

sleep disturbance, respiratory pauses, and changes in oxygenation. The six-channel polysomnography can be performed in children of all ages with videotaping or audiotaping, and abbreviated (vs. full night sleep study) polysomnography may be useful; however, this latter method does not predict the severity of OSAS ([Marcus, Brooks, Draper, et al, 2012](#)). Polysomnography can distinguish between OSAS and primary snoring ([Owens, 2016](#)).

Obstructive sleep disordered breathing in children has been associated with enlarged tonsils, obesity, chronic nasal congestion, asthma, prematurity, cerebral palsy, muscular dystrophy, Down syndrome, craniofacial anomalies, and nasal septal deviation ([Weiss and Owens, 2014](#)).

A common treatment for sleep-disordered breathing in children is adenotonsillectomy, provided there is evidence of adenotonsillar hypertrophy ([Marcus, Brooks, Draper, et al, 2012](#); [Owens, 2016](#)). However, evidence indicates that this procedure may not be as successful in children with obesity as previously reported ([Witmans and Young, 2011](#)). A weight-management plan is implemented for obese children with OSAS.

CPAP and bilevel (cycles between high and low pressure) positive airway pressure (BiPAP) may be helpful in older children with sleep-disordered breathing whose condition persists after surgical intervention. CPAP or BiPAP is a long-term therapy with frequent assessments to evaluate the required amount of pressure and the overall effectiveness of the intervention.

Nursing care of the child with sleep-disordered breathing involves early detection by observation of the infant's or child's sleep patterns, active participation in the diagnostic polysomnography, observation of oxygenation and vital signs, application of CPAP when indicated, and monitoring the patient's response to diagnostic therapy. Counseling families of children with sleep-disordered breathing may involve dietary counseling for exercise programs and weight management, use of the CPAP or BiPAP equipment, and direct postoperative care after the surgical intervention of tonsillectomy or adenoidectomy. Some children may resist wearing the CPAP or BiPAP devices and will need encouragement to do this. The nurse can help identify the most appropriate mask that can be tolerated by the child and can provide education about use of the CPAP or BiPAP at home.