

**OLIVE VIEW-UCLA MEDICAL CENTER  
NEUROLOGY DEPARTMENT  
POLICY & PROCEDURE**

NUMBER: 2213

VERSION: 3

**SUBJECT/TITLE:**     **ROUTINE EMG/NCV RECORDING - PROCEDURAL PROTOCOL**

**POLICY:**           Once an order is placed via ORCHID, (e.g. Neurophysiology Test-EMG) for a routine electromyogram (EMG), nerve conduction velocity (NCV) or other neuromuscular diagnostic test for either an inpatient or outpatient, the procedure time is scheduled. For *outpatients* the procedure is scheduled for the first available outpatient time slot, unless specified as “STAT,” in which case it is done on the same day, or next day at the latest. For *inpatients* the procedure is done the same day as the request, or the next day at the latest (excluding weekends). Again, if the request is “STAT,” the procedure is done on the same day if possible.

The tests performed in the EMG lab include: sensory and motor nerve conductions, F wave and H response, EMG studies of the affected muscles in neuropathic and myopathic conditions, repetitive nerve stimulation for patients with neuromuscular junction disorders including myasthenia gravis.

The following steps constitute the bulk of how the routine EMG is performed. Inpatients and outpatients are done in basically the same way, with some minimal differences, which will be described.

EMG lab follows generally standard protocols. Room temperature is usually kept at normal temperature:

1. The patient arrives in the Neurology Lab for the exam; in the case of inpatients, the appropriate floor is called to have the patient brought to the lab.
2. When the patient arrives, patient identity is verified using two identifiers, and a complete history is taken from both the patient and the requisition. Information is obtained regarding such things as medications, nature and course of the problem, family history, etc.
3. The patient is then logged into the departmental logbook and given a procedure number. The procedure is then explained to the patient, and patient is asked if he or she has any questions. The patient is examined, and surface temperature is ascertained; if cool, the surface is warmed by warm water and/or lamp.
4. Based on clinical diagnosis, the appropriate sensory and/or motor nerve

**SUBJECT/TITLE: ROUTINE EMG/NCV RECORDING - PROCEDURAL PROTOCOL**

**Policy Number: 2213**

**Page Number: 2**

conductions are performed. EMG is performed based on the clinical picture. Other tests, such as repetitive nerve stimulation, F wave, and H reflexes, are done based on the history and physical examinations

5. A standard electro-diagnostic test including EMG lasts approximately 40-60 minutes unless otherwise specified; it could last longer if an abnormality is detected. The machine is calibrated for all standard EMG, NCV and other tests.
6. After the test, the patient is given a warm moist towel to remove any electrode gel or paste from the body. Then the patient is free to leave.
7. In most cases disposable electrodes are used and then discarded. Occasionally, reusable electrodes are employed; in that case, after a test the electrodes are cleaned and disinfected (see infection control procedures) and set aside to dry.
8. The linen is changed, and the recorded EMG data are transferred from the acquisition equipment to disc.
9. A report is placed directly into ORCHID under Neurophysiology-EMG, Neurophysiology-NCV, etc.
10. All reports in ORCHID must be edited and signed in a timely fashion by the Attending Physician.

**PURPOSE:** Standardize method of routine EMG/NCV recording

**DEPARTMENTS:** NEUROLOGY

**DEFINITIONS:**

**PROCEDURE:**

References:	
Approved by: Shannon Thyne (Chief Medical Officer)	Date: 05/09/2017
Review Date: 05/09/2020	Revision Date:
Distribution: Neurology	
Original Date: 05/09/2017	