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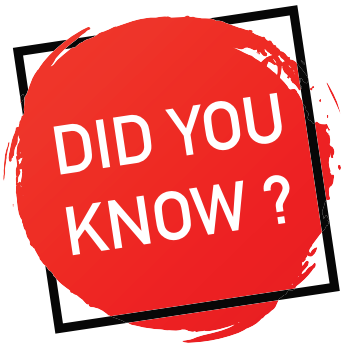
SNORING IN CHILDREN INFORMATION

SNORING IN CHILDREN IS NOT NORMAL AND NEEDS TO BE ASSESSED BY A SPECIALIST



- Snoring is related to poor quality sleep, sleep disordered breathing and obstructive sleep apnea.
- 10% of children less than 6 years snore on the majority of nights.
- 1-5% of children less than 6 years snore and suffer from obstructive sleep apnea.
- Symptoms peak in preschool years and gradually improve until the age of 8. At this age it is unlikely for symptoms to spontaneously resolve.

SYMPTOMS OF SLEEP DISORDERED BREATHING AND OBSTRUCTIVE SLEEP APNEA INCLUDE

CONSISTENT SNORING

Snoring intensity varies throughout the night, and from night to night.

RESTLESS SLEEP

Tossing and turning, sleeping in strange positions, kicking off the blankets sweaty during sleep.

SWEATY DURING SLEEP

SNORTING, GAGGING, CHOKING OR COUGHING AT NIGHT

DIFFICULTY BREATHING

When asleep (often associated with significant parental concern).

WITNESSED APNEAS

Attempting to breath but unable to (it is normal to have pauses in between breaths).

NEW ONSET BED WETTING

TEETH GRINDING

WAKING UP TIRED DESPITE ADEQUATE HOURS OF SLEEP

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DAYTIME SYMPTOMS

DIFFICULTY PAYING ATTENTION, LEARNING DIFFICULTIES AND BEHAVIOR SUGGESTIVE OF OVER TIREDNESS;

MORNING HEADACHES

MOUTH BREATHING

DIFFICULTY EATING AND SWALLOWING DUE TO ENLARGED TONSILS

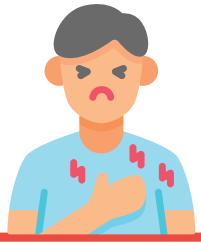
UNTREATED, SDB AND OSA CAN RESULT IN THE FOLLOWING :

NEUROCOGNITIVE EFFECTS

behavioral problems, reduced learning outcomes, poor attention span, morning headaches

CARDIOVASCULAR EFFECTS

raised blood pressure, pressure on the right side of the heart causing heart failure (extreme cases).



CHRONIC MOUTH BREATHING

may result in changes to the growth of the midface (cheeks) and abnormal dental growth (crowding of teeth in the upper jaw and over bite).

THE COMMONEST CAUSE OF SNORING IN CHILDREN IS ENLARGED TONSILS AND ADENOIDS

The tonsils and adenoids out grow the space at the back of the mouth and nose. Tonsils and adenoids are lymphatic tissue. In children, all lymphatic tissue enlarges as the child is developing an immune system. This peaks around age 5 years and then gradually reduces in size,

Other causes include, allergic rhinitis (hayfever), obesity, and laryngomalacia (floppy larynx, common in the less than 2 years). Snoring will be worse when suffering from an upper respiratory tract infection ie a cold.

HOW IS SDB AND OSA DIAGNOSED?

The majority of children are diagnosed based on a clinical history and examination. Consistent snoring most nights with 1-2 other symptoms of sleep apnea is a good indicator that the sleep quality is inadequate.

A formal sleep study is occasionally used in complex cases. This involves a hospital stay overnight to monitor the sleep. A sleep study provides excellent information regarding a single night of sleep. A sleep study is limited due to variability of sleep from night to night, as well as the artificial environment effecting the sleep quality. Generally a sleep study will be requested for children with comorbidities such as down's syndrome, or residual snoring after tonsil and adenoid removal. A sleep study is organised through a Paediatric Respiratory physician.

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OSA 5 QUESTIONAIRE

OSA 5 questionaire is a tool used to help identify children that are likely to have OSA. If a child scores less than 5, they are unlikely to have moderate to severe OSA. These children are appropriate for close observation and a potential trial of nasal steroid spray if appropriate. If the child scores higher than 5, the potential for having moderate to severe OSA is increased, and a prompt referral to an ENT or Respiratory Physician should be made.

	During the past 4 weeks, how often has your child had ...	None of the time	Some of the time	Most of the time	All of the time
1	Loud snoring?	0	1	2	3
2	Breath holding spells or pauses in breathing at night	0	1	2	3
3	Choking or made gasping sounds while asleep?	0	1	2	3
4	Mouth breathing because of a blocked nose?	0	1	2	3
5	Breathing problems during sleep that made you worried that they were not getting enough air?	0	1	2	3

TREATMENT OF SDB AND OSA

Treatment choice depends on the age of the patient, severity of symptoms and ability to tolerate the treatment

ACTIVE OBSERVATION

If symptoms are mild, or only occurring in the setting of upper respiratory tract infections, observation may be recommended. If the symptoms don't resolve with time, then further treatment is required.

NASAL STEROID SPRAYS

ie mometasone or fluticisone: These are used to reduce the size of the adenoid tissue and inflammation in the nose. To be effective, the steroid spray needs to be used daily or twice daily for at least a month. If snoring resolves with nasal steroids, the nose spray can be continued indefinitely. There is minimal systemic absorption, so steroid sprays are safe to use in children. To see if the child still benefits from the spray after continued use, a period off the spray every 3-6months and observing symptoms is recommended. Side effects include nose bleeds. If this occurs, withhold the spray for 2 weeks and restart using the spray after 2 weeks. Nasal steroid sprays are safe to use from the age of 2 years.

NASAL SALINE SPRAYS

This may help allergic rhinitis and thick nasal discharge. Use as needed up to 4 times a day.

REMOVAL OF TONSILS AND ADENOIDS

This is surgery performed by an Ear Nose and Throat surgeon. It requires a general anaesthetic and an overnight stay in hospital. Sometimes the surgeon may recommend only adenoids to be removed if the child is very young. Recovery takes 1-2 weeks, however it is recommended to take 2 weeks off school or daycare. Surgery completely resolves the SDB/OSA in 90% of patients.

NASAL SURGERY

For older children (>6years) allergic rhinitis is increasingly prevalent and may significantly contribute to snoring. If nasal steroid sprays have not resulted in a significant improvement, then surgery on the nose may be an option. This is assessed and determined by an Ear, Nose and Throat surgeon.

MEDICATIONS

In some cases, medications are be prescribed for short term improvement of OSA in the setting of an upper respiratory tract infection. Such medications are antibiotics and oral prednisolone. These cannot be used long term.

CPAP, SUPPLEMENTAL OXYGEN

In some cases surgery does not completely resolved the OSA, or surgery is not apporpriate, CPAP (a face mask worn at night) or Supplement Oxygen is used. This therapy is prescribed by a Paediatric Respiratory physician.

If you are concerned your child is suffering from OSA, discuss the symptoms with your local doctor. Nasal steroid sprays can be started prior to seeing a specialist. Consideration should be given regarding a referral to an Ear Nose and Throat surgeon.