


Name of Policy: <u>Multiple sleep latency test</u> Policy Number: 3364-171-03-04 Department: Sleep Disorders Approving Officer: Senior Hospital Administrator Responsible Agent: Director, Sleep Disorders Scope: The University of Toledo Medical Center Pulmonary Services Department	 Effective Date: 03/17/2023 Initial Effective Date: 03/17/2023
<input checked="" type="checkbox"/> New policy proposal <input type="checkbox"/> Minor/technical revision of existing policy <input type="checkbox"/> Major revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy	

(A) Policy Statement

The Multiple Sleep Latency Test (MSLT) is performed in accordance with American Academy of Sleep Medicine (AASM) practice parameters. The MSLT must be ordered or approved by an appropriately licensed facility medical staff member. The MSLT must always follow all-night polysomnography. The MSLT is indicated as part of the evaluation of patients with excessive daytime sleepiness (EDS) and to help differentiate idiopathic narcolepsy from narcolepsy.

(B) Purpose of Policy

The MSLT is intended to measure sleep tendency under standardized conditions on the absence of external alert factors. A standard MSLT protocol that is consistent with AASM practice parameters ensures consistency and allows comparisons of results with published data generated by other sleep programs.

(C) Procedure

General Description:

1. The MSLT must be performed immediately following polysomnography recorded during the individual’s major sleep period.
 - a. The initial nap opportunity begins about one and a half to three hours after the patient has awakened from the all-night sleep study (i.e., lights on).
2. The use of MSLT to support a diagnosis of narcolepsy is suspect if total sleep time on the prior night sleep is less than six hours.
3. The test should not be performed after a split-night study (combination of diagnostic and therapeutic studies in a single night).
4. The test should not be performed after a home sleep apnea testing (HSAT).
5. Sleep logs will be obtained for two weeks prior to the MSLT to assess sleep-wake schedules. The sleep diary will be attached to the MSLT report.
6. Throughout the day no caffeine or stimulant medications are permitted and unusual exposures to bright sunlight should be avoided.
7. Standardized of test conditions is critical for obtaining valid results. Sleep rooms should be dark and quiet during testing. Room temperature should be set for the patient’s comfort level.
8. The MSLT consists of five nap opportunities given two hours apart.
 - a. For example, the first nap may be performed at 10:00 AM (as long as it falls between 1.5 hours and 3 hours after termination of the nocturnal recording), with subsequent naps at 12:00 PM, 2:00 PM, 4:00 PM, and 6:00 PM.

- b. A shorter test of four naps may be performed, but the shorter test is not reliable for the diagnosis of narcolepsy unless at least two sleep-onset REM periods (SOREMPs) have occurred. (See “Four-nap MSLT” policy below.)
 - c. Five nap opportunities must be performed for mean sleep latency if no SOREMPs or one SOREMP occurred in the first four naps.
9. Between naps the patient is kept out of bed and is visually monitored to ensure that no napping occurs. In each nap opportunity, the patient is told to try to fall asleep.
10. The patient is given 20 minutes to fall asleep. If the patient falls asleep in 20 minutes or less, he or she is monitored for 15 minutes (clock time) from sleep onset before ending the test.
11. The MSLT is recorded with standard polysomnography using the following montage: left and right eye electrooculograms (EOGs), mental/submental electromyogram (EMG), frontal electroencephalogram (EEG) (F3-M2, F4-M1), central EEG (C3-M2, C4-M1), and occipital EEG (O1-M2, O2-M1) derivations, and electrocardiogram (ECG).
12. The mean sleep latency is determined across all naps. Sleep latency is defined as the time from lights out to the first epoch of any state of sleep scored according to the most recent version of the *AASM Scoring Manual*.
13. Sleep technologists who perform MSLT should be experienced in conducting the test.
14. Stimulants, stimulant-like medications, and REM suppressing medications should ideally be stopped two weeks before the MSLT. Use of the patient’s other usual medications should be thoughtfully planned by the sleep clinician before MSLT testing so that undesired influences by the stimulating or sedating properties of the medications are minimized.
15. **Drug screening:** Unless specified by the ordering clinician, all patients undergoing the MSLT are under standing orders from the Medical Director for drug screening to ensure that sleepiness on the MSLT is not pharmacologically induced. Drug screening is usually performed on the morning of the MSLT but its timing and the circumstances of the testing may be modified by the clinician. The results of the drug screening will be attached to the MSLT report.
16. **Patients on positive airway pressure (PAP) therapy:** Unless specified by the ordering clinician, patients tested with PAP during the previous all-night sleep study are tested with PAP at optimum pressure during the naps. Although air flow is not measured, the technologist must document that the MSLT was performed with the patient on PAP therapy and must document the PAP mode and setting(s).

Components:

1. Patient education
2. Patient hook up
 - International 10-20 hook up
 - Chin EMG
 - EYE EOG
 - Oximeter
3. Patient name, Date of Birth (DOB), Medical Record Number (MRN)
4. Date of study
5. Lights out
6. Machine calibrations
7. Impedance check
8. Patient calibrations
9. Lights on
10. Ordering provider
11. Technologist performing the test
12. Technologist scoring the study

<p>Approved by:</p> <p><u>/s/</u> <u>03/20/2023</u> Michael Taylor Director, Pulmonary Services Date</p> <p><u>/s/</u> <u>03/19/2023</u> Andre Aguilon, M.D. Medical Director Date</p> <p><u>/s/</u> <u>03/20/2023</u> Russell Smith Senior Hospital Administrator Date</p> <p><i>Review/Revision Completed By: Director, Sleep Disorders</i></p>	<p>Review/Revision Date: 03/23</p>
<p>Policies Superseded by This Policy:</p>	<p>Next Review Date: 03/26</p>

It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.