# **CPAP Therapy for Sleep Apnea** (Continuous Positive Airway Pressure)

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## What is Sleep Apnea?

• Common disorder in which one has pauses in breathing while sleeping

• Chronic condition disrupting sleep

• Results in poor sleep and daytime sleepiness

## What is Sleep Apnea?

- Airway collapses or becomes blocked causing shallow breathing/breathing pauses
- Affects around 18 million people in US
- Often is undiagnosed
- Cannot be detected from doctor visit

## **Sleep Apnea Causes**

- Muscles in the back of your throat relax
- Airway narrows causing difficulty breathing
- Level of oxygen in blood decreases
- Your brain senses this and awakens you
- Pattern repeats once to 30 times or more per hour

#### **Untreated sleep apnea increases risk of:**

- high blood pressure
- heart attack
- stroke
- obesity
- diabetes
- heart failure
- day-time fatigue
- liver problems
- sleep-deprived partners

## **Solution to Sleep Apnea**

• Long-term management is required

• Mouthpieces, surgery, & breathing devices can successfully treat sleep apnea

#### **CPAP Machine**

• Also known as a "continuous positive airway pressure" device

• Most effective way for treating obstructive sleep apnea

#### **How CPAP Works**

- Used at home
- Increases air pressure in your throat so that your airway does not collapse when you breathe in
- Consists of a mask that covers either your nose and mouth or just your nose

## **How CPAP Works**

- Traditional CPAPs require patient to manually input desired pressure
- Others automatically change air pressure
- Humidifies air
- Monitors breathing
- Price ranges from around \$100-\$2000

Continuous Positive Airway Pressure (CPAP) Machine



CPAP machine with nasal pillow mask, ballcap-style straps



Full face mask, side straps



Nasal pillow mask, ballcap-style straps



Nasal pillow mask, side straps

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• moderate to severe sleep apnea

• coronary artery disease

• heart failure



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#### **Results**

- Decreases daytime sleepiness
- NCPAP (nasal continuous positive airway pressure) lowers blood pressure during both day and night
- Better than other nonsurgical methods
- Most effective for treating sleep apnea
- Decreases risk of heart problems such as heart failure

#### **Risks**

- nightmares
- excessive dreaming
- dry nose
- sore throat
- nasal congestion
- running nose
- sneezing

- irritation of eyes
- irritation of skin
- abdominal bloating

## **Problems associated with CPAP**

- 1. The wrong size or style CPAP mask
- 2. Trouble getting used to wearing the CPAP device
- 3. Difficulty tolerating forced air
- 4. Dry, stuffy nose
- 5. Feeling claustrophobic
- 6. Leaky mask
- 7. Difficulty falling asleep
- 8. Dry mouth
- 9. Unintentionally removing mask during the night
- 10. Annoyed by the noise

## Conclusion

- Sleep is very important for one's mental and physical health
- Sleep apnea is one condition that cannot be untreated
- CPAP is the most effective way to treat sleep apnea and the outcome is worth it

### References

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