Guidelines at-a-Glance

Practice Parameters for the Respiratory Indications for Polysomnography in Children

AASM LEVELS OF RECOMMENDATIONS

TERM                     DEFINITION                                                                                                                                                                                                                       

STANDARD                 This is a generally accepted patient-care strategy, which reflects a high degree of clinical certainty. The term standard generally implies the use of Level I Evidence, which directly addresses the clinical issue, or overwhelming Level II Evidence.

GUIDELINE                This is a patient-care strategy, which reflects a moderate degree of clinical certainty. The term guideline implies the use of Level II Evidence or a consensus of Level III Evidence.

OPTION                   This is a patient-care strategy, which reflects uncertain clinical use. The term option implies either inconclusive or conflicting evidence or conflicting expert opinion.

RECOMMENDATIONS FOR METHODOLOGY

3.1.1 Polysomnography in children should be performed and interpreted in accordance with the recommendations of the AASM Manual for the Scoring of Sleep and Associated Events. STANDARD

RECOMMENDATIONS FOR DIAGNOSTIC INDICATIONS FOR POLYSOMNOGRAPHY IN SLEEP RELATED BREATHING

3.2.1 Polysomnography is indicated when the clinical assessment suggests the diagnosis of obstructive sleep apnea syndrome in children. STANDARD

3.2.2 Polysomnography is indicated when the clinical assessment suggests the diagnosis of congenital central alveolar hypoventilation syndrome or sleep related hypoventilation due to neuromuscular disorders or chest wall deformities. It is indicated in selected cases of primary sleep apnea of infancy. GUIDELINE

3.2.3 Nap (abbreviated) polysomnography is not recommended for the evaluation of obstructive sleep apnea syndrome in children. GUIDELINE

3.2.4 Polysomnography is indicated when there is clinical evidence of a sleep related breathing disorder in infants who have experienced an apparent life-threatening event (ALTE). GUIDELINE

ADAPTED FROM
Aurora RN; Zak RS; Karippot A; Lamm CI; Morgenthaler TI; Auerbach SH; Bista SR; Casey KR; Chowdhuri S; Kristo DA; Ramar K. Practice parameters for the respiratory indications for polysomnography in children. SLEEP 2011;34(3):379-388.
RECOMMENDATIONS FOR INDICATIONS FOR PREOPERATIVE POLYSOMNOGRAPHY

3.3.1 Polysomnography is indicated in children being considered for adenotonsillectomy to treat obstructive sleep apnea syndrome.

GUIDELINE

RECOMMENDATIONS FOR INDICATIONS FOR POLYSOMNOGRAPHY TO ASSESS RESPONSE TO TREATMENT

3.4.1 Children with mild obstructive sleep apnea syndrome preoperatively should have clinical evaluation following adenotonsillectomy to assess for residual symptoms. If there are residual symptoms of obstructive sleep apnea syndrome, polysomnography should be performed.

STANDARD

3.4.2 Polysomnography is indicated following adenotonsillectomy to assess for residual sleep related breathing disorder in children with preoperative evidence for moderate to severe OSAS, obesity, craniofacial anomalies that obstruct the upper airway, and neurologic disorders (e.g., Down syndrome, Prader-Willi syndrome, and myelomeningocele).

STANDARD

3.4.3 Polysomnography is indicated after treatment of children for obstructive sleep apnea syndrome with rapid maxillary expansion to assess for the level of residual disease and to determine whether additional treatment is necessary.

OPTION

3.4.4 Children with OSAS treated with an oral appliance should have clinical follow-up and polysomnography to assess response to treatment.

OPTION

3.4.5 Polysomnography is indicated for positive airway pressure (PAP) titration in children with obstructive sleep apnea syndrome.

STANDARD

3.4.6 Polysomnography is indicated for noninvasive positive pressure ventilation (NIPPV) titration in children with other sleep related breathing disorders.

OPTION

3.4.7 Follow-up PSG in children on chronic PAP support is indicated to determine whether pressure requirements have changed as a result of the child’s growth and development, if symptoms recur while on PAP, or if additional or alternate treatment is instituted.

GUIDELINE

3.4.8 Children treated with mechanical ventilation may benefit from periodic evaluation with polysomnography to adjust ventilator settings.

OPTION

3.4.9 Children considered for treatment with supplemental oxygen do not routinely require polysomnography for management of oxygen therapy.

OPTION

3.4.10 Children treated with tracheostomy for sleep related breathing disorders benefit from polysomnography as part of the evaluation prior to decannulation. These children should be followed clinically after decannulation to assess for recurrence of symptoms of sleep related breathing disorders.

OPTION
3.5.1 Polysomnography is indicated in the following respiratory disorders only if there is a clinical suspicion for an accompanying sleep related breathing disorder: chronic asthma, cystic fibrosis, pulmonary hypertension, bronchopulmonary dysplasia, or chest wall abnormality such as kyphoscoliosis