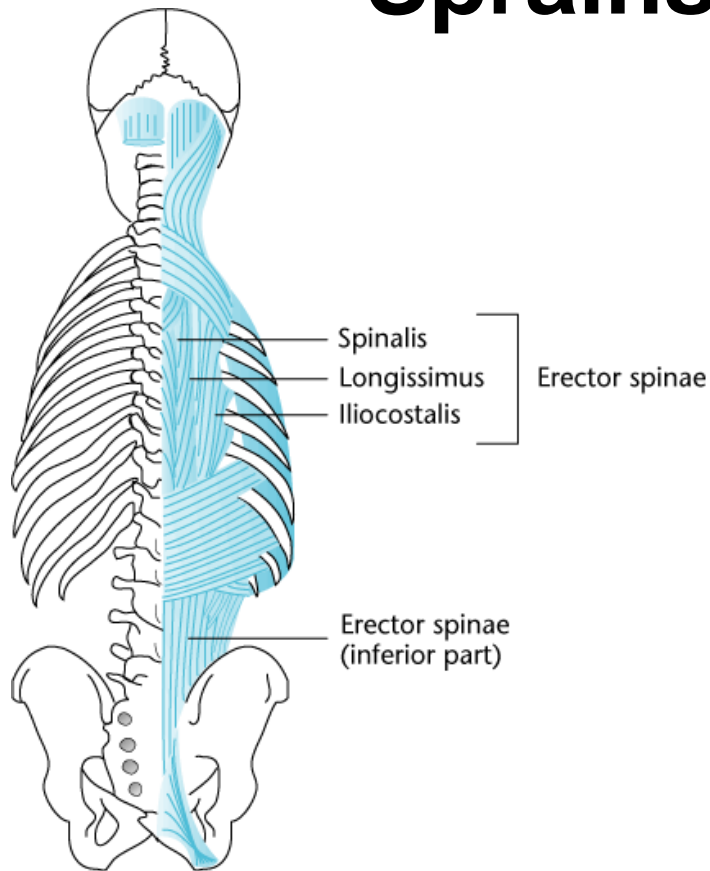


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Traumatic Fractures: Lumbar Spine

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- External blows may result in internal injury.
 - Deep abdominal pain, hematuria, and shock are signs and symptoms of internal injury.
 - Immobilize on spine board and transport to medical facility.
- Blows to the coccyx can result from landing on the buttocks.
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Lumbar Region -- Strains & Sprains



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- Major joints include:
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Lumbar Strains & Sprains (cont.)

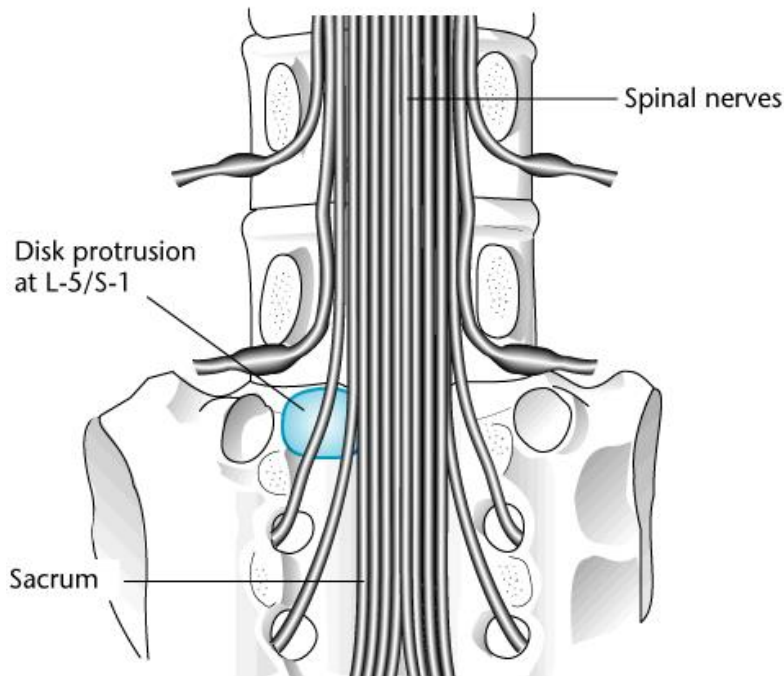
Signs and symptoms include:

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First Aid

- Have athlete maintain a supine position with soft support for lumbar region and application of ice.
- If not improved in 24 hours, refer to physician.

Lumbar Disk Injuries



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- Anatomy of a disk includes annulus fibrosis (outer ring) and nucleus pulposus (inner ring).

Lumbar Disk Injuries (cont.)

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- Intense local or radiating pain.
- Sensory loss or burning/tingling sensation in lower extremity.
- Muscle spasm and postural abnormalities.

Lumbar Disk Injuries (cont.)

First Aid

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