

A Case Study Presentation on a Blood Clot of the Right Subclavian Vein in a Women's Volleyball Player: The Importance of Early Detection.

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Purpose

The purpose of this case report is to show how important it is for athletic trainers to be able to detect injuries early in limb-threatening pathologies. Athletic trainers will be faced with accidents or injuries that will be limb-threatening and can only be saved by the early detection of the issue causing the symptoms.

History

A female volleyball player woke up in the morning and noticed that her right arm was swollen to twice the size of her left arm. The individual stated that there was no mechanism of injury that could have caused the swelling. The athlete had a previous history of shoulder instability but never anything like the symptoms she was presented with. The individual had some concerns with shortness of breath back in August, 2013. The athlete presented to the athletic training room and was referred to the emergency room.

Differential Diagnoses

The athlete presented to the emergency room with numbness and tingling on the right side from her clavicle all the way down her arm. She had point tenderness over the shoulder with moderate swelling. The athlete had full range of motion of her neck. There was grinding in her right shoulder but was pain free. She had normal lymph nodes in her axilla and her pulse was within normal limits. There was a venous engorgement over the anterior aspect of her right shoulder.

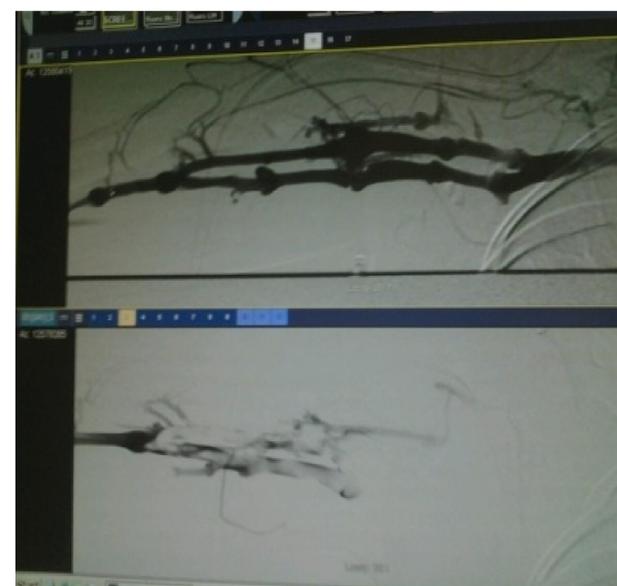
Diagnosis

Final diagnosis was a venous subclavian thrombosis more than likely secondary to playing volleyball and being an overhead hitter. Her history of shoulder instability may have initiated and/or added pressure to the area creating the thrombosis clot.

Post-Surgical Venous Subclavian Thrombosis



Post Venous Subclavian Thrombosis Surgical Drain



Positive Angiogram for Subclavian Thrombosis

Prognosis

The athlete was put on a period of rest following surgery. Physical therapy began once the student returned to campus. The athlete was placed on a blood thinner for two months to minimize risk of another thrombosis. The athlete was allowed to return to volleyball in December without any complications. The athlete should return to full participation for the 2014 volleyball season.

Treatment

The athlete underwent surgery to remove her first rib on the right side of her body. With the removal of the first rib the pressure being placed on the subclavian vein was decreased allowing for normal blood flow and normal angiogram.

Reference

Dr. John McCarroll: Methodist Hospital