CASE STUDY:
Soccer Player with Low Back Pain

CASE STUDY
LUMBAR SPINE

Todd introduces the patient who already had imaging, has had 6 months of low back pain and no previous history or known injury. She has had no improvement with treatment in training room and has a history of ankle sprains.

Refer to the first part of the case video

1. Low back pain is a common complaint among athletes of all sport types and ages. A 22-year-old soccer player reports to your clinic with insidious onset of low back pain 6 months ago. She reports that her x-rays were negative for significant findings in the lumbar spine. She finds this confusing and questions if the pain is coming from somewhere other than her low back. Which of the following is not a possible cause of her pain?

A. **Nerve root compression in the cervical spine** – correct; this could not refer pain to the lumbar spine

B. **Undetected pars defect on plain radiograph** – it is likely that a pars defect can be missed on plain films

C. **Muscular trigger point referral from the abdomen** – abdominal trigger points refer to the lumbar region

D. **Hip mobility dysfunction by way of regional interdependence** – commonly, dysfunction in joints above and below the region of discomfort are common causes of pain

2. A 22 year-old female with a 6-month history of low back pain enters your clinic. During the subjective history, she describes the pain as deep and achy, and widespread across her back and posterior hips. You feel that her pain is likely ______ in nature.

A. **Somatic** – correct

B. **Neurogenic** – there is no numbness, tingling, etc.

C. **Chemical** – Chemical pain is often stabbing, acute, etc.

D. **Psychosomatic** – given the history, there are no signs or symptoms of psychosomatic pain disorders
CASE STUDY:
Soccer Player with Low Back Pain

Dr. Arnold refers the patient to Physical Therapy with Dr. Kiesel. The patient’s examination findings were as follows:

- Multisegmental flexion: DN
- Multisegmental extension: DP
- Multisegmental rotation right: DP
- Multisegmental rotation left: DN
- Single leg stance right: DN
- Single leg stance left: DN
- Squat: DN
- Positive right FABER
- Negative ASLR for pain
- Positive ASLR > 90 deg,
- + Thomas test for rectus & abduction

3. In patients with low back pain, it is important to address local core training to improve stabilization. However, it is equally important to address mobility deficits throughout the body that may negatively affect movement patterns. Which of the following can limit a standing multi-level extension pattern if there is restriction in that muscle?

A. External Oblique – all the answers can limit extension
B. Latissimus Dorsi – All the answers can limit extension
C. Rectus Abdominis – All the answers can limit extension
D. Rectus Femoris – All the answers can limit extension
E. All can limit extension – correct

4. During discharge testing from physical therapy, an athlete being treated for low back pain should be able to demonstrate which of the following?

A. Normal and symmetrical Y-Balance Test Lower Quarter – all of the tests should be demonstrated, even the YBT-LQ as it demonstrates dynamic stability of the LE and core
B. At least a 2 push-up score on the Functional Movement Screen – all of the tests should be demonstrated, push-up demonstrates good trunk control and core stability
C. Negative extension-clearing test on the Functional Movement Screen – all of the tests should be demonstrated, the athlete should report no pain with lumbar extension for discharge
D. All of the above should be demonstrated prior to discharge – correct