ABDOMINAL PAIN IN A FEMALE RUGBY ATHLETE.
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Background
A female Division I rugby athlete (18 y/o, 177.8 cm, 77 kg) presented in the athletic training room with intense abdominal pain. Locations of her pain were within the epigastric and periumbilical regions. History of her illness began in late December 2007 when she presented with left scapular pain at the inferior angle which was treated symptomatically and attributed to her history of muscular strains. In late January 2008, the athlete began exhibiting nausea and moderate abdominal pain which quickly intensified and caused her to be referred to the emergency room. Upon examination, she was tender to palpate over the upper right quadrant (URQ) of her abdominals and complained of increased pain after eating. She also presented with a positive Murphy’s Sign for gallstones. She has a personal history of pyelonephritis (kidney infection) and a family history of cholelithiasis (gallstones). The patient has also been taking an oral contraceptive for two years.

Differential Diagnosis
The emergency room physician’s differential diagnosis included pyelonephritis, irritable bowel syndrome (IBS), and appendicitis. Urinalysis and blood tests were returned within normal limits however trace amounts of blood were detected in the urine. A CT scan and MRI were also performed. Following a diagnostic ultrasound, the final diagnosis was cholecystitis with associated cholelithiasis. It was later noted that the referred pattern for pain in the gall bladder will present at the inferior angle of the left scapula.

Treatment
Treatment for this condition included the immediate implementation of a low-fat, low-dairy diet and a laparoscopic cholecystectomy. She was cleared for full contact and lost little to no playing or training time prior to the procedure. All missed activity was self-limiting due to pain. The athletic trainer, as well as the athlete, were educated on emergency signs and symptoms such as increased pain, fever, persistent vomiting, brown urine and yellowing of the eyes and skin. Should the patient present with one or more of these signs and symptoms at any time she should be referred immediately for emergent care.

Uniqueness
This case is unique due to the absence of contact limitations even though this increases the risk of a traumatic emergency. Also unique is the occurrence of gallstones in this demographic. Gallstones commonly present in patients 65 years or older however they may present as early as 30 years old in the female population due to the presence of estrogen in the body. Women who are prescribed contraceptives are also at an increased risk.
Conclusion

The final outcome of this case included a laparoscopic cholecystectomy performed on March 11, 2008. Prior to surgery, the athlete was still complaining of intense nausea when eating and found it difficult to remain healthy and fit during this time. The procedure was performed as scheduled and without complication. For two weeks following the surgery, the patient was completely restricted from all activity and then cleared for play on March 27, 2008. However, she was instructed by her physician to rest if any discomfort returned. Her goal is to play in at least one game during the current rugby season. After reviewing this case, it is important for athletic trainers to be educated and aware of the signs and symptoms associated with cholecystitis and other medical pathologies as well as their emergency indications to prevent their athletes from potentially life threatening complications. This case has helped to remind athletic trainers that although certain pathologies are uncommon in the young, active population they can, and do still occur.

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