

Case Study Submission Requirements: Diagnostic Ultrasound of Peripheral Nerves

Refer to the Accreditation Application Manual for additional case study submission requirements.

<u>Note</u>: MSK Accreditation is offered in 3 different specialties – "Diagnostic MSK Ultrasound", "Diagnostic Ultrasound of Peripheral Nerves" and "MSK - Ultrasound-Guided Interventional Procedures". If you are applying for <u>both</u> "Diagnostic MSK" (or "Ultrasound of Peripheral Nerves") <u>and</u> "US-Guided Interventional Procedures", the studies you submit for Diagnostic MSK/Peripheral Nerves <u>will also satisfy</u> any diagnostic cases that are required as a part of the MSK US-Guided Interventional Case Submission Requirements.

Only case studies with an ultrasound indication, listed in the relevant practice parameters, will be accepted.

(Non-indicated exams will not be accepted.)

From the main site:

- submit a total of 4 comprehensive, diagnostic peripheral nerve cases from different patients
 with their corresponding final reports
 - each case submitted from the main site must be a different type of peripheral nerve

From each additional site or mobile unit:

 submit 1 comprehensive, diagnostic peripheral nerve case study with its corresponding final report

Neck

Brachial Plexus

Labeled images of the following:

- ☐ 1. Short axis views demonstrating the relationship of the extraforaminal roots to the cervical spine (C5-C7)
- ☐ 2. Short axis views of the interscalene trunks vertical arrangement relative to the adjacent anterior and middle scalene muscles
- ☐ 3. Short axis views of the divisions "bundled" arrangement adjacent to the subclavian vessels at the level of pectoralis major muscle and first rib
- ☐ 4. Short axis views of the retropectoralis cords relative to the adjacent axillary vessels at the level of the pectoralis minor muscle
- ☐ 5. Short axis views of the terminal branches (median, ulnar, and radial nerves) relative to the brachial vessels

ADDITIONAL VIEWS (if indicated)

- ☐ 6. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 7. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 8. Dual image with contralateral comparison when a size difference is present
- ☐ 9. Demonstrate any structures causing nerve compression
- \square 10. Demonstrate innervated muscle, when affected
- ☐ 11. Relevant dynamic views

Long Thoracic Nerve

Labeled images of the following:

☐ 1. Short axis views of the long thoracic nerve relative to the adjacent cervical spine (C6) and middle scalene muscle at the level of the 1st rib

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Shoulder

Suprascapular Nerve

Labeled images of the following:

☐ 1. Short axis views of the suprascapular nerve relative to the adjacent suprascapular artery at the level of the trapezius and omohyoid muscles

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- \square 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Axillary Nerve

Labeled images of the following:

☐ 1. Short axis views of the axillary nerve relative to the adjacent posterior circumflex artery within the quadrilateral space

ADDITIONAL VIEWS (if indicated)

- \Box 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Upper Arm

Median Nerve

Labeled images of the following:

☐ 1. Short axis views of the median nerve relative to the adjacent brachial artery where it is located between the ulnar and humeral heads of the pronator teres muscle

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- $\hfill \Box$ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Radial Nerve

Labeled images of the following:

☐ 1. Short axis views of the radial nerve where it is located between the brachialis and brachioradialis muscle at the level of the lateral epicondyle

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- $\hfill \square$ 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- \square 6. Demonstrate innervated muscle, when affected
- \square 7. Relevant dynamic views

Upper Arm (continued)

Musculocutaneous Nerve

Labeled images of the following:

☐ 1. Short axis views of the musculocutaneous nerve relative to the adjacent brachial artery where it is located between the brachialis and biceps brachii muscles

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- \square 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Elbow

Ulnar Nerve

Labeled images of the following:

- $\ \square$ 1. Short axis views of the ulnar nerve between the medial epicondyle and olecranon process within the cubital tunnel
- ☐ 2. Obtain an accurate cross-sectional area (CSA) measurement of the ulnar nerve
- $\hfill \square$ 3. Dynamic assessment to rule out subluxing or dislocating nerve

ADDITIONAL VIEWS (if indicated)

- \square 4. Long axis views along the course of the nerve to show any variation in uniform thickness
- $\hfill \Box$ 5. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 6. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Posterior Interosseous Nerve

Labeled images of the following:

☐ 1. Short axis views of the posterior interosseous nerve as it runs between the superficial and deep heads of the supinator muscle at the level of the radius

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 3. Cine loop to appreciate the nerve in motion when beneficial
- $\hfill \Box$ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Wrist

Median Nerve

Labeled images of the following:

- ☐ 1. Short axis views of the median nerve relative to the adjacent flexor carpi radialis tendon and underlying flexor digititorum superficialis and profundus tendons at the level of the carpal tunnel inlet
- ☐ 2. Short axis views of the median nerve relative to the overlying flexor retinaculum and underlying flexor digitorum superficialis and profundus tendons within the carpal tunnel
- ☐ 3. Obtain an accurate cross-sectional area (CSA) measurement of the median nerve

ADDITIONAL VIEWS (if indicated)

- ☐ 4. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 5. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 6. Dual image with contralateral comparison when a size difference is present
- ☐ 7. Demonstrate any structures causing nerve compression
- □ 8. Demonstrate innervated muscle, when affected
- ☐ 9. Relevant dynamic views

Ulnar Nerve

Labeled images of the following:

☐ 1. Short axis views of the ulnar nerve relative to the adjacent ulnar vessels at the level of the pisiform bone

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- $\hfill \square$ 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Superficial Branch Radial Nerve

Labeled images of the following:

☐ 1. Short axis views of the superficial branch of the radial nerve relative to the radial artery at the level of the first extensor compartment

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Wrist (continued)

Palmar Cutaneous Branch Median Nerve

Labeled images of the following:

☐ 1. Short axis views of the palmar cutaneous branch of the median nerve relative to the flexor carpi radialis tendon

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Forearm

Medial Antebrachial Cutaneous Nerve

Labeled images of the following:

☐ 1. Short axis views of the medial antebrachial cutaneous nerve relative to the adjacent basilic vein

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- \square 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Lateral Antebrachial Cutaneous Nerve

Labeled images of the following:

☐ 1. Short axis views of the lateral antebrachial cutaneous nerve relative to the adjacent cephalic vein

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Hand

Superficial Sensory Branch Ulnar Nerve

Labeled images of the following:

☐ 1. Short axis views of the superficial sensory branch at the level of the thenar muscles

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Deep Motor Branch Ulnar Nerve

Labeled images of the following:

 \Box 1. Short axis views of the deep motor branch of the ulnar nerve relative to the hook of hamate at the level of the hypothenar muscles

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Palmar Digital Nerves

Labeled images of the following:

☐ 1. Short axis views of the palmar digital nerves on both side of the digit relative to the adjacent digital artery

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Hip

Sciatic Nerve

Labeled images of the following:

☐ 1. Short axis views of the sciatic nerve between the ischial tuberosity and greater trochanter at the level of the piriformis muscle

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- \square 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Lateral Femoral Cutaneous Nerve

Labeled images of the following:

☐ 1. Short axis views of the lateral femoral cutaneous nerve between the inguinal ligament and the anterior superior iliac spine

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Groin

Femoral Nerve

Labeled images of the following:

☐ 1. Short axis views of the femoral nerve relative to the adjacent common femoral vessels at the level of the psoas muscle

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- $\hfill \square$ 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Genitofemoral Nerve

Labeled images of the following:

☐ 1. Short axis views of the genitofemoral nerve underlying the linea semilunaris relative to the external iliac vessels at the level of the psoas muscle

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 3. Cine loop to appreciate the nerve in motion when beneficial
- $\hfill \Box$ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Thigh

Sciatic Nerve

Labeled images of the following:

☐ 1. Short axis views of the sciatic nerve between the biceps femoris and adductor magnus muscles

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Saphenous Nerve

Labeled images of the following:

☐ 1. Short axis views of the saphenous nerve relative to the femoral artery underlying the sartorius muscle

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Knee

ee Calf

Common Peroneal Nerve

Labeled images of the following:

☐ 1. Short axis views of the common peroneal nerve at the level of the fibular head

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Sural Nerve

Labeled images of the following:

☐ 1. Short axis views of the sural nerve relative to the short saphenous vein and adjacent to the Achilles tendon

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Ankle

Tibial Nerve

Labeled images of the following:

☐ 1. Short axis views of the tibial nerve underlying the flexor retinaculum relative to the adjacent posterior tibial vessles at the level of the medial malleolus

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- \square 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Deep Peroneal Nerve

Labeled images of the following:

☐ 1. Short axis views of the deep peroneal nerve relative to the corresponding anterior tibial artery and adjacent extensor hallucis longus tendon at the level of the ankle joint

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Superficial Peroneal Nerve

Labeled images of the following:

☐ 1. Short axis views of the superficial peroneal nerve relative to the adjacent fibula between the peroneus longus and extensor digitorum muscles at the level of the crural fascia

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- □ 7. Relevant dynamic views

Foot

Common Plantar Digital Nerve

Labeled images of the following:

- ☐ 1. Short axis views of the common plantar digital nerve underlying the transverse intermetatarsal ligament between the metatarsal heads with compresssion
- $\hfill \square$ 2. Long axis views along the course of the nerve with compression

ADDITIONAL VIEWS (if indicated)

- ☐ 3. Show Morton's neuroma continuous with the nerve when present
- ☐ 4. Measure Morton's neuroma when present
- \square 5. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 6. Dual image with contralateral comparison when a size difference is present
- ☐ 7. Demonstrate any structures causing nerve compression
- ☐ 8. Demonstrate innervated muscle, when affected
- ☐ 9. Relevant dynamic views

Medial Calcaneal Nerve

Labeled images of the following:

☐ 1. Short axis views of the medial calcaneal nerve relative to the calcaneus at the level of the abductor hallucis muscle

ADDITIONAL VIEWS (if indicated)

- \square 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Medial Plantar Nerve

Labeled images of the following:

☐ 1. Short axis views of the medial plantar nerve relative to the adjacent flexor hallucis longus tendon

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- ☐ 3. Cine loop to appreciate the nerve in motion when beneficial
- \square 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- ☐ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Lateral Plantar Nerve

Labeled images of the following:

☐ 1. Short axis views of the lateral plantar nerve between the abductor hallucis longus and quadratus plantae muscles

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- $\hfill\square$ 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Foot (continued)

Baxter's Nerve

Labeled images of the following:

☐ 1. Short axis views of the Baxter's nerve between the abductor hallucis longus and quadratus plantae muscles

ADDITIONAL VIEWS (if indicated)

- ☐ 2. Long axis views along the course of the nerve to show any variation in uniform thickness
- \square 3. Cine loop to appreciate the nerve in motion when beneficial
- ☐ 4. Dual image with contralateral comparison when a size difference is present
- ☐ 5. Demonstrate any structures causing nerve compression
- \square 6. Demonstrate innervated muscle, when affected
- ☐ 7. Relevant dynamic views

Changes made to this document since previous version:

7/24/24 added requirement for proper exam indication