Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association

Volume 2
Issue 1 *Ohio Athletic Trainers' Association*
Supplementary Edition

Article 18

May 2016

Thoracic Outlet Syndrome and Volkmann's Contracture in a Field Hockey Player

Morgan L. Sawyer
Kent State University - Kent Campus, msawyer5@kent.edu

Follow this and additional works at: <https://scholarworks.bgsu.edu/jsmahs>

Part of the Sports Sciences Commons

How does access to this work benefit you? Let us know!

Recommended Citation

Sawyer, Morgan L. (2016) "Thoracic Outlet Syndrome and Volkmann's Contracture in a Field Hockey Player," *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association*: Vol. 2: Iss. 1, Article 18.

DOI: <https://doi.org/10.25035/jsmahs.02.01.18>

Available at: <https://scholarworks.bgsu.edu/jsmahs/vol2/iss1/18>

This Undergraduate Student Abstract is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in *Journal of Sports Medicine and Allied Health Sciences: Official Journal of the Ohio Athletic Trainers Association* by an authorized editor of ScholarWorks@BGSU.

Thoracic Outlet Syndrome and Volkmann's Contracture in a Field Hockey Player

Morgan Sawyer, ATS

Kent State University, School of XXXXXXXXXXXXXXXXXXXXXXXX

Background: A 19-year-old female field hockey player presents with bilateral upper trapezius and rhomboid tightness and spasm beginning in January of 2016. She has no previous history of upper back pain or injury. The student first reported the injury immediately after running sprints. She stated that she could not move or feel her fingers or hands. She presents with a visible hump on her left upper trapezius. She also has forward-rounded shoulders. She has regular and equal radial pulses. She has decreased sensation upon palpation of her fingers, hands and forearms. After extraneous exercise, the athlete's hands, wrists and forearms go into contracture and flexion and she is unable to move from this position until manual extension is applied, or 10 or more minutes of rest occurs. She is TTP over her upper trapezius musculature. She had a positive Military Brace test.

Differential Diagnosis: Based on evaluation, the athlete could simply just have upper trapezius musculature spasms. The diagnosis could also be

shoulder impingement syndrome, due to the neurological signs and symptoms. Compartment syndrome could produce similar s/s that the athlete experiences, as well.

Treatment: X-rays show no bony abnormalities and no extra ribs. The athlete's injury has been treated with ice post-practice, heat pre-practice and upper body stretching exercises. Three days a week the athlete works on postural exercises that strengthen her back musculature. The athlete also receives combination therapy over her upper trapezius trigger points, along with massage and Hawkgrip technique over the same areas.

Uniqueness: The uniqueness in this case is that the athlete has both TOS and Volkmann's contracture. Volkmann's contractures typically occur in pediatrics, which is another reason why this particular case is unique.

Conclusion: This case allows other clinicians to understand the causes of TOS and the secondary s/s that TOS can potentially cause.

Key words: XXXXXXXXXXXXXXXXXXXXXXXX