

Multiple Sleep Latency Test

A Multiple Sleep Latency Test (MSLT) is used to assess the severity of daytime sleepiness. It is also the standard tool used to diagnose narcolepsy. The aim of this test is to measure how quickly you fall asleep during the day in a dark, quiet environment. It also allows assessment of the presence of REM sleep periods (dream sleep) which are needed to make a diagnosis of narcolepsy. For further information on Narcolepsy refer to ATS Patient Education Series at www.thoracic.org/patients.



This test takes place during the daytime following an overnight sleep study. The sleep study is used to rule out other underlying sleep disorders that might explain symptoms of daytime sleepiness. For further information of sleep study, refer to ATS Patient education series at www.thoracic.org

How can I get ready for the MSLT?

Your sleep routine should be kept as normal as possible a few weeks prior to the sleep study and MSLT. You will be asked to complete a sleep log for 1-2 weeks prior to the sleep study. A sleep log is a calendar where you record your sleep for 1-2 weeks. You may be asked to wear an actigraph for 1-2 weeks prior to the sleep study to document your sleep. An actigraph is a device that looks like a wristwatch and senses movement to help determine your sleeping patterns.

You will likely be asked to list all of your medications before the test is scheduled. Let the sleep laboratory staff know all medications and natural products you are currently taking. Some medications might need to be held 2 weeks prior to the study. A urine drug screen may be performed on the day of the test.

What can I expect during the multiple sleep latency test?

Two hours after the end of the overnight sleep study, you will have the opportunity to take 5 scheduled naps (each lasting 20 minutes or more). Each nap period is separated by 2 hours over the course of the day. During these two-hour breaks, you will be instructed to stay awake and avoid eating or drinking anything which contains caffeine (coffee, tea, soda, or chocolate). You will not need to stay in bed and will be allowed to leave the sleep laboratory for this period of time.

Many of the sensors used during the overnight sleep study will be worn during the MSLT. These sensors will record your brain waves and eye movements to determine when you fall asleep and the stages of sleep you reach during the naps. These sensors do not hurt and are easy to remove. A closed-circuit camera allows staff to monitor you during the study. With the two-way speakers, you can ask for help at any time, if needed. The staff will avoid entering the room as much as possible during the naps to avoid disturbing your sleep.

You will likely be asked to complete a questionnaire to assess the quality of your sleep in the lab the night before the MSLT and after each

nap opportunity. After 5 nap times are completed, the sensors will be removed and you will be ready to leave the sleep laboratory.

What happens after the MSLT?

Your sleep log, actigraph information, overnight sleep study and MSLT will be interpreted by a sleep specialist. You should schedule a follow-up visit with your healthcare provider or sleep specialist to discuss the results and treatment, if necessary.

Preparation before the test:

To make sure you get the best evaluation possible, there are several things you can do to prepare yourself:

- Tell the sleep center every medication you are taking, even over the counter medications and natural products. This information will be important for a better interpretation of the study results.
- If you take sleeping medications or psychostimulant medications (for example, ADHD medications) ask the sleep specialist if you should take these medications the day of the overnight study or the day of the MSLT.
- Recording of a sleep log for 2 weeks prior to the overnight study and MSLT; this will be helpful for your physician to determine whether you get enough sleep.

- Bring everything you need for a good night of sleep (for example, pillow, blanket, or book).
- Bring personal items to entertain yourself during the 2 hours breaks between nap times.
- You are responsible for any meals or snacks.

Authors: Refika Ersu, MD, Frederic Proulx, MD

Reviewers: Iris A. Perez, MD, Helena Schotland, MD, Marianna Sockrider, MD, DrPH

Resources

American Thoracic Society

- www.thoracic.org/patients/
 - Narcolepsy
 - Sleep Studies

American Academy of Sleep Medicine

- <http://sleepeducation.org/disease-detection/multiple-sleep-latency-test/overview-and-facts>
- <http://sleepeducation.org/essentials-in-sleep/narcolepsy/overview-facts>

American Sleep Association

- <https://www.sleepassociation.org/sleep-treatments/multiple-sleep-latency-test/>

National Sleep Foundation

- <https://www.sleepfoundation.org/articles/narcolepsy>

National Institutes of Health: National Heart, Lung and Blood Institute

- <https://www.nhlbi.nih.gov/health-topics/narcolepsy>

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