# Journal of Clinical Sleep Medicine

### **BOARD REVIEW CORNER**

## It Doesn't Sound Like Snoring

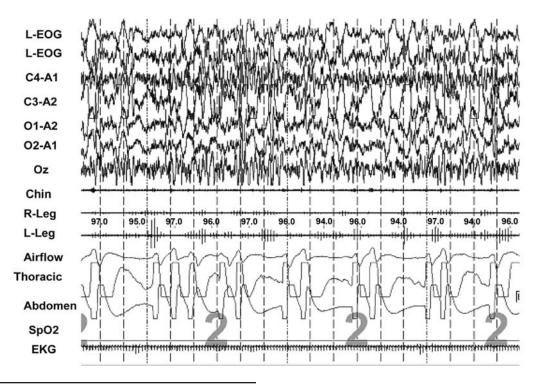
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J Clin Sleep Med 2005;1(2):206, 208

#### **Question 1**

A 10 year-old boy with a history of recent decompression surgery for Arnold-Chiari malformation was admitted with excessive daytime somnolence and dyspnea. The patient's mother reported that her son had been diagnosed with obstructive sleep apnea at an outside institution, and had not been compliant with continuous positive airway pressure (CPAP). The patient was drowsy but able to answer questions. He was propped up on 4 pillows and complained of worsening dyspnea when he would lay flat. Physical examination revealed a patient of normal weight and stature for his age. Head and neck examination had not revealed any tonsillar hypertrophy. Tachypnea with normal breath sounds was noted. There were no cardiac murmurs or extra heart sounds heard. There was no extremity edema and oxygen saturation was 92% while 3 liters per minute of oxygen was administered through nasal cannula. The neurosurgeon requested a CPAP re-titration study, and a representative fragment during CPAP titration is shown below (**figure**). A concerned sleep technician, however, called the sleep physician an hour into the sleep study and reported, "...this does not sound like snoring, it is more like a crowing sound during inspiration." She added, "...and the kid makes this sound when he lies flat even while he is awake!" The technician increased the CPAP setting to 16 cm H<sub>2</sub>O and supplement oxygen at 5 liters per minute.



#### **Disclosure Statement**

Dr. Parthasarathy has indicated no financial conflict of interest.

#### Submitted for publication February 2005 Accepted for publication February 2005

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- a. Immediate institution of Albuterol nebulizer
- b. Lateral X-ray of the head and neck
- c. Fiberoptic endoscopy and plans for urgent tracheostomy
- d. Echocardiography and intravenous diuretics
- e. Reassurance and anxiolytics