

#### 28<sup>th</sup> Sthapana Divas

# SNORING AND OBSTRUCTIVE SLEEP APNEA

# Manish K. Wani MD, FACS

2019-04-06



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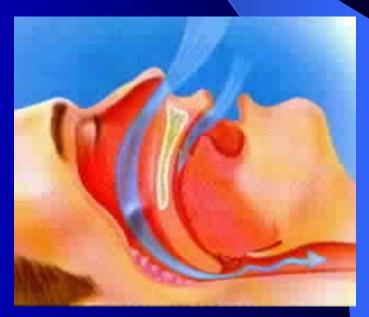
18400 Katy Freeway, Ste 470 Houston, Texas 77094 281-492-7827 2019-04-06 Snoring and Sleer

# **Snoring and Obstructive Sleep Apnea**





- Not funny, not hopeless
- Adults: 25-45% snore
- Air passage is partially blocked and throat tissues vibrate and rattle
- Serious?
- >300 devices patented











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#### **Snoring - Treatment**

- Uvulectomy
- Somnoplasty (radiofrequency ablation)
- LAUP (laser assisted uvuloplasty)
- Pillar Implants
- Injection Snoreplasty



#### **Pillar Implants – Restore Medical**

- 3 tiny polyester implants
- Inserted into soft palate
- In office procedure
- Highly effective (80%)
- \$1750 (not covered by insurance)
- Must pass a sleep study
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#### **Injection Snoreplasty**

- Painless
- In-office procedure (15-30 minutes)
- "peanut butter" on the palate for one week
- Highly effective (70-80% success rate)
- \$500 (not covered by insurance)
- *Must pass a sleep study*

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# OBSTRUCTIVE SLEEP ANEA

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#### What is Obstructive Sleep Apnea? (OSA)

- Greek word, apnea, meaning "want of breath."
- Serious, potentially life-threatening condition
- Disorder characterized by brief interruptions of breathing during sleep.
- Occurs when air cannot flow into or out of the person's nose or mouth although efforts to breathe continue.

#### Who Gets OSA?

- All age groups
- Both sexes but is more common in men
   Prevalence: 4% males: 2% females
- Approx. 18 million people in US have sleep apnea.
- Upper body obesity (40% normal IBW)
- Genetics (APOE4 gene)

#### What Causes Sleep Apnea?

- Tonsillar hypertrophy
- Elongated uvula
- Redundant pharyngeal folds
- Large tongue
- Micrognathia
- Deviated septum/turbinate hypertrophy





#### **Pediatric OSA**

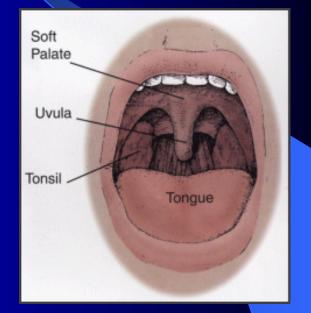
#### • Prevalence 10%

#### • Etiology

- Adenotonsillar hypertrophy (>90%)
- Anatomic
- Neuromuscular
- Miscellaneous

#### • Diagnosis

- History and exam
- Sleep study (very rare)



#### **Pediatric OSA**

#### Symptoms

- Snoring/apnea
- Nocturnal enuresis
- Mouth breathing
- Abnormal daytime behavior
- Hypersomnolence
- Frequent URIs
- School and learning problems

#### **Pediatric OSA**

Treatment – Surgery
 – >99% success rate

# Tonsillectomy and Adenoidectomy

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# Adult Obstructive Sleep Apnea (OSA)

- Serious, life threatening
- "Heroic" snoring
- Structures completely block the throat
- Frequent awakenings
- Patient usually not aware



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#### **Consequences of Sleep Apnea?**

- Hypertension
- CVA (strokes)
- Poor overall health and quality of life
- Learning and memory difficulty
- Mood and affect disorders (depression/irritability)
- Motor vehicle accidents

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#### When Should Sleep Apnea be Suspected?

- Loud heavy snoring
- Gasping/choking for breath
- Unrefreshing sleep
- Excessive daytime somnolence/fatigue
   Falling asleep while driving, working, or watching TV

# How is OSA Diagnosed?

- Comprehensive ENT evaluation with fiberoptic exam
- Polysomnography (Sleep Study)
  - RDI (respiratory disturbance index)
    - (Apneas + hypopneas)/# hours of sleep
  - LSAT (Lowest blood oxygen saturation)



# Example of an Apneic Event



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#### Classification

OSAS severity	<u>RDI</u>	<u>LSAT</u>
Normal	<5-10	>95
Mild	10-20	85-95
Moderate	20-40	80-85
Moderate-severe	40-60	70-80
Severe	>60	<70
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#### Treatment

• Lifestyle changes

• CPAP

Oral Appliances

Surgery

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#### Lifestyle Changes

- o Avoid alcohol and certain medications
- o Proper diet
- o Lose weight
- o Exercise regularly
- o Unblock your nose





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o Have to use all night, every night

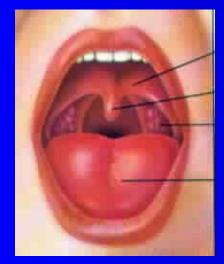


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#### – UPPP (uvulopalatopharyngoplasty)

• Remove uvula and trim soft palate





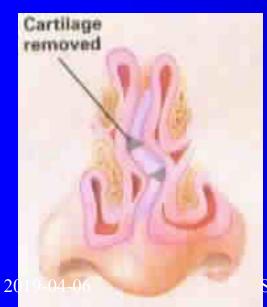


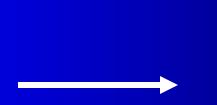
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- Septoplasty
- Turbinate surgery











#### Surgery

Tongue base advancement

- Radiofrequency ablation
- Genioglossus advancement
- hyoidopexy
- Maxillomandibular advancement
- Tracheostomy

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#### Conclusion

- Snoring can be annoying
- Sleep apnea is serious and lethal
- ENT evaluation and Sleep study is diagnostic
- Multiple treatment options
- Work with your doctor
- Goal is for quite, restful sleep *for all*

#### **Additional Information**

#### www.texasent.com www.aaohns.org www.sleepapnea.org www.apnea.net

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# Rhinitis

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#### **Definition of Rhinitis**

-inflammation of the lining of the nasal cavity and the paranasal sinuses.



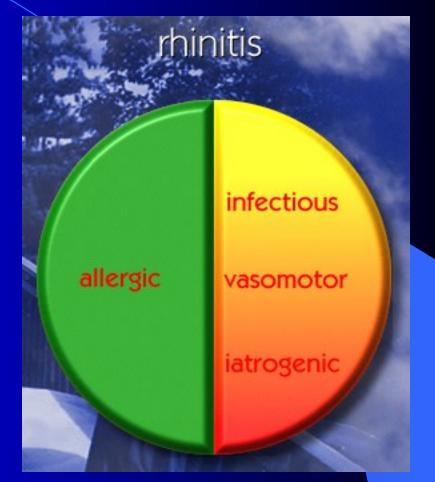


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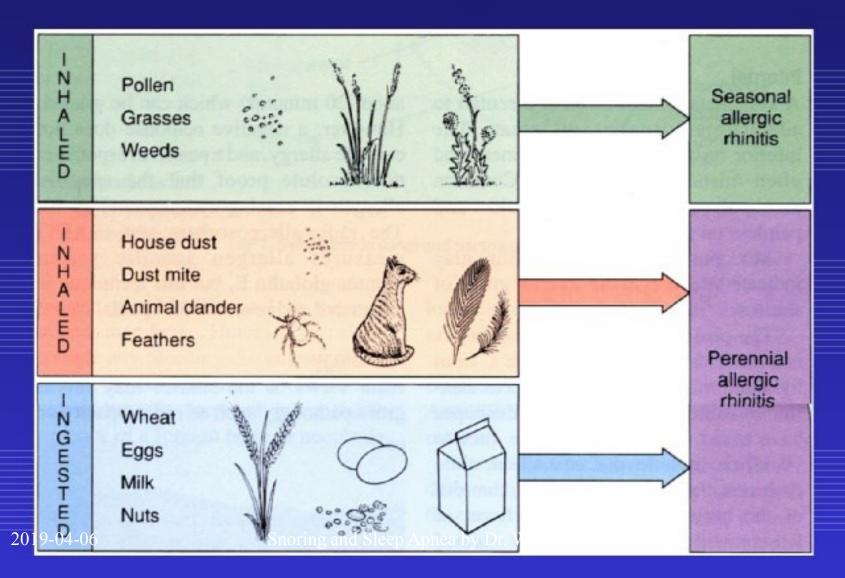
#### **Classification of Rhinitis**

#### Allergy Seasonal ,Perennial, food related ,drug induced

Infectious
 -Acute
 -Chronic



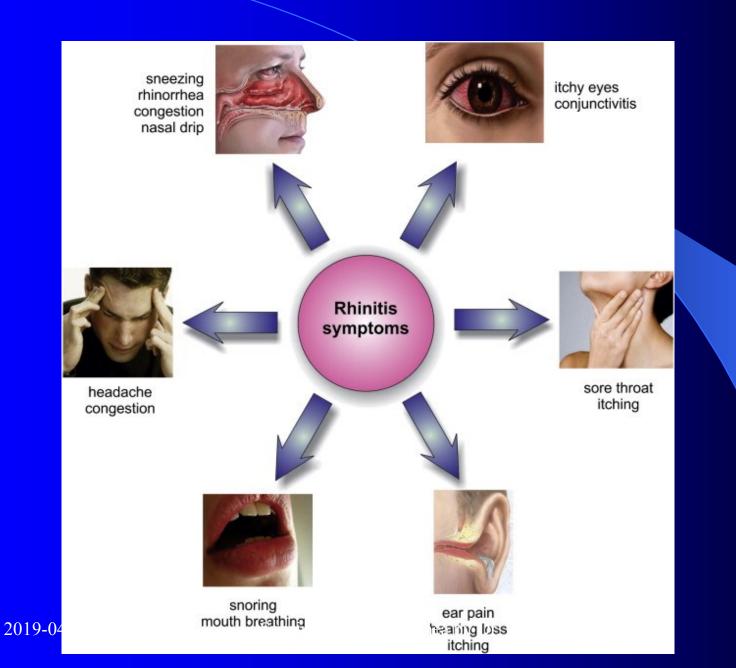
#### **Causes of Allergic Rhinitis**



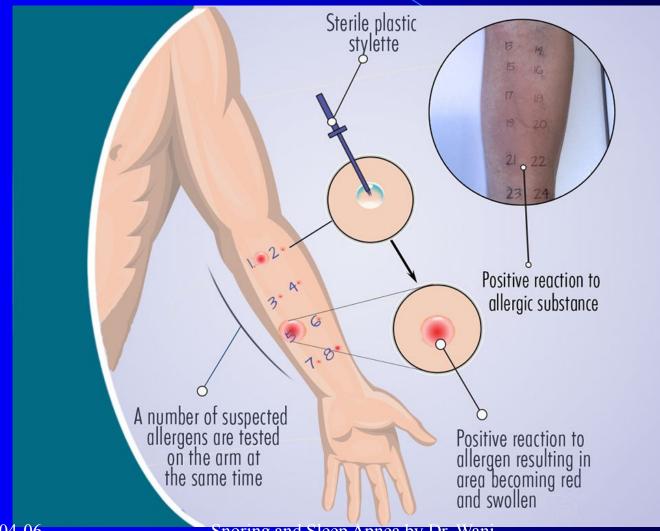
# Allergic Rhinitis



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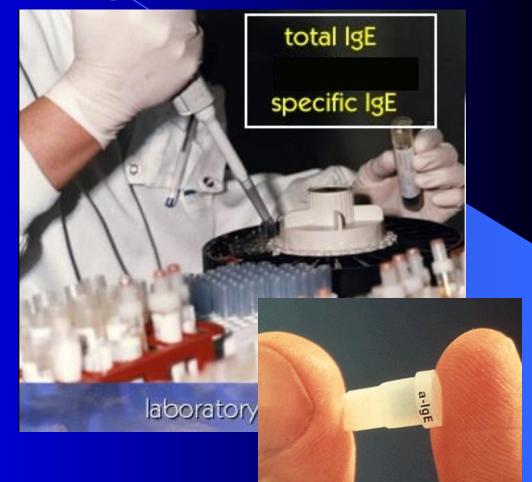
#### **Diagnosis: Skin prick test**



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#### Laboratory tests:

Laboratory tests:-RAST testing



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# Treatment



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#### Treatment

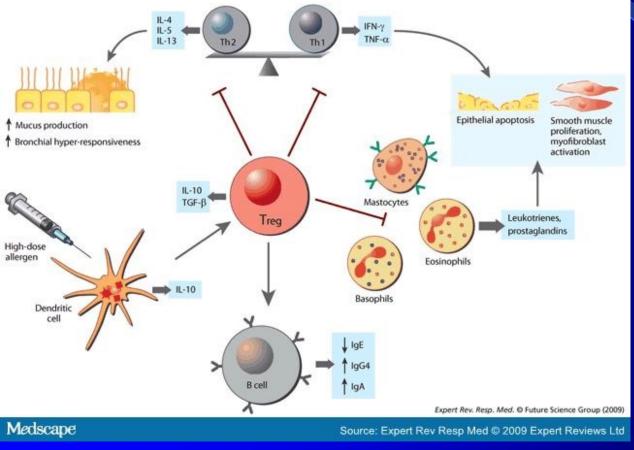
- Intranasal steroids Flonase, Nasacort, etc
- Antihistamines
   Claritin, Zyrtec, Allegra
- Leukotriene-receptor antagonist
   Singulair/Montelukast

#### **ALLERGIC RHINITIS TREATMENTS**



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# Immunotherapy



Scit

> Slit

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# Surgery

- Septoplasty
- Turbinate reduction surgery
- Endoscopic sinus surgery
- Nasal Polypectomy
- Balloon Sinuplasty

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# Thank you

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