

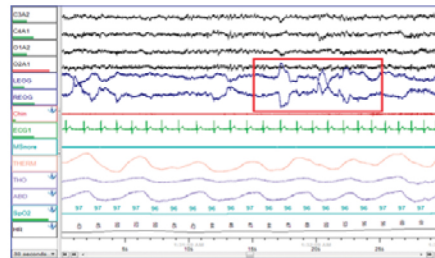
SLEEP DISORDER

breathing attached to your chest. These will remain in place while you sleep.

- The electrodes record signals while you are awake (with your eyes closed) and during sleep. The test measures the amount of time it takes you to fall asleep and to enter REM (deep) sleep.
- A specially-trained health care provider will observe the recording while you sleep and note any changes.
- The test will record the number of times that you have difficulty breathing, while sleeping.

How To Prepare for the Test

Unless directed to do so by your doctor, do not take any sleep medicine and do not drink alcohol or caffeinated beverages before the test. They can interfere with your sleep. Bring comfortable clothes to sleep in, bring your medications with you, do not take sleeping pills.



Why the Test is Performed

The test helps diagnose possible sleep disorders, including obstructive sleep apnea (OSA). Your Doctor may think you have OSA because you have these symptoms:

- Daytime sleepiness (falling asleep during the day)
- Loud snoring
- Periods of holding your breath while you sleep, followed by gasps or snorts
- Restless sleep

Include: Map as in the Neurophysiology Department Brochure

What is A Sleep Disorder

Sleep is essential for life. Normal sleep is required for mental and physical restoration. Diseases which adversely affect sleep can lead to functional impairment, poor health and, even death.

A sleep disorder is any condition that interferes with the duration, continuity or quality of sleep. Broad categories of sleep disorders include sleep related breathing disorders, movement disorders, insomnia, disorders of excessive sleepiness, abnormal sleep-wake pattern (circadian rhythm disorders) and abnormal behavior during sleep (parasomnias). Early recognition, diagnosis and treatment of a sleep disorder are important to prevent harmful consequences.

Common Sleep Disorders

Obstructive Sleep Apnea Syndrome (OSA)

Obstructive Sleep Apnea Syndrome is a disorder characterized by collapse of the upper airway when the air cannot enter the lungs during sleep. Obesity is the major risk factor for OSA; other risk factors include male gender, advancing age, post-menopausal state in women, recessed jaw, and certain medical conditions. Common symptoms of OSA are snoring, choking episodes during sleep, non-refreshing sleep, morning headaches or dry mouth, decreased concentration /irritability/fatigue, and excessive daytime sleepiness. In women, mood disturbances may predominate.

Diagnosis of OSA is essential as untreated moderate to severe OSA can lead to medical problems such as heart attacks, stroke, high blood pressure (hypertension) and heart failure. Road traffic accidents are also more common in patients with OSA compared to the general population. Diagnosis is confirmed by Sleep Studies. Treatment options include positive airway pressure (PAP) therapy, surgery and oral appliances. PAP therapy is the most commonly used treatment for OSA.

When Should Osa Be Suspected?

You should see a sleep specialist if you suffer from the following:

- Obesity
- Snoring
- Lack of refreshing sleep
- Morning headaches or dry mouth
- Excessive daytime sleepiness
- Irritability, decreased concentration, easy fatigability
- Mood disturbances

Restless Leg Syndrome (RLS)

This is a sleep related movement disorder in which there are abnormal sensations usually restricted to the legs, accompanied by an urge to move the extremities; it is typically worse at night or when keeping still for extended periods. Certain blood tests may be required to guide therapy, which includes both non-pharmacological and pharmacological measures.

Insomnia

A number of conditions can lead to problems with initiating and maintaining a full night's sleep. A detailed analysis is generally required to pinpoint the cause(s) of insomnia. A common etiology of insomnia is poor sleep hygiene where maladaptive behavior/habits not conducive to sleep interfere with sleep.

Other Sleep Disorders

Various other disorders can affect sleep, including narcolepsy, circadian rhythm sleep disorders, sleep walking/sleep terrors/ confusional arousals and other parasomnias etc.

A detailed evaluation by a sleep specialist, who may order further tests (including a hospital based in-lab sleep test or polysomnogram (PSG)), is advised if any of the above sleep disorder is suspected.

What Is Polysomnography (PSG)?

Polysomnography is totally painless and is a comprehensive recording of the biophysiological changes that occur during sleep. It is usually performed at night, when most people sleep. A sleep study measures your sleep cycles and stages by recording:

- Air flow in and out of your lungs as you breathe
- The level of oxygen in your blood
- Body position
- Brain waves (EEG)
- Breathing effort and rate
- Electrical activity of muscles
- Eye movement
- Heart Rate



Full sleep studies are usually done at a special sleep center. The entire sleep study facilities are available at The Aga Khan University Hospital.

- You will be asked to arrive about 2 hours before bedtime.
- Your health care provider will place electrodes on your chin, scalp, and around the eyelids. You will have monitors to record your heart rate and