EMG CLASS PRACTICAL REQUIREMENTS:

PGY II Responsibilities:

1) Set-up EMG instrument for a sensory study: (will do two)
   1) median sensory (all)
   2) ulnar sensory
   3) radial sensory
   4) sural sensory

2) Set-up EMG instrument for a motor study:
   1) median motor (all)
   2) ulnar motor
   3) peroneal motor
   4) tibial motor

3) Must to obtain results from the screen for 1 study:
   1) latency
   2) amplitude
   3) conduction velocity

PGY III Responsibilities: (including PGY II responsibilities)

1) Set-up EMG instrument for long-latency response, perform technique and interpret response for 1 of the below:
   1) lower limb H-reflex
   2) upper limb F-wave
   3) lower limb F-wave

2) Set-up EMG instrument for needle EMG study.

3) Demonstrate the appropriate components for EMG needle technique including:
   1) location
   2) muscle at rest
   3) insertional activity
   4) initial recruitment
   5) maximal recruitment
Above activity for 1 upper and limb muscle:

**UPPER LIMB (ONE)**

- Deltoid
- Biceps
- Triceps
- Brachioradialis
- Pronator Teres
- Ext. Carpi Rad. Long
- APB
- ADM
- 1DI

**LOWER LIMB (ONE)**

- Glut Max
- Glut Med
- Biceps Femoris
- Semitendinosus
- Vastus Medialis
- Rectus Femoris
- Ant Tib
- Peroneous Longus
- Gastrocnemius
- Ext. Hallicus Long

PGY IV RESPONSIBILITIES: (Including PGY II & III):

1) Perform Nerve conduction study using supraclavicular stimulation and discuss.
   1) Axillary N.
   2) Musculocutaneous N.
   3) Suprascapular N.
   4) Long Thoracic N.

2) Perform repetitive stimulation technique and be able to discuss the meaning of various results.

3) Demonstrate appropriate needle technique for unusual muscles.

- Serratus Ant.
- Rhomboids
- Supraspinatus
- Infraspinatus
- Flex Carpi Ulnaris
- Ext Ind Prop
- Supinator
- Flex Poll Longus
- ABD Poll Longus
- Flex Dig. Profundus

- Pronator Quadratus
- Adductors
- PSOAS
- Posterior Tibials
- Flex Dig Longus
- EDB
- ABH
- ADH
SKILL REQUIREMENTS

SENSORY & MOTOR STUDIES
SET GAIN
SET SWEEP SPEED
ELECTRODE PLACEMENT
  REFERENCE
  ACTIVE
  GROUND
  (WITH CONDUCTING GEL)
CONNECT ELECTRODES TO PRE-AMP
MEASURE CORRECT DISTANCE
CORRECT SIMULATOR DIRECTION
CORRECT DURATION/INTENSITY
  OF STIMULUS

NEEDLE EMG STUDY
SET GAIN
SET SWEEP SPEED
ELECTRODE PLACEMENT
  REFERENCE
  GROUND
REAL TIME RECORDING
CONNECT TO PRE-AMP
LOCATE MUSCLE
  ID MOTOR POINT
MUSCLE AT REST
INSERTIONAL ACTIVITY
INITIAL RECRUITMENT
MAXIMAL RECRUITMENT
UNUSUAL MUSCLES FOR EMG
  ID MOTOR POINT

F WAVE & H REFLEX STUDIES
SET GAIN
SET SWEEP SPEED
ELECTRODE PLACEMENT
  REFERENCE
  ACTIVE
  GROUND (WITH CONDUCTING GEL)
CONNECT ELECTRODES TO PRE-AMP
MEASURE CORRECT DISTANCE
CORRECT SIMULATOR DIRECTION
CORRECT DURATION/INTENSITY OF STIMULUS
CORRECT WAVE FORM ACQUISITION

REPETITIVE STIMULATION
SET-UP COMPUTERIZED INSTRUMENT (SAPPHIRE)
DISCUSS APPROPRIATE MUSCLE GROUPS
ACQUIRE 1 STUDY
DISCUSS STIMULATION AND/OR EXERCISE PROTOCOL
DISCUSS INTERPRETATION OF FINDINGS

SUPPRACLAVICULAR NCS
ATTACH ELECTRODES FOR REQUESTED MUSCLE
  REFERENCE
  ACTIVE
  GROUND (WITH CONDUCTING GEL)
DEMONSTRATE CORRECT SIMULATOR SITE AND POSITION
<table>
<thead>
<tr>
<th>TEST</th>
<th>PGY2</th>
<th>PGY3</th>
<th>PGY4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Date/Evaluator</td>
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<tr>
<td>Motor Studies</td>
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<td>Sensory Studies</td>
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<td>CMAP Interpretation</td>
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<td>Long Latency Responses</td>
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<tr>
<td>Instrumentation for EMG</td>
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<td>Upper Limb Needle Exam</td>
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<td>Lower Limb Needle Exam</td>
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<tr>
<td>Supraclavicular NCS</td>
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<td>Repetitive Stimulation</td>
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<tr>
<td>Unusual Muscles for EMG</td>
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# Direct Observation
**Neurolytic Injection**

**Resident Name/PGY:**

**Evaluators Name:**

**Date Performed:**

**Site of Intervention:** (check all that apply)
- □ Neck
- □ Shoulder Girdle
- □ Upper Extremity
- □ Lower Extremity

<table>
<thead>
<tr>
<th>Needs Improvement</th>
<th>Meets Expectations</th>
<th>NA</th>
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<tbody>
<tr>
<td>Communicates accurately the intended expectations of the procedure</td>
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<tr>
<td>Answers all patient or family questions accurately</td>
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<tr>
<td>Obtains informed consent that includes appropriate explanation of risk and benefits</td>
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<td>Identifies the involved muscles requiring intervention</td>
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<td>Develops a neurolytic plan with appropriate dosing for each muscle including sides of treatment</td>
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<td>Prepares medications appropriately</td>
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<tr>
<td>Performs a time out to confirm patient identification, dosing and injection plan</td>
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<tr>
<td>Uses anatomical landmarks to correctly isolate muscle intended for injection</td>
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<tr>
<td>Appropriately uses EMG guidance and/or stimulation for procedure</td>
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<td>Performs procedure with minimizing patient discomfort</td>
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<tr>
<td>Clearly communicates the follow up plan</td>
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- PGY1-PGY3 require Direct Supervision
- PGY4 may advance to Indirect Supervision after observed to meet expectations in all areas on 3 UE procedures, 3 LE procedures or 2 Neck/Shoulder procedures

**Comments:**

---

**Attending Signature**

**Resident Signature**

*RETURN all completed forms to the Program Coordinator*

1/10/2013
Direct Observation
Joint/Trigger Point Injection

Resident Name/PGY: 
Evaluators Name: 
Date Performed: 

Site of Intervention: (check all that apply)
- [ ] Glenohumeral
- [ ] AcromialClavicular
- [ ] Bursa
- [ ] Knee
- [ ] Other

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<tr>
<td>Identifies the involved muscle(s)/joint(s) requiring intervention</td>
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<tr>
<td>Chooses appropriate pharmacological agent(s) and dosing for injection</td>
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<td>Prepares medications appropriately</td>
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<td>Performs a time out to confirm patient identification, dosing and injection plan</td>
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<tr>
<td>Uses anatomical landmarks to correctly isolate muscle(s)/joint(s) intended for injection</td>
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<tr>
<td>Appropriately uses Ultrasound guidance to identify anatomic landmarks and guidance for injection</td>
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<td>Performs procedure with minimizing patient discomfort</td>
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Documents procedure appropriately in the medical record

- PGY1 requires Direct Supervision
- PGY2 or above may advance to Indirect Supervision after observed to meet expectations in all areas on 3 UE and 3 LE procedures
- Only PGY4 may be approved to provide supervision

Comments:

Attending Signature

Resident Signature

RETURN all completed forms to the Program Coordinator