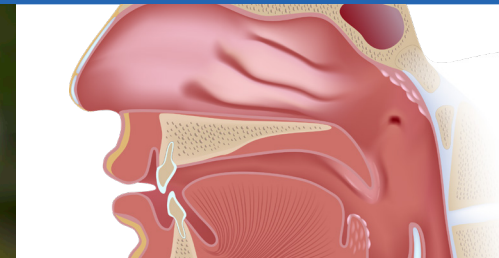


MILD

Obstructive Sleep Apnea



OBSERVATION

MEDICAL TREATMENT

OXYGEN

SOFT TISSUE SURGERY

BENEFIT

- 45% may resolve

- About 90% respond
- Improve nasal breathing
- Covered by most insurance

- About 50% respond
- Can treat central apneas too
- Temporary solution
- Covered by most insurance

- 50-60% respond
- Can be long-term solution
- Covered by most insurance

SIDE EFFECT

- Continued symptoms
- OSA may worsen over time

- Nasal Spray
 - 1% nosebleeds
- Singulair
 - 10% do not respond
 - < 1% mood issues
 - Duration unclear

- Skin irritation / dry nose
- Not tolerated well in toddlers
- Harder to travel with than medication

- Limited activity for 2 weeks
- Pain up to 2 weeks
- Risk of bleeding

FOLLOW-UP

- 3-6 months or with change in symptoms

- 3-6 month clinic visits
- Recommend repeat sleep study
- Evaluate need to continue medication

- 3-6 months clinic visits
- Recommend oxygen sleep study
- Recommend repeat sleep study off oxygen in 3-12 months

- 2 clinic visits if resolved
- Recommend repeat sleep study

Introduction to OSA

Obstructive sleep apnea (OSA) causes breathing difficulties while sleeping. Diagnosing children with OSA is more difficult than in adults. A narrowing of the throat and/or nasal passages during sleep causes the child to start and stop breathing during sleep. This is referred to as apnea.

Description of OSA

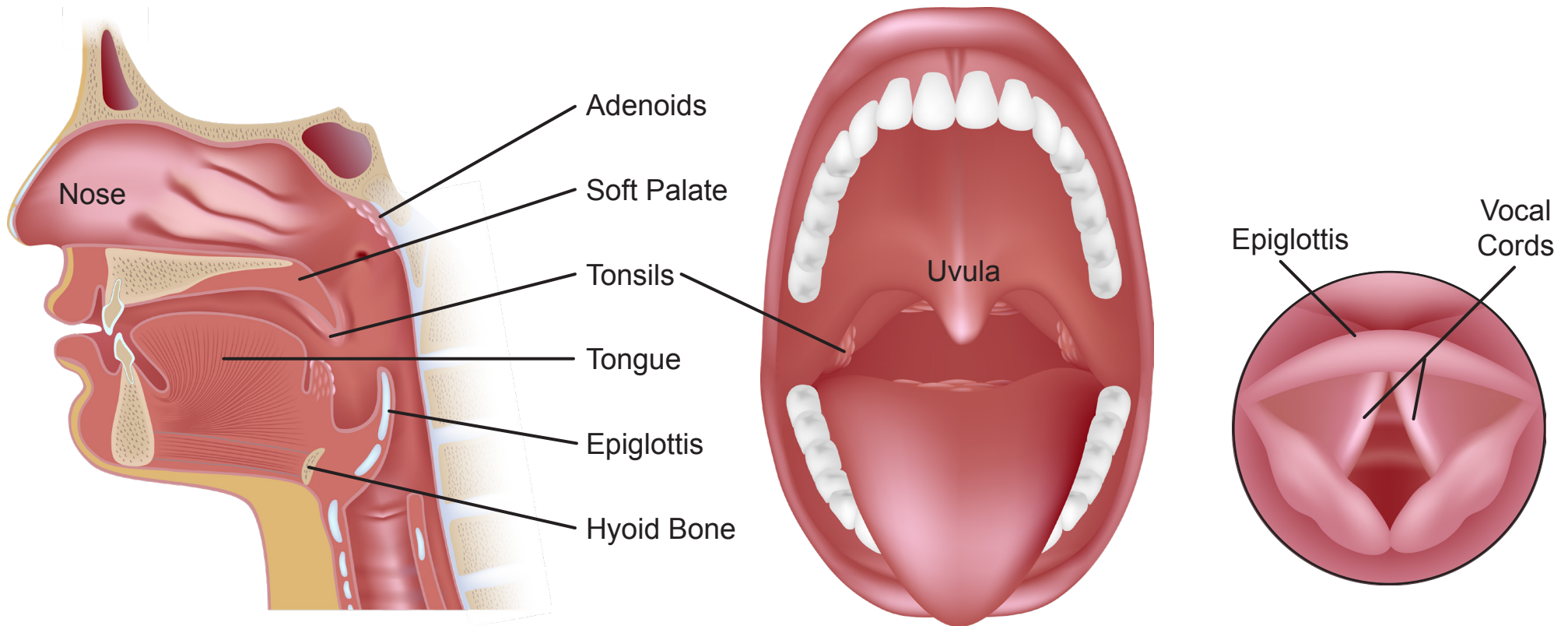
Muscles used to breathe become more relaxed during sleep than they are during the day. In some children, they become so relaxed that it interferes with breathing.

Symptoms of a Child with OSA

- Odd positions during sleep
- Loud and continuous snoring
- Stopping breathing during the night
- Having school or behavior problems
- Sweating heavily during sleep

Factors that Increase Risk of OSA

- Enlarged tonsils and adenoids
- Abnormality in face or jaw
- Down Syndrome and other congenital abnormalities
- Overweight and/or obesity

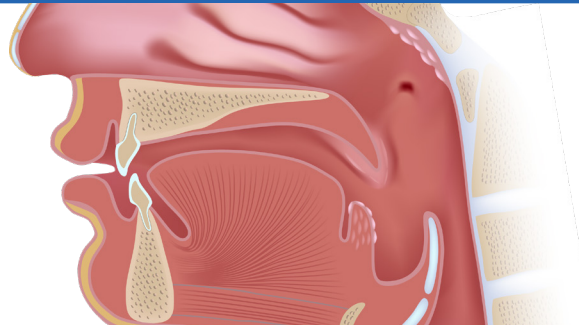


MODERATE/SEVERE

Obstructive Sleep Apnea



POSITIVE PRESSURE



SOFT TISSUE SURGERY



Bony Surgery

- 95% effective if used
- Effective immediately

- 50-60% respond
- Can be long-term solution
- Covered by most insurance

- 90% responders for 2 jaw surgery
- Can be long-term solution
- Covered by most insurance

- Skin irritation
- 40-50% able to tolerate
- Long-term bony changes

- Pain up to 2 weeks
- Risk of bleeding
- Limited data

- Limited activity for 4 weeks
- Pain up to 4 weeks
- Jaw usually not wired
- Changes facial appearance

- 3-6 month clinic visits
- Long-term use
- Monthly downloads
- Sleep studies every 1-2 years

- 2 visits after surgery
- 1 sleep study if successful

- 4 visits after surgery
- 1 sleep study if successful

BENEFIT

SIDE EFFECT

FOLLOW-UP

Introduction to OSA

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