What is a lateral shift?

- A lateral shift is when the patient’s body is, either actively or reflexively, avoiding a spinal nerve root compression or irritation through muscle spasm.

- Lateral shifts can occur to the right, left, or both which is known as alternating scoliosis.

- A lateral shift as described by McKenzie is when a vertebra has rotated and laterally flexed in relation to the vertebra below. This moves the trunk to the right or left in relation to the bottom half.
Causes of Lateral Shifts:

Acute Low Back Pain
Disc Protrusion
Disc Herniation
Assessment of condition:

- Assessment of a lateral shift is done by visually assessing the patient.

- In more aggressive lateral shifts, the patient will have a visible lean either to the right or left.

- For less aggressive shifts, the line down the middle of the back will have a shift, or a scoliosis.
Patient Leans away from pain
Impact of topic on PT

- Lateral shifts are very common in patients with disc protrusions.

- Can be used for patients with low back pain.

- As PTA’s we will be using manual corrections, traction, and patient education to correct lateral shifts for proper lumbar alignment and to maintain that alignment.
Correction of Lateral Shift:

- Self-Correction

- Manual Correction
Self-Correction

Patient stands with side that the shift is occurring to against wall.

The Opposite hand is placed on opposite hip

The patient gently leans in or drops the hips of the involved side towards the wall, and holds for a few seconds and then returns to a start position.

This motion creates a sheering force on the vertebra known as “side gliding” This is a form of mobilization.
Manual Correction

Patient stands with feet shoulder width apart.

The clinician stands on the side that the shift is occurring towards with the shoulder placed against the patient’s ribs, and the head behind the patient’s back.

The clinician will then clasp his/her arms and hands around the hips of the patient by the iliac crests and draws the patient’s lower body towards them.
What to do after the correction?
Sources

- http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2700497/

- ptjournal.apta.org/content/65/3/346.full.pdf

- http://physther.org/content/70/8/480.full.pdf