

# Snoring + OSAS

Dave Pothier

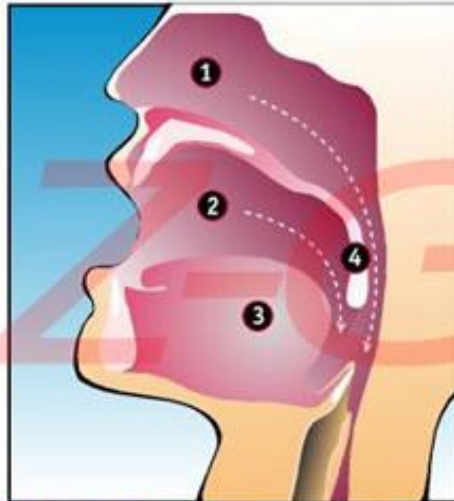
# Definition

Snoring is noisy breathing during sleep

OSAS is upper airway obstruction during sleep

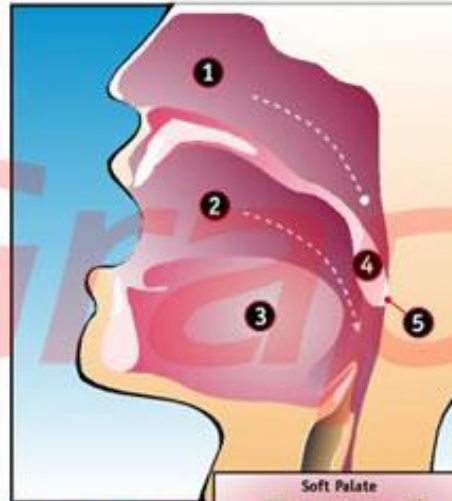
# What is it?

## Snoring and Sleep Apnea



### Normal Airway

upper airway anatomy  
Nasal and Oral Airways are open.



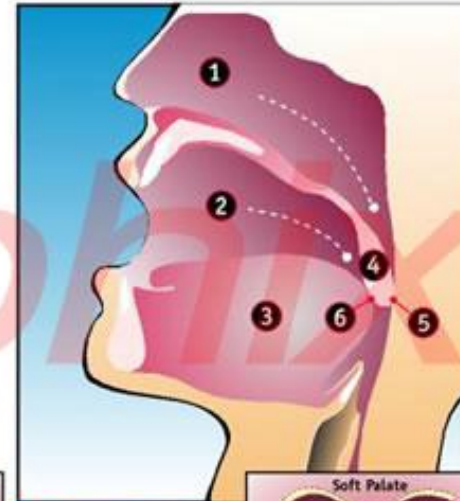
### Snoring

caused by  
Uvula/Soft  
Palate blockage

Uvula and Soft Palate  
(4) collapse against rear  
wall of throat (5). Oral  
airway (2) remains open.



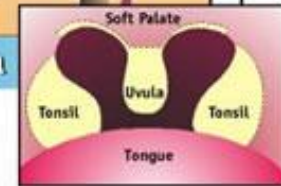
tissue removal



### Sleep Apnea

caused by total  
upper airway  
blockage

Both Nasal Airway  
(1) and Oral Airway  
(2) close. Breathing  
stops completely.  
Blood oxygen levels  
decrease. (see figure 1)



tissue removal

### Legend

1. - Nasal Airway
2. - Oral Airway
3. - Tongue
4. - Uvula/Soft Palate
5. - Soft Palate/Pharynx Obstruction
6. - Oral Airway Obstruction

### Blood Chemistry Changes



As breathing stops, O<sub>2</sub> levels drop  
and CO<sub>2</sub> levels increase, causing  
possible serious health risks.

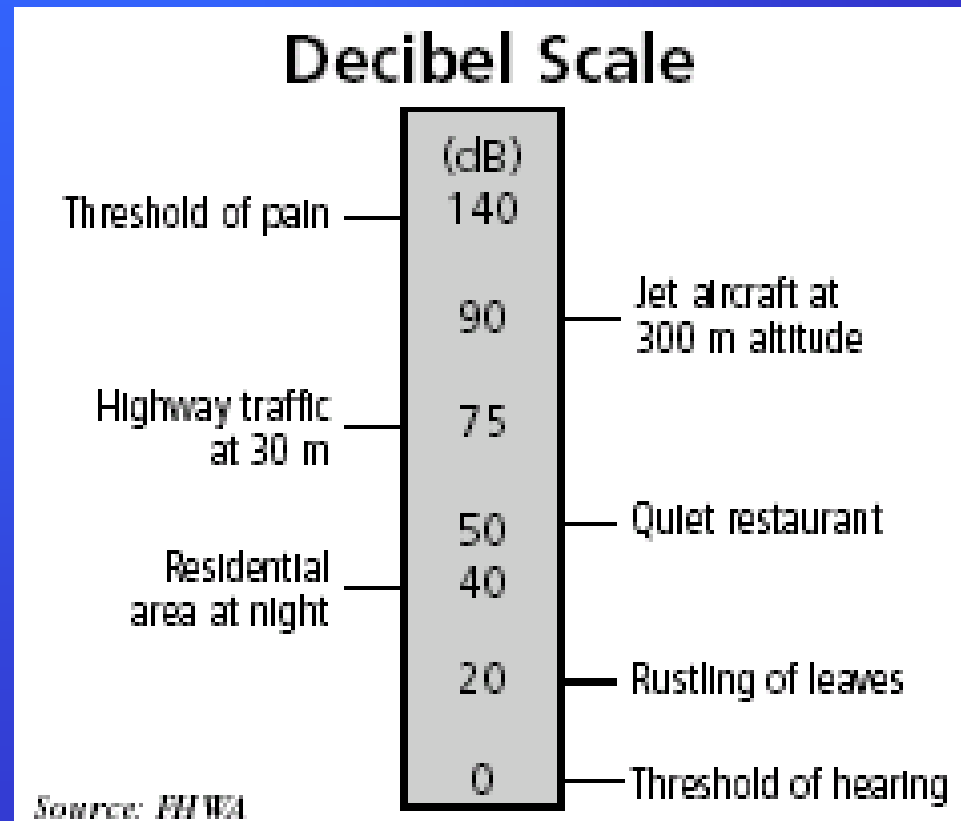
# Who snores?

	Men	Women
Age 30	20%	5%
Age 60	60%	40%

# How loud?

- Kära Walkert from Sweden:

93dB recorded at  
Örebo Hospital,  
24 May 1993



# Morbidity

- None to patient...
- Many reports of shootings and GBH from partners of snorers
- Surgery almost entirely done for another's benefit



- Home
- Free Excerpts
- Players
- Links
- Readers' Comments
- Order
- Author

## Did John Wesley Hardin really shoot a man for snoring?



A story persists that he killed a man for snoring.

As best as can be determined, this occurred in an Abilene, Kansas hotel.

It seems Hardin came to his room late one night, probably in a tipsey state. Several attempts to sleep were thwarted by the loud and constant snoring of a man in an adjoining room.

Banging on the thin wall separating the rooms did no good. Pulling his pistol, Johnny fired a shot into the wall, thinking it would awaken the snorer and get his attention, but the bullet struck and killed him.

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# Who?

## Who snores:

Facial abnormalities

Micrognathia

Overweight, thick neck, heavy drinkers

Adenoids

## Who has OSAS:

Snorers (end of spectrum)

5% of population

25% of hypertensives

50% of OSAS sufferers are hypertensive

So...

NB to differentiate

History

Examination ???

Investigations

# Pickwickian syndrome

'Fat Boy'

Famous for  
daytime  
somnolence



# Hx

- Weight
- Alcohol
- Smoking
- Nasal symptoms



# Epworth score

SITUATION	CHANCE OF DOZING
Sitting and reading	_____
Watching TV	_____
Sitting inactive in a public place (e.g a theater or a meeting)	_____
As a passenger in a car for an hour without a break	_____
Lying down to rest in the afternoon when circumstances permit	_____
Sitting and talking to someone	_____
Sitting quietly after a lunch without alcohol	_____
In a car, while stopped for a few minutes in traffic	_____

# Examination

- Nose
- Nasendoscopy
- +/- Muller manoeuvre

# Investigations

- Sleep nasendoscopy
- Sleep studies



# Treatment of snoring

- Conservative
- Medical
- Surgical



# Treatment

- Conservative

Stop all fun things in life

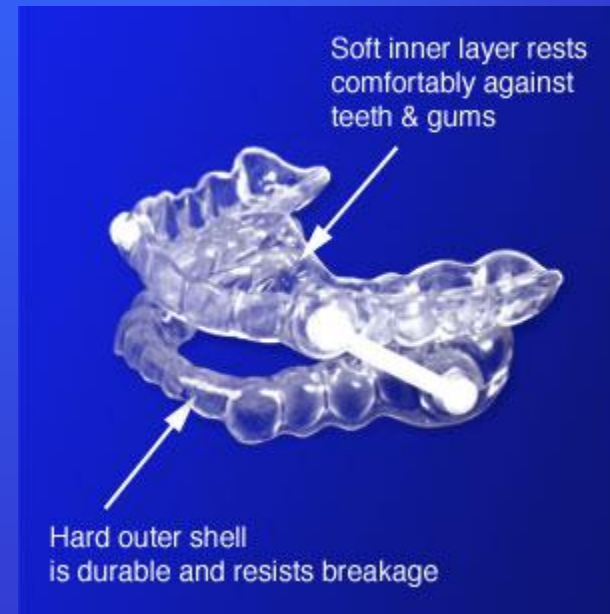
- eating lots
- drinking lots of beer
- smoking

VERY EFFECTIVE IN MOST CASES

# Treatment

- Medical
  - over the counter
  - sprays
  - homeopathy?
- Mandibular splints

Not good!



# Treatment

- Surgical

OSAS – largely contraindicated

Snoring – a myriad of operations

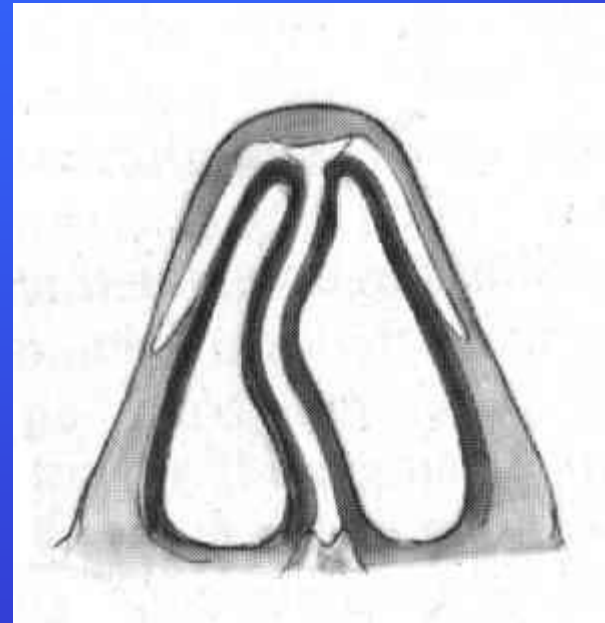
# Surgical options for snoring

- Nasal
- Palatal
- Tongue base



# Nasal surgery

- Septoplasty
- SMR
- IT's
- Adenoids/tonsils



# Tongue base surgery - not commonly performed

- Advancement procedures
- Partial glossectomy
- Maxillomandibular advancement

# Palatal surgery 1

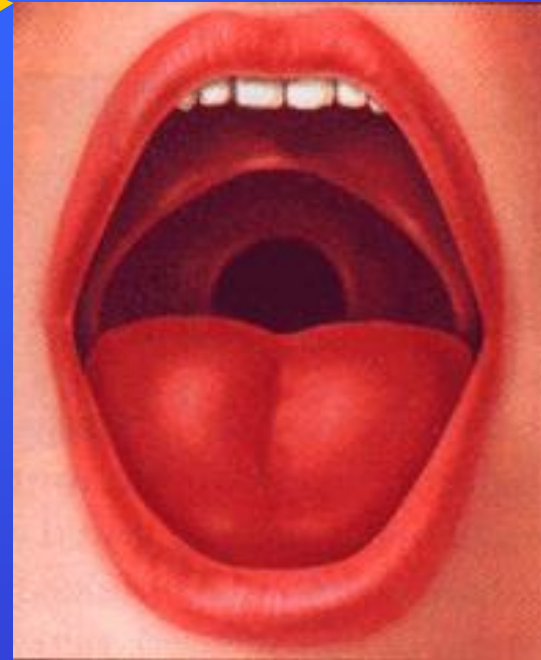
- Ensure all other causes eliminated
- Exclude OSAS
- Exclude nasal pathology

# Palatal surgery 2

-LAUP

-UPPP

-Coblation et al





# Effectiveness

- 80% immediate effect after recovery
- 30% at two years



# OSAS

- Medically treated with CPAP  
(almost 100% effective)  
(only 50% compliance)

