RECURRENCE OF PARSONAGE-TURNER SYNDROME (PTS) IN THE CONTRALATERAL LIMB

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CASE DESCRIPTION

- Patient with a PMHx most notable for previous right-sided PTS presenting via telehealth with left sided shoulder & arm pain.
- His previous PTS diagnosis was two years prior, presenting with acute onset of right arm soreness, awakening him from sleep.
- At that time, he presented to his PCP who ordered cervical MRI, which revealed no acute pathology. He then was referred to PM&R clinic.
- He reported pain along the lateral forearm, thumb and index finger,
- Physical exam was notable for inability to make the “OK sign”.
- Electrodiagnostic testing revealed a right anterior interosseous mononeuropathy that was felt to be consistent with PTS.
- Over the course of 9 months, while participating with physical therapy, he had complete resolution of his symptoms.

CLINICAL PRESENTATION

- Now, the patient presents to clinic with a 2-month history of left-sided shoulder and arm pain, mimicking his prior right-sided symptoms.
- Physical exam limited due to telehealth but notable for inability to make ”OK sign” on the left.
- Clinical presentation felt to be consistent with PTS.
- Despite slight improvement of symptoms and relief with sling and NSAIDs, he inquired about slowing the progression and decreasing duration of symptoms compared to prior course.
- He was given oral steroids and instructed to perform a home exercise program.
- He returned to clinic after 2 weeks with self-reported improvements of pain, weakness and ROM.

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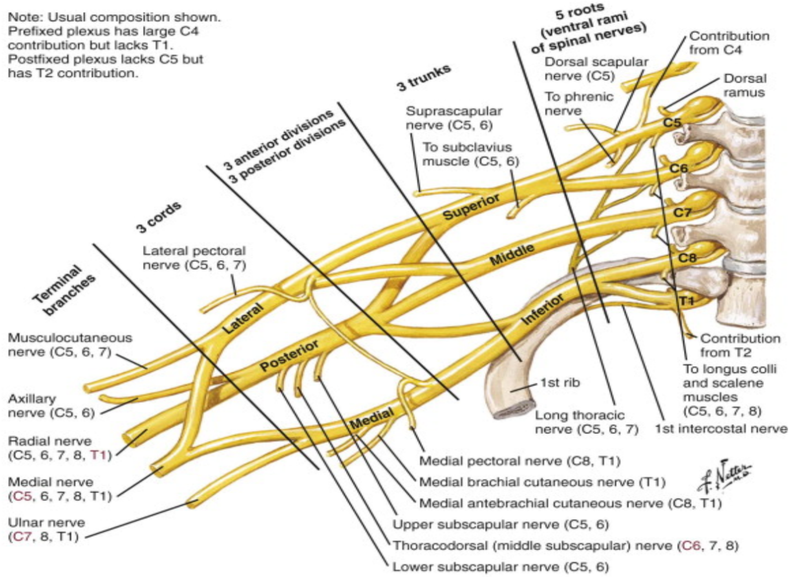

Figure 1. Brachial Plexus; PTS most commonly affects the upper trunk

PARSONAGE-TURNER SYNDROME

- Multiple diagnostic terms include this diagnosis: brachial neuritis, neuralgic amyotrophy, brachial neuritis or neuritis of the shoulder girdle
- Differential diagnosis remains broad and includes but is not limited to rotator cuff pathology, glenolabral injuries, adhesive capsulitis, cervical spondylosis, cervical radiculopathy, peripheral nerve compression, tumor
- Presents with intense shoulder pain classically awakes the patient at night
    - Typically followed by associated weakness and numbness.
- Male predominance; presents in 3rd-7th decade
- Classically occurs after a viral illness
- Most commonly affects the upper trunk of the brachial plexus, including the suprascapular, axillary, and long thoracic nerve
- EMG can be useful in the work-up and diagnosis
- No specific treatment, focus remains on symptomatic management which can include therapies and modalities
- Up to 90% of patients recover up to 2-3 years

“OK Sign”

- Indicative of anterior interosseus nerve (AIN) syndrome
- Pure motor branch off the medial nerve
- Muscles innervated by AIN can be remembered by the 4 P’s:
    - **P**ronater Quadratus
    - Flexor **P**ollicis Longus
    - 1st and 2nd Flexor Digitorum **P**rofundus

CONCLUSIONS

- There have only been only a few case reports on recurrence of PTS in the contralateral limb.
- Bilateral PTS and recurrent PTS are not uncommon, with recurrence in hereditary subtype occurring up to 75%, and 25% in idiopathic PTS.
- The recurrent episode has been found to not be as severe as the original and lasts ~2 weeks.
- This case report aims to spread awareness on the diverse clinical spectrum of PTS presentation, severity, clinical course and recurrence.

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