## **Snoring and Sleep Apnea**

#### Snoring

If the structures in your nose or throat are enlarged or throat muscles relax too much, the airway may become narrowed. Air flowing through the throat makes these structures vibrate. That vibration is what causes snoring.

#### Sleep Apnea

When the airway becomes narrowed, this can partially or completely stop air from flowing. If this happens, the brain tells the body to wake up just enough to tighten the muscles and open the airway. This cycle may repeat many times during the night

#### Nose and Jaw

Problems in the structure of the nose may obstruct breathing. A crooked (deviated) septum or swollen turbinates can make snoring worse. Also, a receding jaw may make the tongue sit too far back, so it is more likely to narrow/block the airway when you are asleep.

#### Problems Associated with Sleep Apnea

- Wake up tired after a full night's sleep
- Wake up with a headache
- Feel very sleepy and even fall asleep during the day
- Problems with memory and concentration
- Cranky or short-tempered
- Gasp or snort in your sleep
- High blood pressure
- Cardiac problems
- Stroke
- Sexual dysfunction

## **Treatment Options:**

## Change Habits

- Sleep on your side
- Lose weight
- Avoid alcohol and certain medications

#### CPAP

 Most effective treatment option

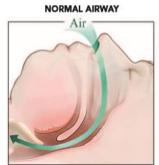
• Air pressure that holds your airway open

### **Oral Appliances**

- For simple snoring and mild to moderate apnea
- Moves jaw forward
- Takes several rounds of adjustments

#### **Surgical Treatment**

- Surgery to widen the airway
- Shrinks excess tissue where the mouth meets the throat



AIRWAY IS OPEN AND AIR MOVES THROUGH





AIRWAY IS BLOCKED AND AIR DOES NOT MOVE THROUGH

## Diagnosis/Treatment Process

This process can take up to 3 months and in some cases longer.

## Step 1: Ambulatory Diagnostic Sleep study

 In person, group appointment which is about 30-45min long.
Provides instruction on equipment use.

#### Step 2: Results of Sleep Study

Results are sent to your PCP (Primary Care Physician) for further review and follow up.

• Mild Apnea:

Sleep Clinic will schedule for a Mild Sleep Apnea Class in select cases.

 Moderate to Severe Apnea: Sleep Clinic will coordinate an outpatient CPAP (Continuous Positive Airway Pressure) trial

#### Step 3: CPAP Titration Study

• In Person, Group appointment about 1 hour to demonstrate how to use the CPAP equipment.

• CPAP device is returned for analysis after 7 days of use

#### Step 4: CPAP Results Analysis

Sleep MD's review results of CPAP study.

 Based on the results and your DME (Durable Medical Equipment) supplemental insurance coverage, a referral is sent to the Kaiser Permanente DME department for equipment ordering or a signed prescription and CPAP resource guide are mailed to you.

• Apria (DME vendor) will contact you to discuss equipment delivery options (processing of the order can take 3 weeks or longer)

## **Helpful Habits**

Four habits that could help you stop snoring and prevent mild sleep apnea:

#### Sleep on your side

• When you sleep on your back gravity pulls relaxed throat tissues down, blocking the airway.

• Sleeping on your side may reduce this blockage.

• Less blockage may mean less snoring and less apnea.

# Avoid alcohol and certain medications

• Avoid alcohol and certain medications such as sedatives and sleeping pills may relax your throat muscles more than usual.

- That could cause or worsen blockage, snoring, and apnea.
- Avoid alcohol 3 to 4 hours before bedtime.

#### Lose weight

• Excess weight makes the structures in your throat more bulky and floppy.

• That makes breathing harder and snoring and apnea worse.

• We have a number of weightloss programs and ideas on living an active lifestyle.

#### Unblock your nose

- A blocked up nose makes snoring and apnea worse.
- Sinus Rinses, Allergy medications like Zyrtec/ Allegra and Flonase maybe be helpful
- Smoking worsens a stuffy nose; so if you smoke, quit