## **SNORING AND SLEEP APNEA IN CHILDREN**



**Snoring and Sleep Apnea in Children:** You often don't think of children as snoring or suffering from sleep apnea but surprisingly a number do. The condition can be just as serious as in adults and may lead to daytime health problems such as failure to thrive, developmental delay or behavioural problems.

**What is sleep apnea.** Sleep apnea is a condition where the child repeatedly stops breathing during sleep. These episodes last from 10 seconds to a minute or so. Usually they occur because of an obstruction in the airways, in children this obstruction is most commonly due to big tonsils and adenoids. This is called obstructive sleep apnea. A less common form of apnea is called central sleep apnea and results from a problem with the mechanisms that control breathing.

**Nighttime signs of sleep apnea.** Children with sleep apnea almost always snore, struggle to breathe and have restless sleep. There may also be frequent pauses in breathing and snoring lasting between 10 seconds and a minute. Pause may end with a gasping or choking noise and there may be a brief awakening as the child struggles to breathe. In young children the chest may be sucked in during an apnea and sometimes the child will adopt unusual sleeping positions. The child may also sweat profusely during sleep or wet the bed repeatedly. In the morning they may wake up with a dry mouth, a headache or confusion.

**Daytime symptoms of sleep apnea.** Because of the events during sleep, the child with sleep apnea may show a number of problems during the day. Infants may feed poorly and fail to gain weight. Older children may have behavioural problems such as hyperactivity, aggression, learning difficulties and poor concentration. Sleepiness can cause personality changes, poor school performance and interpersonal relationship problems. A child with sleep apnea may lag behind in many areas of development. They may become frustrated and depressed. In the long term, left untreated, sleep apnea can cause heart problems and high blood pressure which may in severe cases be life threatening.

**Snoring and sleep apnea affect families.** Snoring and apnea in a child is extremely worrying for the family. These problems can aggravate, or become a focus for family stress. Subsequent behavioural problems and issues at school may make the situation worse.

**Causes of sleep apnea.** In children the most common cause of snoring and sleep apnea is enlarged tonsils and adenoids. Obesity may also be a significant contributing factor. Cranio-facial abnormalities or conditions which affect the tongue or airways may predispose the child to snoring or sleep apnea. In Down's Syndrome, for example, an enlarged tongue may block the airway. In children with a small or receding jaw, sleep apnea is more common. Children who have had a cleft palate repaired may also be at increased risk of sleep apnea.

**How is sleep apnea diagnosed?** If the doctor observes large tonsils and adenoids in combination with symptoms such as snoring, observed apnea and sleepiness, this may suggest that a child has sleep apnea but the best way to be really sure is with a sleep study. The study is conducted in a special area of the hospital and the child is wired up and attached to computers which measure their sleep, their breathing and oxygen levels. Studies may be done at night in older children or in the daytime in babies. None of the measurements are invasive and children normally manage to sleep. Parents generally stay with the child.

How is sleep apnea treated? Where a child's sleep apnea or snoring needs treatment and the tonsils or adenoids are large, removal is usually the first line of treatment. An adeno-tonsillectomy will in many cases cure the sleep apnea. If the child has a cranio-facial abnormality surgical correction of this may also be effective. If the condition is not suitable for surgery then the best treatment is nasal continuous positive airway pressure or CPAP. This consists of a pump that blows air through a mask worn over the nose. The pump only needs to be used at night and the treatment is immediately effective at controlling the symptoms and the long term consequences of sleep apnea. With proper education of parents and appropriate support, CPAP is well tolerated by most children. If the sleep apnea is the result of the child being significantly overweight, losing weight may help or even cure the apnea.

**Are drugs treatments effective?** There is no effective drug for treating sleep apnea although a number have been tried. A number of other remedies have been marketed but none has been shown to be effective.

**Good sleep habits are important.** Although the child with sleep apnea may have disturbed sleep, developing and maintaining a good sleep pattern and sleep habits is important. A regular bedtime and waking up time should be established and a stimulating environment avoided before bed. The bedroom should be quiet and dark. Caffeine containing drinks such as colas should be avoided in the evening.

**SIDS and sleep apnea.** The most often asked question with sleep apnea in children is if it is related to sudden infant death syndrome (SIDS). The causes of SIDS are not well understood. It may be that SIDS is a mixture of a number of different causes of sudden unexplained death in infants. One of the most common explanations is that SIDS results from a problem associated with maturation of the breathing mechanisms in early childhood. It is believed that SIDS is not associated with obstructive apnea in children although recent research found that in families with sleep apnea, infants were much more likely to die from SIDS. These families also had some physical characteristics such as small airways. Children with near miss episodes of SIDS are at an increased risk of further events and may be monitored overnight or may go home with apnea monitors.

**Other conditions.** Although snoring and sleep apnea are the most common conditions, children may also suffer from other sleep disorders. Parasomnias such as sleep walking and night terrors are extremely distressing to the child and parent. Underlying medical conditions such as epilepsy, asthma or cystic fibrosis may also cause sleeping problems. Sleep centres are the best place to go for information on these less common conditions.

**Sources of help and information.** If you are concerned about snoring or sleep apnea in your child, you should consult your family doctor. Referral from your family doctor will be necessary before you can consult a sleep physician. Patient support groups such as Sleep Disorders Australia have branches throughout Australia and hold information sessions from time to time.

DISCLAIMER - Information provided in this fact sheet is general in content and should not be seen as a substitute for professional medical advice. Concerns over sleep or other medical conditions should be discussed with your family doctor.

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