The Sleep Center, Kennedy Krieger Institute

707 N. Broadway, Baltimore, MD 21205-1890

POLYSOMNOGRAPHY REPORT

Patient Demographics

Unique ID: ee5df99e

Sex: Female Started: 6/10/2019 at 9:13:45 PM

Birth date: [REMOVED] Stopped: 8/11/2019 at 5:01:33 AM

Patient age: 15 years Duration: 7:47:48 hours (467.8 min)

Height: 64.3 in. Weight: 116.0 lbs.

BMI: 19.7 lb/in2

Neck: in.

Scoring Technician: Referring provider: Constance Smith-Hicks

Recording Technician: Lisa McKenney, RPSGT, RST Interpreting physician: Janet Lam

Testing Type & Methods

Type of Test: PSG

Method: Polysomnography was conducted on the night of 8/10/2019. The following parameters were monitored: frontal, central and occipital EEG, electrooculogram (EOG), submentalis EMG, nasal and oral airflow, anterior tibialis EMG, body position and electrocardiogram. Additionally, thoracic and abdominal movements were recorded by inductance plethysmography. Oxygen saturation (SpO2) was monitored using a pulse oximeter. The tracing was scored using 30 second epochs. Hypopneas were scored per AASM definition (3% desaturation).

A Central Apnea was defined as a cessation of oral and nasal airflow with simultaneous cessations of respiratory movements for at least 10 seconds (2 respiratory cycles in children).

An Obstructive Apnea was defined as a cessation of airflow for at least 10 seconds (2 respiratory cycles in children) in the presence of continuous respiratory movements.

Hypopneas were scored per AASM definition (3% desaturation).

Medical History and Indication for Polysomnography:

15yo with monoallelic mutation of SHANK1, communication delay, intellectual d/o, disruptive behavior, impulsiveness. This study was performed to evaluate for sleep disturbance.

Medications:

Clonidine Risperdal melatonin

Sleep Data

The study began at 9:19:09 PM. The patient was monitored for a total of 461.2 minutes, out of which the patient slept for 409.5 minutes. Sleep efficiency was 88.8%. Sleep onset occurred at 9:25:45 PM for a sleep latency of 6.6 minutes. REM latency was 237.0. Wake After Sleep Onset (WASO): 45.1 minutes. The study ended at 5:00:21 AM.

A breakdown of sleep staging reveals the following: Stage N1 3.0 minutes (0.7% of total sleep time), Stage N2 234.5 minutes (57.3% of total sleep time), Stage N3 133.5 minutes (32.6% of total sleep time) and last, REM 38.5 minutes (9.4% total sleep time).

Respiratory Data

During the study, there were a total of 5 apnea events occurred for an apnea index of 0.7 /hour. 0 hypopnea events occurred for a hypopnea index of 0.0 /hour of sleep. 5 apnea and hypopnea events were observed during the analysis period as follows, 0 obstructive apneas, 5 central apneas, 0 mixed apneas, and 0 hypopneas for an apnea/hypopnea index (AHI) of 0.7 /hour of sleep.

During this time, 0 desaturations occurred during the study. Desaturations were based on 3% or greater drop from baseline. The lowest SaO2 was 95% with an average of 98%. The minimum SpO2 value during sleep was 95%. The duration of SpO2 less than 90% was 0.0 minutes. Last, the minimum SpO2 value associated with a respiratory event was 96%.

The highest CO2 during TIB was 51. The average CO2 during wakefulness was 43 mm Hg. The average CO2 during sleep was 44.50 mm Hg. The duration of CO2 greater than 45mm Hg was 186.3 minutes.

Snoring

Snoring was and not associated with arousals or respiratory events.

Cardiac Data

The average pulse rate during sleep was 71.3 bpm. The highest pulse rate during sleep (TST) was 102 bpm. The highest heart rate during recording (TIB) was 107 bpm. The lowest heart rate during sleep (TST) was 52 bpm. There no arrhythmias.

Arousal Statistics

A total of 11 arousals (1.6/hour) were observed during the analysis period as follows, 0 respiratory arousals, 6 Leg Movement arousals, 5 spontaneous arousals and 0 snore arousals.

PLM Statistics

There were 0 PLMS.0 PLMS arousals.

Caregiver Reports

The caregiver accompanying the child thought that the night's sleep was typical.

Diagnosis

Sleep Disturbance

Impressions

1. No significant respiratory events.

2. Patient had an overall AHI of 0.7/hour.

3. Patient's sleep efficiency was decreased.

4. Patient's sleep architecture was abnormal due to decreased REM sleep.

5. There were no periodic limb movements during the procedure.

Last Resulted: 09/30/19 07:03