

Polysomnography for children

Purpose of the Examination

The purpose of the polysomnography (PSG) is to study disturbances of sleep structure, special sleep disorders (parasomnias), possible apneas, partial upper airway obstruction, and periodic leg movements during sleep.

Preparing for the Examination

- The child can take his or her possible medication normally before the examination. Please bring along any medication the child needs during the examination.
- **A parent, or another adult the child feels safe around, has to be present during the examination.** Please bring along any items included in bedtime routines, for example, pyjamas, a tooth brush, a plush toy, a pacifier etc.
- The child should have clean and dry hair when coming to the examination.
- If the child is 7 years old or elder, please **keep track of his/her sleeping in the attached sleep diary for two weeks** before the examination. Hand in the diary when arriving to the examination.

Examination Process

A technician will begin by attaching the measurement sensors on the child. The attachment takes about an hour. All the sensors will be attached on the surface of the skin, either by an adhesive or by other means. None of these measurements causes pain to the child. The child gets used to the attached sensors very quickly, so they will not disturb normal sleep remarkably.

The child will have some time to get used to the attached sensors, and to play and eat at the unit, before going to sleep. The child and the accompanying adult will be served meals during the examination. The sleep examination includes the electrical activity of the child's brain, eye movements, muscle tension, heart rate, position and movement, blood oxygen saturation, and breath carbon dioxide concentration. In addition, the examination is recorded on video.

After the Examination

The wires will be detached from the examination equipment after the examination has ended. If the wires have been attached with a water-soluble paste, they are detached easily in a shower or in a bath. A clinical neurophysiologist will analyse the examination and write a report. The report is directed to the clinic that requested the examination. They will inform you of the examination results and any possible follow-ups.