

An Introductory Guide to Electrodiagnostic Billing Part 2: Case Studies

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This is the second article in a three-article electrodiagnostic (EDx) testing series. For a detailed introduction to EDx coding, see the companion article in the September issue of *The Physiatrist*. This portion of the series offers 2 sample case studies to demonstrate how to put the coding guidance into practice.

Case Study 1

A 62-year-old man with history of cervical fusion is referred for electrodiagnostic testing with 2 months of symptoms that started without inciting event. He reports painless weakness of the left ankle dorsiflexors. Over the past 2 months, he has had progressive difficulty walking and describes a left foot slap with intermittent tripping. His primary care physician referred the patient for further evaluation with electrodiagnostic testing.

On examination, the patient has 4/5 weakness with left ankle dorsiflexion. Upper limbs are notable for mild weakness and atrophy of the right deltoid muscle. Sensory exam is intact. Deep tendon reflexes are 3+ symmetric in the upper limbs, 2+ symmetric in the lower limbs, with up-going plantar response and clonus on the right. Dural tension signs are absent in the lower limbs. The following electrodiagnostic studies were performed:

Sensory NCS

1. Left sural sensory
2. Left superficial fibular sensory

Motor NCS

3. Left fibular motor to EDB (including F-wave)
4. Left tibial motor to AH
5. Bilateral tibial H-reflexes

Left lower limb EMG

The **left lower limb** was initially examined with needle electromyography, evaluating the following:

- | | |
|---------------------------|-----------------------------------|
| 1. Tibialis anterior (TA) | 5. Extensor hallucis longus (EHL) |
| 2. Fibularis longus | 6. Vastus medialis (VM) |
| 3. Gastrocnemius | 7. Adductor longus |
| 4. Tibialis posterior | 8. Lumbar paraspinals |

All of the muscles examined in the left leg showed increased insertional activity with prominent positive sharp waves and fibrillation potentials and also fasciculations. In addition, they all demonstrated chronic motor unit changes, including polyphasia, increased duration, and increased amplitude.

Right upper limb, right lower limb, and non-extremity EMG

Based on the results from the left leg, along with a history and examination that suggested a more global process, additional testing was performed in the **right upper and lower limbs**.

- | | |
|--------------------|------------|
| Upper Limb | Lower Limb |
| 1. Deltoid | 1. TA |
| 2. Biceps | 2. VM |
| 3. Brachioradialis | |
| 4. Infraspinatus | |
| 5. Pronator teres | |
| 6. Triceps | |

The results revealed similar involvement in the right arm and leg, **bilateral thoracic paraspinals**, and the **genioglossus muscle** confirming the suspicion for motor neuron disease.

CASE STUDY 1: CORRECT BILLING	
Nerve conduction studies; 5-6 studies <i>Rationale: The total of nerves studied is 6. Note that the F-wave does not count as an additional study, but bilateral H reflexes do count as two separate studies.</i>	95909
Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; complete, five or more muscles studied, innervated by three or more nerves or four or more spinal levels <i>Rationale: Two complete limbs with 5+ muscles were studied. Cervical paraspinals were deferred given history of cervical surgery.</i>	95886 x 2 units (Left leg, Right arm)
Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; limited <i>Rationale: Examiner only evaluated 2 muscles in the right leg.</i>	95885
Needle electromyography, non-extremity (cranial nerve or axial) muscle(s) done with nerve conduction, amplitude and latency/velocity study <i>Rationale: One unit is coded when testing the bilateral thoracic paraspinals and another unit is coded for genioglossus testing.</i>	95887 x 2
Diagnosis: Amyotrophic lateral sclerosis	G12.21

Continued on page 7

Continued from page 6

Case Study 2

A 32-year-old woman presents for electrodiagnostic evaluation on referral from her family physician. Her symptoms started mildly 6 months ago without inciting event and have been getting progressively worse the past 2 months. She reports pain and numbness in the left arm and hand with radiation to the ring and little fingers. She denies weakness.

Examination reveals no swelling, atrophy, skin changes. Neurovascular exam is fully intact throughout the bilateral upper limbs. Ulnar entrapment neuropathy, C8 radiculopathy, and thoracic outlet syndrome are highest on the differential diagnosis for pain and numbness in the ring and little finger.

The electrodiagnostic evaluation is focused to evaluate the patient for the most likely possibilities as an extension of the history and physical examination but can be expanded if abnormalities suggest other issues.

Sensory NCS

1. Left median from palm to index finger
2. Left median from wrist to index finger
3. Left ulnar from wrist to the short finger
4. Right median from palm to index finger (comparison)
5. Right median from wrist to index finger (comparison)
6. Right ulnar from wrist to the short finger (comparison)

Motor NCS

7. Left median motor to APB
8. Left ulnar motor to ADM

NCS are notable for conduction block of the ulnar nerve at the elbow.

Left upper limb EMG

The **left upper limb** was examined with needle electromyography evaluating the following:

- | | |
|-----------------------------|--------------------------------|
| 1. First Dorsal Interosseus | 5. Triceps |
| 2. Abductor Pollicis Brevis | 6. Deltoid |
| 3. Flexor Carpi Ulnaris | 7. Cervical paraspinal muscles |
| 4. Biceps | |

Needle electromyography (EMG) was performed on the left upper limb and included evaluation of the first dorsal interosseous, abductor pollicis brevis, flexor carpi ulnaris, biceps, triceps, deltoid, and the upper, middle and lower cervical paraspinal muscles. All muscles tested showed normal insertional activity, normal recruitment, and normal motor unit morphology.

Stay tuned for the third and final article installment in this series, which will feature frequently-asked-questions about electrodiagnostic billing. ❖

CASE STUDY 2: CORRECT BILLING	
Nerve conduction studies; 5-6 studies <i>Rationale: Although 8 tests were performed, the two median studies to the index finger only count once on either side since they are different segments along the same named nerve segment from Appendix J.</i>	95909
Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; complete, five or more muscles studied, innervated by three or more nerves or four or more spinal levels <i>Rationale: A complete left upper extremity EMG study, including paraspinals, was performed.</i>	95886
Diagnosis: Ulnar neuropathy at the elbow	G56.22

HAPPENING @ #AAPMR2019

FRIDAY, NOVEMBER 15
2:00 pm - 3:15 pm
2019 Office Coding & Documentation E/M Updates—Preparing for 2021
 Session Directors: Scott Horn, DO – Jordan Young Institute; Annie D. Purcell, DO – Redding Spine and Sports Medicine
 Faculty: Linda Duckworth, CHC, CPC – SCBI, Inc.

3:45 pm - 5:00 pm
2019 Inpatient/SNF Physiatry Reimbursement Hurdles
 Session Directors: Christopher Garrison, MD, MBA – Dell Medical School/ UT Austin; Jeffery Johns, MD – Department of PM&R Vanderbilt University Medical Center
 Faculty: Linda Duckworth, CHC, CPC – SCBI, Inc.

ACADEMY IN ACTION

- In September, your Academy voiced physiatry's concerns regarding the 2020 Medicare Physician Fee Schedule proposed rule. Our comments recommend modifications to the proposed values for new codes for injection and destruction of the genicular nerves and nerves innervating the SI joint as well as modifications to the proposed changes to the office and outpatient evaluation and management codes scheduled to take effect January 1, 2021. Additional comments addressed changes to the Quality Payment Program. Stay tuned for more details!