



MSLT

What is it?

The Multiple Sleep Latency Test (MSLT) is a nap study. It is used to see how quickly you fall asleep in quiet situations during the day. The MSLT is the standard way to measure your level of daytime sleepiness. Excessive sleepiness is when you are sleepy at a time and place when you should be awake and alert. It affects about 5% of the general population.

The study is based on the idea that you should fall asleep in a shorter amount of time as your feeling of sleepiness increases. The MSLT charts your brain waves and heartbeat and records your eye and chin movements. The study also measures how quickly and how often you enter the rapid-eye-movement (REM) stage of sleep. Results of the nap study are routinely used to detect sleep disorders.

The study isolates you from outside factors that can affect your ability to fall asleep. These factors include such things as the following:

- Temperature (too hot or too cold)
- Light
- Noise
- Activity

Other factors that can still affect the results of the study include the following:

- Anxiety
- Tension
- Depression
- Age
- Caffeine
- Drugs and medications
- Amount of sleep prior to the study

The use of stimulants needs to be stopped for two weeks before the MSLT. Your sleep specialist should help you properly schedule the use of any other medications.

Who gets it?

The MSLT is the standard tool used to evaluate people who are thought to have narcolepsy. Most people with narcolepsy fall asleep in an average of less than five minutes during the MSLT nap trials. Some take longer than five minutes to fall asleep. There are also people without narcolepsy who fall asleep in less than five minutes.

The MSLT also counts sleep-onset REM periods (SOREMPS). This is when you enter REM sleep very soon after you fall asleep. REM sleep is normally the fifth and last stage of each sleep cycle. It usually begins about 90 minutes after you fall asleep. People with narcolepsy often have two or more SOREMPS in a nap trial.



The MSLT may be used to see if a person has idiopathic hypersomnia. Patients with idiopathic hypersomnia fall asleep easily but do not have SOREMPs.

The MSLT reveals a broad range of time in which it takes normal sleepers to fall asleep during the study. Normal sleepers tend to fall asleep in an average of about ten minutes or more during the five naps of the MSLT. Due to the wide range of normal times, the results from these nap trials alone are not enough to diagnose a sleep disorder. Doctors must also consider other data, tests, and medical information.

What happens when I have it?

It will be helpful if you fill out a sleep diary for at least one week before the MSLT. This will allow the doctor to see your normal sleep-wake pattern. Smoking should be stopped at least 30 minutes before each nap trial.

You will not be allowed to have any drinks with caffeine during the study. You will also not be able to see any bright sunlight. Outside factors that might affect your sleep are limited. Your room is made dark and quiet. The room temperature is set at your personal comfort level.

The daytime nap study is taken right after you do an overnight sleep study. For the MSLT to be accurate, you should have had a total sleep time of at least six hours during the overnight sleep study.

The MSLT consists of four or five nap opportunities with breaks lasting for two hours in between them. The first nap trial begins between 1.5 and three hours after you wake up from the overnight sleep study. You will be given a light breakfast at least one hour before the first nap trial. After the fourth nap trial, which is usually around 2:00, the technician will be able to make the decision if there is enough information for the study to be ended, or if a fifth nap trial will be needed.

Sensors are placed on your head, face, and chin. They send tiny electrical signals to a computer. The signals show when you are asleep and awake during the study. The brain-wave and eye-movement detectors show when you are in REM sleep. This is a stage of sleep where your eyes twitch and your brain waves are very active.

You will not feel any pain during the MSLT. The sensors are gently taped to your skin and connected to a computer. The cables are long enough to let you move around and turn over in bed. You will be asked to move your eyes, clench your teeth and turn your head. This will make sure that the sensors are working. A low-light video camera allows a technologist to see you from a nearby room.

For each nap trial, you are asked to lie quietly in bed and try to go to sleep. Then the lights are turned off. Once the lights are out, the test will measure how long it takes you to fall asleep. Your vital signs will continue to be measured as you sleep.

After sleeping for 15 minutes, you will be awakened. Each trial will end if you do not fall asleep within 20 minutes. Between nap trials, you will have to stay out of bed and occupy yourself so that you remain awake. A light lunch should be provided right after the end of the third (noon) trial.

After the last nap trial, you will test the sensors again, and then they will be removed. This will complete the study, and you will be free to go.



Who reads it?

A technologist is the first one to look over the data from a nap study. First, he or she will chart your wake-sleep times and sleep stages. He or she will be sure to look for and count any times you entered REM sleep. The results will be given to a doctor. The MSLT is not a test that you can fail. The doctor will simply review the study to find out what kind of sleep problem you may have. The results of a nap study are always reviewed by a board-certified sleep specialist.

How do I get the results?

It usually takes about two weeks to get the results of a nap study. At times the doctor who takes a look at the study needs to get more information. He or she may talk to the technologist or to the doctor who sent you to the center.

The doctor who ordered the MSLT will discuss the results with you. If your primary care doctor ordered it, then the results are sent to him or her. If you met with a doctor in the sleep center, then he or she will tell you the results.

For more information please visit SleepEducation.com.