

Children's Mercy Kansas City

## SHARE @ Children's Mercy

---

Posters

---

4-2022

### **17-year-old ballet dancer with 4 years of right upper extremity pain**

Mariah Sisson

Brian S. Harvey

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/posters>



Part of the [Orthopedics Commons](#), [Pediatrics Commons](#), and the [Sports Medicine Commons](#)

---

## Physical Exam

Cardiac: capillary refill normal.  
MSK: RUE:  
Inspection: No erythema, edema, or bruising. Lower trapezius wasting visible when examining back/scapula. Palpation: Tenderness at medial epicondyle but not same pain she has previously experienced. No tenderness to palpation throughout remainder of RUE. ROM: Full ROM without pain or numbness. Strength: Normal strength. Special Tests: Spurling's negative, Roos negative, **Adson's positive with loss of palpable radial pulse.**

## Differential Diagnosis

Thoracic Outlet Syndrome  
Cervical Neuropathy  
Right Shoulder Tendinopathy  
Scapular Dyskinesia  
Medial Epicondylitis

## Test & Results

Right Shoulder Xray - unremarkable.

Chest MRI/MRA:  
compression of right subclavian artery and vein between the clavicle and first rib with arm abduction.

EMG: median mononeuropathy.

# 17-year-old ballet dancer with 4 years of right upper extremity pain.

No known injury.

Intermittent, dull, radiating.

Starting at the shoulder and moving to the medial elbow, but sometimes only at the medial elbow with numbness of the 4th/5th digits.

No limitations in ballet.

Extended course to see Sports Medicine.

PCP - failed treatment for herpetic whitlow, referred to dermatology.

Dermatology - bilateral Raynaud's syndrome & Pernio, referred to rheumatology.

Rheumatology - having RUE numbness, referred to neurology & PT.

Neurology - tenderness to palpation at the anterior shoulder, referred to Sports Medicine.

PT - getting stronger, but symptomatically making minimal improvement.



Mariah Sisson MD & Brian Harvey DO

Children's Mercy Kansas City

## DISCUSSION

Initial presentation was interesting with overall non-specific symptoms and many specialists who had new findings, including bilateral Raynaud's syndrome. Patient was unable to truly localize if the pain was from her neck, shoulder, or elbow, but endorsed pain at times in all these locations and had no symptoms on day of clinic visit. It wasn't until the positive Adson's test that the diagnosis started to become clearer, or at least moved thoracic outlet syndrome to the top of the differential diagnosis. Concern for thoracic outlet syndrome guided further management.

## Outcome Return to Play

Restarted PT to focus on the working diagnosis thoracic outlet syndrome. Once MRI and EMG were obtained, patient was referred out of the Children's Mercy network to surgeons who specialize in thoracic outlet syndrome. Further follow-up pending visit with specialists in 2022

## Final Diagnosis

Vascular Thoracic  
Outlet Syndrome

LOVE WILL.



UMKC  
School of Medicine



Children's Mercy  
KANSAS CITY