Brachial plexus neuropathy

see also Idiopathic brachial plexus neuropathy.

Evaluation

When the etiology is unclear, check CXR (with apical lordotic view), glucose, ESR, and ANA.

If no improvement by ≈ 4 weeks, obtain MRI of the plexus (idiopathic brachial plexitis will usually start to show some improvement by this time; therefore tumor should be ruled out if no improvement).

Differential diagnosis of etiologies of brachial plexopathy

1. Pancoast syndrome or Pancoast tumor AKA superior sulcus tumor. Clinical: various combinations of pain in the shoulder radiating into the upper extremity in the ulnar nerve distribution from involvement of the lower brachial plexus, atrophy of hand muscles, Horner syndrome , UE edema.

Etiologies:

a) neoplasms:

● most common: bronchogenic cancer, usually non-small cell (NSCLC) (squamous cell or adenocarcinoma) arising in the pulmonary apex

● metastases

b) infections

c) inflammatory: granulomas, amyloid

2. (idiopathic) brachial plexitis AKA neuralgic amyotrophy: most commonly upper plexus or diffuse

3. cervical rib

4. viral

5. following radiation treatment: often diffuse

see Radiation induced brachial plexus neuropathy

6. diabetes

7. vasculitis

8. inherited: dominant genetics

9. trauma