

Peripheral Neuro-vascular Examination

Course 452

Goals:

To be able to perform upper & lower limb peripheral nerve and vascular examination properly –as an adjunct to orthopedic examination of any limb-and identify any abnormality that aids in diagnosis

Examination:

1. Upper limb:
 - a. Median nerve:
 - i. Inspection: Thenar muscle wasting.
 - ii. Motor: Thumb abduction or opposition (opposition of thumb to little finger and NOT to index finger for OK sign).
 - iii. Sensory: fine touch over volar aspect of index finger
 - b. Ulnar nerve:
 - i. Inspection: hypothenar muscle wasting, claw hand
 - ii. Motor: finger abduction, Froment's sign
 - iii. Sensory: fine touch over volar aspect of little finger
 - c. Radial nerve:
 - i. Inspection: drop wrist
 - ii. Motor: wrist extension
 - iii. Sensory: fine touch over dorsal aspect of first web-space

2. Lower limb:

a. Femoral nerve:

- i. Inspection: Quadriceps wasting
- ii. Motor: knee extension
- iii. Sensory: medial aspect of leg and foot (saphenous nerve).

b. Common peroneal:

- i. Inspection: drop foot, anterior leg muscle wasting
- ii. Motor: ankle dorsiflexion
- iii. Sensory: dorsal aspect of foot

c. Tibial:

- i. Inspection: calf muscle wasting
- ii. Motor: ankle plantar flexion
- iii. Sensory: plantar aspect of foot

3. Vascular exam:

a. Look: Thin, shiny, hairless skin. Ulcers. Pallor.

b. Feel: temperature

c. Special tests:

- i. Capillary refill (normal is <2 seconds).
- ii. Pulses