Obstructive Sleep Apnea

Snoring seems to be a common problem as people age. It can be very annoying but more than that it can be dangerous. Snoring may be a sign of Obstructive Sleep Apnea (OSA) which is a significant obstruction on the upper respiratory tract. 9% of women aged 50 to 70 have OSA, 17% of men have it.

OSA is recurring episodes of partial or complete collapse of the upper airway during sleep. Partial collapse leads to lower oxygen in your blood and total collapse leads to apnea or complete cessation of breathing.

These episodes cause a drop in oxygen levels, short periods of wakefulness that fragments your sleep, resulting in daytime sleepiness and impairs your quality of life.

There are many adverse effects of this drop in oxygen. It is associated with a surge in blood pressure that can lead to elevation even during waking times.

Usually our blood pressure drops about 10% during the night. If it does not drop, it is an independent risk factor for worse cardiac outcomes and more organ damage from high blood pressure.

Patients with TIA's, commonly called "mini-stroke" or mild stroke, have a high prevalence of OSA, at rates of 60 to 80%.

A recent study "SLEEP TIGHT" reported that treatment of OSA with CPAP (Continuous Positive Airway Pressure) in people who have recently had a TIA or minor stroke resulted in improved heart health and diabetic risk factors, better brain function and reduced stroke rate.

A recent study from Japan showed that after angioplasty or heart attack (MI), those with sleep apnea were more than twice as likely to have heart failure, heart attack or stroke in the next five years. It's SO IMPORTANT to recognize and treat this!

Sleep apnea is associated with:

1. Daytime sleepiness and moody behavior;
2. High blood pressure;
3. Increased rate of irregular heartbeat, heart attack or sudden death;
4. Type 2 diabetes and metabolic syndrome (impaired metabolism and impaired use of the body's insulin);
5. Higher post surgical complications because greater risk of breathing problems when lying on their backs or sedated;
6. More likely to have abnormal liver function;
7. More car accidents from falling asleep at the wheel;
8. Sleep deprived partners;
9. Three times greater risk of osteoporosis due to increased cortisol levels that suppress bone formation.

DO YOU HAVE IT?

A simple screening tool that can be used to detect sleep apnea is the STOP-BANG questionnaire[11]:

- **S**nore: Have you been told that you snore loudly?
- **T**ired: Are you often tired during the day?
- **O**bserved apnea: Do you know if you stop breathing, or has anyone witnessed you stop breathing while sleeping?
- **P**ressure: Do you have or are you being treated for high blood pressure?
- **B**ody mass index: Is your body mass index greater than 35 kg/m^2?
- **A**ge: older than 50?
- **N**eck circumference: greater than 40 cm?
- **G**ender: Male?

A score of 3 or more indicates a high risk of obstructive sleep apnea, and further workup for it is appropriate.

WHAT CAN YOU DO IF YOU HAVE IT?

1. Lose weight
2. Exercise
3. Quit smoking
4. Treat respiratory allergies
5. Avoid alcohol and sedating drugs
6. Sleep on your side
7. After appropriate testing, use CPAP, which is continuous positive airway pressure given by an air mask to provide air directly to your nose and mouth that prevents your throat from collapsing.

The message for today is that this is a common condition, increasing as we age. We are under-diagnosing it because people assume that snoring is normal. What people might not appreciate is that if there is prolonged phase of not breathing you should see your doctor as soon as possible for appropriate tests.