Differential Diagnosis:
- The athlete had no previous history of low back pain or symptoms prior to the end of a prior volleyball season 1 year ago. Athlete reported to the athletic trainer after a practice during junior volleyball season complaining of "achy" low back pain that recently began to affect her performance. Athlete stated she felt pain in her low back after a "twisting" motion occurred during practice the following day. Initial evaluation did not reveal any obvious deformities or signs of irritation. Clinical examination revealed a decreased range of motion in the lumbar spine. An X-ray imaging revealed the athlete's lumbar vertebrae causing disc herniation.

Patient Demographics
- A 21-year-old female NAIA volleyball player standing, (157.64 cm, 50.32 kg) and is of Hispanic ethnicity. Athlete began a conservative approach to treatment with emphasis on pain management. When athlete first reported to the athletic training room for treatment, conservative management was implemented. Treatment modalities including heat and electrical stimulation, set on symmetrical biphasic, were utilized for pain management. The athlete reported an increase of lower back tightness the next day; thus treatment modalities were modified to ice and pre-modulated settings for electrical stimulation were utilized instead. Athlete still reported no change in symptoms and pain level so she was referred to the team physician to be evaluated. X-ray imaging revealed the athlete's lumbar vertebrae causing disc herniation.

Treatment
- Athlete began a conservative approach to treatment with emphasis on pain management. When athlete first reported to the athletic training room for treatment, conservative management was implemented. Treatment modalities including heat and electrical stimulation, set on symmetrical biphasic, were utilized for pain management. The athlete reported an increase of lower back tightness the next day; thus treatment modalities were modified to ice and pre-modulated settings for electrical stimulation were utilized instead. Athlete still reported no change in symptoms and pain level so she was referred to the team physician to be evaluated. X-ray imaging revealed the athlete's lumbar vertebrae causing disc herniation.

Discussion
- Sacralization of the fifth lumbar vertebra is a congenital anomaly that can affect the daily living of an individual as well as affect the functionality of the spine and limit certain movements. Many health problems can occur from the fusion of L5 and S1 including nerve root compression, back pain, and poor posture. Sacralization is often associated with low back pain, low back after a "twisting" motion occurred during practice the following day. Initial evaluation did not reveal any obvious deformities or signs of irritation. Clinical examination revealed a decreased range of motion in the lumbar spine. An X-ray imaging revealed the athlete's lumbar vertebrae causing disc herniation.

Introduction
- Sacralization of the fifth lumbar vertebra is a congenital anomaly that can affect the daily living of an individual as well as affect the functionality of the spine. Several ensuing problems can occur from the fusion of the L5 and S1 including nerve root compression, low back pain, and poor posture. Sacralization is often associated with low back pain, low back after a "twisting" motion occurred during practice the following day. Initial evaluation did not reveal any obvious deformities or signs of irritation. Clinical examination revealed a decreased range of motion in the lumbar spine. An X-ray imaging revealed the athlete's lumbar vertebrae causing disc herniation.

Clinical Evaluation
- During the initial evaluation, the athlete presented with no observable deformities or signs of swelling.

Diagnostic Evaluation
- The athlete was capable of full lumbar range of motion but had pain in the end ranges of lumbar rotation and lateral flexion.

Management and Treatment of Lumbar Sacralization in a College Volleyball Player

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