

# NORTH COLLIER SLEEP DIAGNOSTIC CENTER

## SLEEP MEDICINE NEWS

Soon to be accredited by the American Academy of Sleep Medicine

### Medical Director

**JOSE R. MARQUINA, M.D., F.C.C.P.**  
Board Certified in Internal  
Medicine, Pulmonary, and  
Critical Care.

Recognition of  
Obstructive Sleep  
Apnea is an important  
part of your health.

Primarily because of  
the strong relationship  
between this condition  
and:

- Myocardial Infarction
- Strokes
- Hypertension
- Diabetes
- Car Accidents,
- Sudden Death and  
other serious diseases

Treatment is effective  
and simple and will  
have a positive effect  
in your life and energy  
level.

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## Obstructive Sleep Apnea

Obstructive Sleep Apnea (OSA) is a prevalent health hazard with serious health consequences. These include excessive daytime sleepiness, depression, cognitive disturbances, cardiovascular disease, cerebrovascular disease, and hypertension. OSA is a frequent, partial, or complete collapse of the breathing passageway during sleep. The muscles in the throat relax, making the airway more susceptible to collapse. The negative pressure of air pulled by the lungs through a narrow airway may cause the breathing passage to collapse. With the airway blocked, no breathing occurs and oxygen levels drop, your heart rate may slow down and increase, your blood pressure also increases. In order to breathe again, you awaken briefly. The result is non-restful sleep.



If you or someone you know has one or more of these symptoms they should be referred to a sleep clinic for proper diagnosis and treatment.

### Symptoms include:

- Excessive sleepiness
- Loud snoring
- Increased night time urination
- Observed apnea events
- Choking or gasping while sleeping
- Feeling sleepy while driving
- Feeling sleepy while reading
- Morning headaches
- Dry mouth on awakening
- Excessive sweating at night
- History of hypertension
- History of stroke
- History of heart attacks
- Tiredness upon awakening

Obesity is another known factor that causes obstructive sleep apnea.

## Risk of Death Linked to Severity of Sleep Apnea

In July 2007 the Newspaper of The American College of Chest Physicians had an article explaining the relationship between the amount of apneas (complete closure of the airway) plus hypopneas (partial closure of the airway) per hour. AHI is apnea plus hypopnea index. Depending on the number of apneas and hypopneas per hour (AHI) the percentage of risk for heart attack or death increases. An AHI greater than

30, has a 90% increased risk of heart attack or death. Patients with AHI from 5 to 14 has a 20% greater risk, and patients with AHI from 15 to 30 has a 50% greater risk. The results emphasize that patients with OSA should get treatment.



Avoid stimulants like caffeine and Nicotine for several hours before bed-time.

*“Therapy with positive airway devices is effective and usually well tolerated.”*



Arrival time at our sleep lab is around 9 PM and departure is at approximately 6AM.

## Sleep Apnea is Strong Predictor of Diabetes

People with obstructive sleep apnea (OSA) have almost three times more risk of developing Type II Diabetes, according to a poster presentation by Dr. Nader Botros at the International Conference of the American Thoracic Society. Evidence exists, that sleep apnea triggers a cascade of events in the body, including the production of high levels of cortisol, which has been tied to the development of insulin resistance and glucose intolerance. These pre-diabetic conditions, if left untreated, can lead to the development of full-blown diabetes. This article was obtained from the July 2007 edition of the American College of Chest Physicians Journal.



Improve your quality of life and your life expectancy.

## Therapy for Obstructive Sleep Apnea

The medical therapy for OSA consists of positive airway pressure (PAP) devices that provides humidified heated air to your airways and relieve the obstruction. The appropriate mask and PAP pressure is determined during a sleep study. Most of the patients tolerate PAP therapy well.

A few may experience some

discomfort, and dryness. We can help you adapt to your machine by using the latest technology in PAP machines and face mask. Oral appliances may also be affected for people with very mild OSA. Those include tongue retaining and jaw advancement devices. Surgery may also be effective. These include nasal operations, laser-assisted uvulopalatoplasty, uvulopalatopharyngoplasty, maxillo mandibular advancement, somnoplasty,

and in severe cases tracheostomy.

Oxygen usually does not improve the apneas, but in selected cases may be used in combination with PAP therapy.

We also recommend the use of sleeping aids, nasal sprays, and decongestants that may help you tolerate your positive airway pressure better.

## Overnight Sleep Study

If you have evidence of OSA you may be scheduled for an overnight sleep study. The study consists of continuous overnight oximetry, electrocardiogram, electroencephalogram, electromyogram, oculogram, flow sensor and a snoring detector. We also monitor your chest and abdominal movements.

Once you arrive at our center you will be directed to one of our comfortable rooms, designed to make you feel as if you were at home. You will then have multiple sensors placed on your head and body in order to be able to effectively monitor your sleep.

## Sleep Study Equipment

At our lab we use the latest in technology. All our Sleep Technicians have been trained either by the Atlanta School of Sleep or by seminars given by the American Academy of Sleep Medicine.

Spending a night in our sleep lab is like staying at a hotel. The only difference is that you will have electrodes monitoring your sleep.

Our technicians will go out of their way to make you feel comfortable and relaxed.



## Keys for Positive Air Pressure Success

1. PAP will immediately improve your sleep but it is essential to be persistent and have a long-term commitment to proper sleep.
2. Contact your sleep doctor and PAP supplier regarding any questions. Sometimes the mask needs to be changed to adapt to what is best for you.
3. PAP should be used every night even when you nap. It will be easier for your body to adapt when PAP is used on a continuous basis.
4. Always try to use your humidifier to add moisture and make your treatment more comfortable.
5. Use a ramp setting to slowly get used to the air pressure level.
6. Clean your mask, tubing and humidifier container on a regular basis. Also, replace filters for your PAP machine.
7. Remember that PAP therapy may reduce your blood pressure levels and your risk for heart disease.

*“After the first night of PAP therapy most patients feel completely refreshed, because they finally got a good nights sleep”*

## Sleep Hygiene

The following instructions are to be used as guidelines:

- Avoid alcohol and caffeine near bedtime.
- Exercise regularly, preferably 4 hrs before bedtime.
- Do not go to bed hungry
- Maintain a regular sleep schedule, if possible wake up at the same time every day even on weekends.
- Do not force your self to sleep.
- Do not nap during the day.
- If you are unable to sleep after 20 minutes of laying in bed, go to another room to read or watch TV and return to your bed when sleepy.



**Our Sleep Lab is extremely comfortable and you will feel as if you were at home.**

# North Collier Sleep Diagnostic Center

Our Sleep Center has become well known in our community because of the excellent patient care our Physician and Sleep Technicians. Jose R. Marquina M.D., F.C.C.P. directly oversees every aspect of our patients care. We spend an extensive amount of time in teaching our patients the entire process, from their initial sleep study to the types of treatment available for each sleep disorder they may have. In addition we follow-up with our patients to resolve their sleeping disorders with counseling and sleep hygiene techniques.

## **MEDICAL DIRECTOR**

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Take Exit # 111 from I-75 proceed West on Immokalee Road, toward North Collier Hospital.

**Every Patient Receives VIP Treatment and Complimentary Transportation to our Facility.!**

