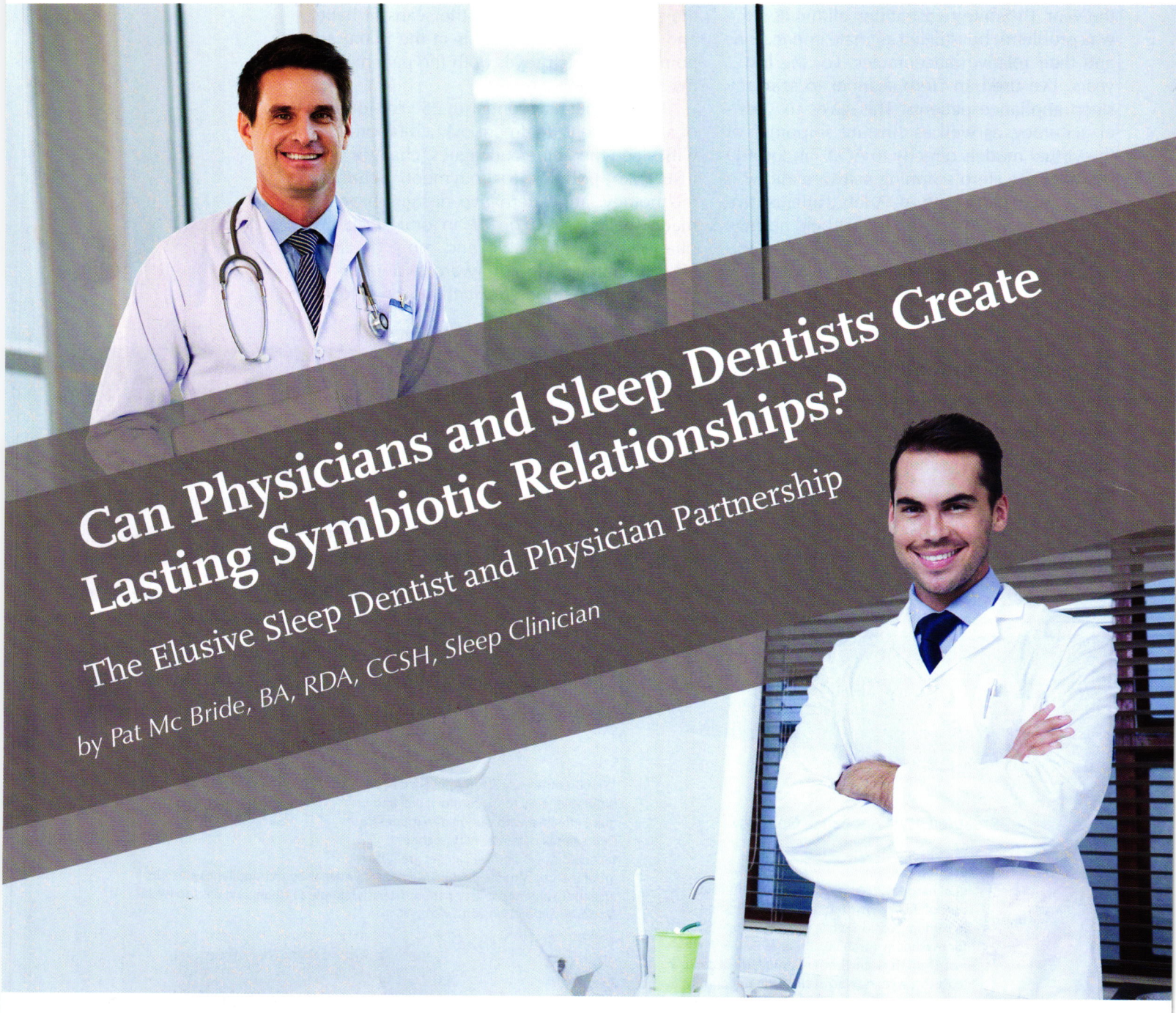


Can Physicians and Sleep Dentists Create Lasting Symbiotic Relationships?

The Elusive Sleep Dentist and Physician Partnership

by Pat Mc Bride, BA, RDA, CCSH, Sleep Clinician

Treating patients with breathing disorders associated with sleep has become the fastest growing new area of diagnosis and treatment in Dentistry today. That's right; breathing disordered sleep, not sleep disordered breathing. Improper breathing dis-orders the sleep, not the other way around. The time is rapidly coming when patients will be referred to us from just about every medical specialty, and we need to know what is expected, wanted and needed by each and every one of these referring physicians.

Today, there is an increased urgency to partner the Dentist and Physician symbiotically to better serve an exploding patient population. Not only are the numbers of affected people growing at an alarming rate, but the age demographic of the patients screened and treated has decreased dramatically from the early days when OSA was considered a disease of big fat old men to one where very young children and thin fit women have been discovered to suffer from the very same breathing disordered sleep problems. These

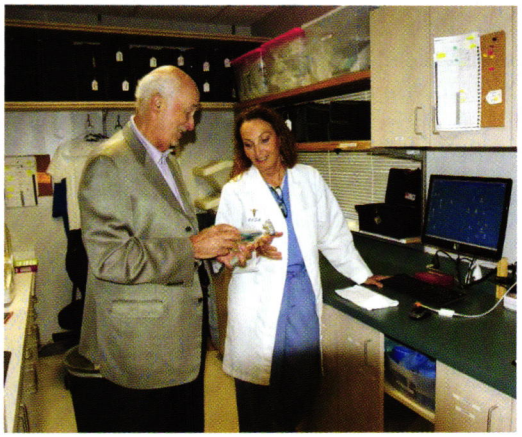
include UARS (upper airway resistance syndrome), OSA (obstructive sleep apnea), and many other disorders of breathing and sleep, all of which fragment sleep and affect their daily lives.

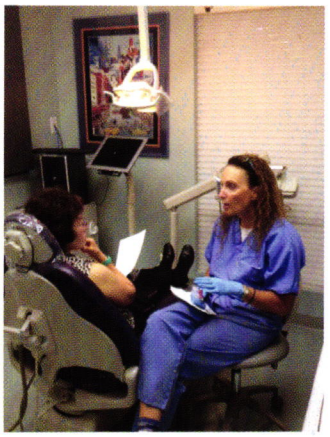
For the dentist, the obvious place to start screening patients for airway disorders is with one's entire patient database. No man, woman or child should be left unscreened. But, what happens next and how do you relate your findings to the patient's physician? Depending on the state where you practice, it can be illegal for the dentist to order diagnostic testing. If ordering diagnostic testing is permitted, referring a patient for testing, circumventing the physician of record, may not win friends or influence potential referrals to your growing "sleep practice." A positive screening is the door-opener to a partnership conversation with a primary care physician or specialist.

Garnering and keeping relationships with the physicians of your own patients can definitely lead to referrals of their other patients to your practice.

One way to begin the process is to locate the Sleep Lab(s) in your area and start there. The director MD of the lab can be a critical ally in your mission to serve your community and treat these patients. And, physicians want to hear just that. You are reaching out in partnership to help them walk these people towards wellness with much more than a plastic appliance to help open the airway while they sleep. They want to know how you are going to help, what modalities of additional therapy you use besides the oral appliance, and whether or not you are going to fully invest in the wellbeing of these people's lives and futures. They desperately need help managing the patients who RTC (return to clinic) or loop back over and over again throughout the year with ailments stemming from untreated breathing disorders of sleep. What they absolutely do not want to hear is that you want to sell anyone anything.

Oral appliance therapy is a precise and exacting dental application to treat a serious and potentially life threatening medical condition. Stepping into the world of the physician requires that you speak their language. Are you fully informed about the signs and symptoms of disordered breathing as it applies to each of the medical specialties-pulmonary, neurology, etc.? Can you speak to a pulmonologist or cardiologist in terms he or she understands, and are you able to show them refereed literature supporting what you are telling them? Believe it or not, they will notice if you belong to their own organizations: The American Thoracic Society, American Academy of Sleep Medicine, American Academy of Dental Sleep Medicine, or the American Academy of Physiological Dentistry and Medicine.

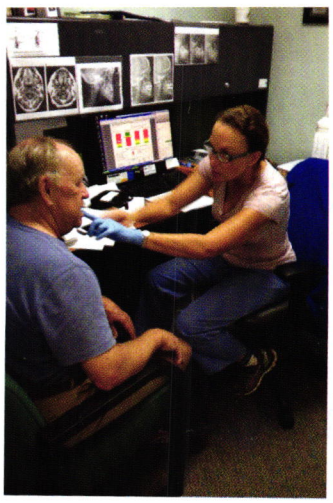




Top left: Contra Costa Sleep Lab with Dr. Michael Cohen. Top right: Sleep clinician in Dental Sleep Medicine Offices of Michael J Selleck. Bottom right: Lecturing at AAPMD

It is essential to have a complete understanding of just what they deal with on a day-to-day basis in terms of economics. Let's be honest here: dentistry is a fee for service basis in many areas, yet it simply doesn't work that way in medicine. If you wish to capture and keep MD referrals, you had better be prepared to change your business model and expectations regarding fees. As an example, if the MD you really want to partner with be-

Pat McBride, BA, RDA, CCSH, *has spent 35 years as a full time clinician in the fields of dentistry, respiratory medicine, and dental sleep medicine. Her extensive experience in clinical, laboratory and educational arenas led to the development of interdisciplinary care model delivery systems used by physicians and dentists across the globe. She sits on the Board of Directors for the Academy of Dental and Physiological Medicine in New York. Pat continues to work as hands on with patients while lecturing internationally on subjects relating to sleep medicine, dentistry, and protocol development to best serve patient populations. Serving the underserved remains a priority and passion for her. She has one grown daughter, a teacher in Spain.*



Interactive patient care

Specialist Physicians, first and foremost, want to understand what you know and exactly what you are doing with the patients they entrust to you.

longs to a medical system or an IPA (Independent Practice Association) they often cannot refer to you unless there is absolutely no one in the network who performs the services required. If even one dentist is in their system, you will never get the referrals, nor will you get out of network fees, out of network exceptions (GAP), or letters of agreement (LOA) for payment on your submitted fees. If you are out of network, the patient's pre-certification for care will come back either rejected, or with a list of in network providers and a strong warning about the consequences of going out of network.

Making the decision to join any managed care network should never be made lightly, but if it insures that the referral doors open and people walk through, it's worth considering. When referring physicians treat Medicare patients, they are going to want to know that you can work within the confines of that system as well. We used to believe that treating the underserved and Medicare was important because, "It's like taking care of our parents." Okay fine, that was then, this is now, and now it's us. Referring MD's don't ever want to send a patient over only to have them come screaming back through their doors upset that you either can't or won't deal with their insurance, and they are expected to pay the entire fee out of pocket and hope to be reimbursed. People generally want their insurance to pay for their care, and will expect you, their Dental Physician, to take care of the billing and claims processing just like at their primary care MD's office.

Specialist Physicians, first and foremost, want to understand what you know and exactly what you are doing with the patients they entrust to you. The Pulmonologist/Sleep MD for example will be thrilled that you want to help with the PAP (positive airway pressure) fail/refusal patient. These are often non-compliant patients in general, and of course we recognize there are many reasons for not using PAP therapy. These patients don't watch their diets, don't take medications regularly, don't exercise, mouth breathe, have poor structural and oral postures, metabolic syndromes, do not control their stress, and present with numerous co-morbidities associated with sleep apnea. These people have likely already been through a lot already, so simply placing an oral appliance and doing nothing else, then hoping the AHI/RDI will go down, is tantamount to rearranging the deck chairs on the Titanic. Do something positive with these patients; by demonstrating real improvement in their overall health status longitudinally, and you will win big with the referring MD's.

Pulmonologists are breathing gurus and clinicians of fairly singular focus when it comes to the Sleep dentists. Michael Cohen, MD, ABSM Chairman of Sleep and Pulmonary Medicine at Respiratory Medical Group in California states the expectations of the Sleep MD/ Pulmonologist simply: "We require that the Sleep dentist carefully evaluate the patient for an oral appliance. He or she must have a complete understanding of the polysomnography or out of center sleep test report results and how they relate to each particular patient's general health status. If the patient has hypoventilation syndrome for example, the expectation is that the Sleep dentist has some sort of plan as to how to deal with this issue in addition to placing the oral appliance. We leave the process of appliance selection and fabrication to the Sleep DDS. This of course is where we rely on his or her particular expertise and abilities. The referred patient may have failed or refused PAP therapy, but alternative treatment modalities presented to them must have specific value to their particular syndrome. Prior to referral back, we like to see a written report documenting the nature and scope of the care rendered with request for post therapeutic sleep testing to prove efficacy and derived clinical benefit from the treatment."

So, this isn't just about screening patients, and making them an oral appliance, is it? If you cannot get the patients to breathe properly during the day, how do you expect to fully help them at night? We breathe 24/7, so retraining brains to unlearn bad habits with proper breathing and oral posture will be part of the process. Eliciting the partnership of a local Otolaryngologist (ENT) is a must. People who cannot breathe through their nose may require any number of interventions in addition to oral appliance and breathing therapy. Everything from tonsils, adenoids, nasal turbinate reduction, septorhinoplasty, genioglossus and hyoid advancement surgery must be considered during treatment planning. The ENT and expansion/Orthotropic orthodontist will be your frontline referral for children. Referring back and forth to the

Pat McBride with Dr. Andy Benn in office cardiology partnership

It's what YOU do with the patients entrusted into your care by your colleagues, the local physicians, that really counts.

ENT will exponentially improve the level of care delivered and patient outcomes. Good ENT's will appreciate your referrals and if they understand the damage occurring in children with OSA, they will take an aggressive approach to removing tonsils and adenoids prior to or concurrent with expansion.

Incorporating breathing exercise programs like Buteyko, or Pranayama Universal Breathing into your treatment model can seriously help move the airway patient further along towards wellness. Sleep apnea patients literally need to learn to shut their mouths and breathe through their noses. It is very likely that no one else before you has ever told them they should. Correcting oral posture through Myofunctional therapy, and possible release of frenulum or tongue-ties in addition to oral appliance therapy will effectively show the physician you possess a level of knowledge, expertise and understanding to treat their patients effectively. You will always spend more minutes per visit with your patients than any other care provider will. Incorporating many modalities to better serve this population will further improve your ability to partner with their physicians. When a patient is referred back to the Pulmonologist for follow-up sleep testing with the appliance, be sure to include a study or journal which further gives the therapy you render credibility. Many physicians know little or nothing about Myofunctional therapy, Orthotropics and or oral posture retraining.

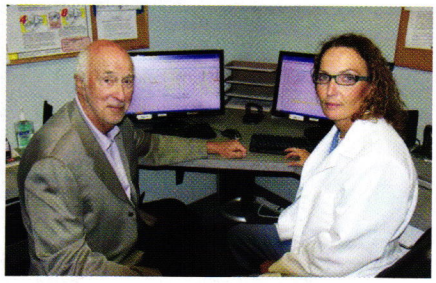
Andrew Benn, MD, FACC, Chairman, Section of Cardiology John Muir Medical Centers, is very clear about what the referring cardiologist wants and needs from the Dental Sleep Medicine Provider. "Cardiologists hope for three things in an alliance with a dental sleep provider 1) a diagnostic approach that patients will accept and be willing to undergo 2) a therapy they will accept, tolerate and use over a prolonged period of time 3) committed follow up to tweak therapies as needed, reevaluate the efficacy of implemented therapies and be a resource for patients rather than them looping back to the cardiologists who often are less informed on OSA and its treatment. Ideally, the dental sleep center would also provide a fourth, educational function for the cardiologists but that would require a more consistent commitment within the cardiology community to accept that: - OSA occurs in a high percentage of our patients. - OSA is, from an epidemiology standpoint, imparting negative prognostic effects on these patients – we can improve the quality of their lives if we are willing to get the ball rolling in the diagnosis and treatment of their OSA."

The Endocrinologist deals with metabolic syndrome, and like the cardiologist understands the direct correlation between disordered breathing of sleep and increases in metabolic syndrome. If they partner with you, they will fully expect the Sleep DDS to monitor the patient's adherence to their medication and dietary needs during appliance therapy and beyond. Many of these patients suffer from significant GERD, a common comorbidity of the metabolic syndrome and they often do not realize that the GERD may be sequelae of apnea. Acid erosion on the teeth is a warning sign of both GERD and OSA. Physicians expect that a large portion of the time you spend with the patient will be in education and retraining of habits to improve overall health status.

Meticulously study medical intake forms. Review the medications, and it will not be a surprise that the psychiatrist will be a specific and important partner for your practice. Obstructive sleep apnea has been associated with psychiatric pathology. Psychiatric comorbidity in OSA may affect patient quality of life and adherence to traditional PAP therapy. Psychiatrists don't like having to constantly increase or change psychotherapeutics medications. Transitions on and off these drugs are always unpredictable and patients have a particularly difficult time with it. Many patients dealing with significant depression have some level of disordered breathing and sleep issues. Reach out to the Psychiatrist with literature regarding this direct correlation, and offer to help screen and treat their patients. You will find that compliance to PAP therapy is dismally low in depressed patients, but compliance with OA is relatively high, and once the sleep/respiratory disorder is treated, the depression often lifts considerably, requiring less medication.

Patients with co-morbidities like metabolic syndrome, OSA and heart disease also suffer from ocular issues. Many a referral into our sleep lab has come from an Opthalmologist. Author and clinician Arun Prasad, MD notes, "There are a number of ocular conditions associated with sleep apnea: floppy eye-

lid syndrome, nonarteritic anterior ischemic optic neuropathy, retinal vein occlusion, papilledema, and glaucoma, to name a few. As an ophthalmologist who specializes in glaucoma, I've sent several patients for sleep apnea testing. Studies have shown a correlation between sleep apnea severity and intraocular pressure, presence of visual field defects, and even decreased optic nerve perfusion. While more research needs to be done to further elucidate the relationship, it is important to be able to identify these patients so that they can undergo testing and be treated if necessary to decrease the risk of cardiovascular and neurological sequelae from untreated sleep apnea. Whether the treatment is continuous positive airway pressure, an oral appliance or surgery, it is becoming increasingly clear that we need to adopt a multidisciplinary approach when it comes to sleep apnea."



Contra Costa Sleep Lab with Dr. Michael Cohen

As an author and researcher on glaucoma, Dr. Prasad values what the Sleep Dentist brings to the table. He understands that patients need a multidisciplinary approach to treat all of their issues, and therapy that they can live with on a day-to-day basis.

Finally, we come to the physician who treats what I consider the most fragile breathing disorder patient, the pregnant woman. Regardless of her age, number of pregnancies or pre-pregnancy health status, pregnancy carries a host of medical complications which can threaten both mother and baby. Women in the second and third trimesters with a tendency towards hypertension and preeclampsia often present with sleep apnea. Partnering with the OB/GYN can quite literally save lives. Getting that pregnancy to a full term delivery is critical; telling a tired, pregnant woman who isn't sleeping well and feels exhausted that she now needs to strap on a PAP mask does not go over well at all. If she already has a small child she is getting up with at night, it's guaranteed she'll never treat her sleep. Assuming she did not have OSA prior to her pregnancy, we don't really know at what point the OSA could be the result of the weight gain and stress from the pregnancy and may resolve post-partum. In these cases, you as the partner Sleep dentist can help tremendously by putting these PAP non-compliant/refusal patients into a temporary appliance to get her through the delivery. The increase in her oxygen saturation levels and improved sleep quality during that final trimester may result in a birth at appropriate gestational age and fewer complications to both mother and baby. Pregnant moms are far more likely to place a provisional "boil and bite" you have made to get them through the pregnancy and then retest after delivery. If she tests positive for OSA, at that point you can decide which direction of therapy is appropriate.

Partnering with physicians is critical to the development and health of your sleep medicine practice. Sharing is critical. Don't be overwhelmed by "Everyone wanting a piece of the sleep dentistry pie." There are going to be more people to treat than you will ever be able to handle alone. It's what YOU do with the patients entrusted into your care by your colleagues, the local physicians, that really counts. Building these relationships takes time, perseverance and patience, but if even one person walks away healthier, happier and living their life as they should, I say it's all good. DSP

References

1. Cardiovascular Benefits of Oral Appliance Therapy in Obstructive Sleep Apnea: A Systematic Review. http://dx.doi.org/10.15331/jdsm.4430 Gilles Van Haesendonck, BSc1; Marijke Dieltjens, MBS1,2; Chloé Kastoer, MD3; Bharati Shivalkar, MD, PhD1,4; Christiaan Vrints, MD, PhD1,4; Caroline M. Van De Heyning, MD, PhD1,4; Marc J. Braem, DDS, PhD1,2; Olivier M. Vanderveken, MD, PhD1,3. University of Antwerp, Faculty of Medicine and Health Sciences, Antwerp, Belgium; 2Antwerp University Hospital, Department of Special Care Dentistry, Edegem, Antwerp, Belgium; 3Antwerp University Hospital, Otolaryngology and Head and Neck Surgery, Edegem, Antwerp, Belgium; 4Antwerp University Hospital, Cardiology, Edegem, Antwerp, Belgium
2. *J Clin Sleep Med.* 2015 Jan 15;11(2):165-75. doi: 10.5664/jcsm.4466. Obstructive sleep apnea and psychiatric disorders: a systematic review. Gupta MA1, Simpson FC1.
3. *J Clin Endocrinol Metab.* 2010 Feb;95(2):483-95. doi: 10.1210/jc.2009-1912. Epub 2010 Jan 8. Endocrine aspects of obstructive sleep apnea. Attal P1, Chanson P.
4. Association of Psychiatric Disorders and Sleep Apnea in a Large Cohort. Amir Sharafkhaneh, MD1,3; Nilgun Giray, MD2,3; Peter Richardson, PhD1; Terry Young, PhD4; Max Hirshkowitz, PhD1-3. 1Department of Medicine at Baylor College of Medicine, Houston, TX; 2Meninger Department of Psychiatry at Baylor College of Medicine, Houston,
5. *Sleep Med Rev.* 2005 Jun;9(3):211-24. Sleep apnea is a manifestation of the metabolic syndrome. Vgontzas AN1, Bixler EO, Chrousos GP. 1Department of Psychiatry H073, Penn State College of Medicine, 500 University Drive, Hershey, PA 17033, USA. axv3@psu.edu TX; 3Michael E. DeBakey VA Medical Center, Houston, TX; 4University of Wisconsin, Madison, WI
6. Sleep-Disordered Breathing During Pregnancy. Chakradhar Venkata, MD and Saiprakash B. Venkateshiah, MD
7. *Crit Pathw Cardiol.* 2015 Jun;14(2):81-5. doi: 10.1097/HPC.0000000000000044. Obstructive Sleep Apnea and Atrial Fibrillation: Pathophysiology and Implications for Treatment. Maan A1, Mansour M, Anter E, Patel VV, Cheng A, Refaat MM, Ruskin JN, Heist EK.
8. Metabolic syndrome is associated with gastroesophageal reflux disease based on a 24-hour ambulatory pH monitoring.Kallel L1, Bibani N, Fekih M, Matri S, Karoui S, Mustapha NB, Serghini M, Zouiten L, Feki M, Zouari B, Boubaker J, Kaabachi N, Filali A.
9. Obstructive sleep apnea, gestational hypertension and preeclampsia: a review of the literature. Pengo MF1, Rossi GP, Steier J.