Obstructive Sleep Apnea
– A New Cardiovascular Risk Factor

It is no secret that Americans are sleep deprived. A recent National Sleep Foundation survey reported that 63 percent of American adults do not get the recommended eight hours of sleep each night. Many individuals who do obtain an adequate amount of sleep, do not find it restorative due to an intrinsic sleep disorder. Among the persons who have sleep disorders, the majority are diagnosed with sleep apnea. Many people don't realize that sleep apnea is a serious condition that can affect both quality of life and life span.

What is Obstructive Sleep Apnea Syndrome?
Sleep apnea occurs to some degree in everyone due to the floppy nature of the throat during sleep and the fact that we breathe by suction as the diaphragm descends. It is considered normal for the throat to be sucked shut, up to five times per hour. The brain “wakes up” briefly to activate pharyngeal dilator muscles allowing breathing to resume.

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The Cardiovascular Center Offers
The Microvolt T-Wave Alternans Test

Sudden cardiac arrest claims the lives of over 300,000 people annually in the U.S. and is the nation’s number one cause of death. Most people who suffer cardiac arrest have an underlying, pre-identifiable, electrical disorder that puts them at risk. One way to identify this disorder is through the measurement of Microvolt T-Wave Alternans, a “beat-to-beat” alternation in a portion of a patient’s ECG. When visible on the ECG, these alternations have long been associated with an increased likelihood of ventricular arrhythmia.

The Microvolt T-Wave Alternans test is a noninvasive diagnostic test designed to help identify patients at risk of life threatening heart rhythm disturbances that can lead to sudden cardiac death.

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Sleep Apnea (continued from page 1)

When secondary factors such as obesity, nasal obstruction, abnormal upper airway anatomy or alcohol or myorelaxant sedative use intervene, the frequency and severity of obstructive episodes increase. Rates of greater than ten timers per hour lead to complaints of excessive daytime sleepiness. Apnea rates of greater than twenty per hour are associated with decreased survival.

Left untreated, sleep apnea can lead to stroke, heart attack, and hypertension. Sleep apnea is a cardiovascular risk factor which when combined with other risk factors, such as smoking, high cholesterol, diabetes, hypertension, and obesity, results in an exponential increase in risk of cardiovascular morbidity and mortality.

Treating Sleep Apnea

Population studies of midlife working individuals demonstrate that two percent of women and 4 percent of men have significant obstructive sleep apnea. This represents a large group of generally undertreated people in our community. Following presentation with snoring, excessive daytime sleepiness and witnessed apnea, the diagnosis is confirmed by clinical polysomnography at the Sleep Disorders Center. Treatment options include conservative measures such as weight loss and the avoidance of alcohol and myorelaxant sedatives in the evening. Definitive treatment generally consists of nasal continuous positive airway pressure by mask or ENT surgery in selected individuals.

The Sleep Disorders Center at St. Joseph Hospital is accredited by the American Academy of Sleep Medicine. For more information or to make a patient referral call the Sleep Disorders Center at 598-3374.

The Microvolt T-Wave Alternans Test (continued from page 1)

The test is usually performed during a treadmill stress test. Unlike the standard stress test designed to identify the presence of ischemia, the Microvolt T-Wave Alternans test will identify these

The Cardiovascular Center at St. Joseph Hospital is able to offer the Microvolt T-Wave Alternans test. “We are very excited about the number of people we can impact with this diagnostic option,” said Peter Klementowicz, MD, Medical Director of Cardiovascular Services at St. Joseph Hospital. “This is just one more way The Cardiovascular Center can help the community combat cardiovascular disease.”

Preventing, diagnosing and treating the early warning signs associated with cardiovascular disease is crucial to enjoying a healthy, happy lifestyle. For more information about The Cardiovascular Center, the Microvolt T-Wave Alternans test, risk screenings or education outreach programs, please call 595-3971.
**News from the Quality and Resource Management Office**

**An Expanded Role for our Case Managers**

In an effort to provide enhanced physician support and to more actively advocate for our patients, the role of the Case Manager is becoming more dynamic. With the recent merger of Quality Management and Continuum of Care (now Quality and Resource Management), the combined resources and strengths have afforded the Case Manager the opportunity to expand her focus and job responsibilities. Previously, the Case Manager’s focus was on discharge planning. The Case Manager’s role will now be three-pronged. We will continue to arrange for the appropriate and safe discharge needs of our patients, but we will also become more involved in Quality Assurance and Process Improvement to help insure optimal outcomes for our patients. We will assume a proactive approach to Utilization Review insuring that our patients receive care at the most appropriate level. St. Joseph Hospital has purchased the same criteria used by Medicare (Intertual/McKesson) and has trained the Case Managers to insure that our patients are admitted to the correct level of care (Observation vs. Inpatient vs. Diagnostic Holding Bed).

As Medicare continues to scrutinize inpatient admissions, it is imperative that the correct level of care is applied to the admission. The Case Manager’s role is to support the physician in this function as well as to assist the physician in securing the healthcare needed by the patient in a safe and appropriate manner.

We look forward to this enhanced working relationship with our physicians. We are confident that our added responsibilities will help assure that patients receive quality healthcare both while an inpatient at St. Joseph Hospital and throughout their post hospitalization needs. Look for onsite education sessions to further discuss admission levels of care.

Feel free to discuss any concerns or questions you may have with any of the Case Managers or contact Quality & Resource Management directly at extension 63850.

Stacey Hodgeman, RN
Utilization Program Manager

**High Tech Surgery Performed**

On Wednesday, May 1st, Dr. Daniel Bouvier and Dr. John Lynn performed the first Autologous Chondrocyte Implantation done at St. Joseph Hospital. In 1995, Genzyme Tissue Repair Company introduced Carticel (autologous cultured chondrocytes) in the United States. The goal of the Carticel implantation is to restore damaged articular cartilage in the knee joint. The procedure involves an initial arthroscopic biopsy of the patients healthy cartilage. This healthy cartilage is then sent to Genzyme Tissue Repair in Cambridge, Massachusetts where it is processed and cultured. The chondrocytes "grow" during this process, significantly increasing to about 12 million cells. These cells are then available for reimplantation to the patient. The time between biopsy and reimplantation can vary from weeks to several months. The rehabilitation time for this procedure can be 12-18 months and requires a patient that is willing and able to comply. This is a time intensive, highly technical procedure...another example of St. Joseph Hospital's commitment to providing patients state-of-the-art surgical care.

**Information Systems Implementation Update**

**McKesson Horizon Physician Portal**

St. Joseph Hospital implementation teams have been working for several months on the McKesson STAR/Horizon Care Manager software project to facilitate improved patient data processing in the hospital setting. These products also establish the building blocks necessary to implement new functions in technology with the delivery of information when and where needed as the core mission. St. Joseph Hospital has recently licensed the McKesson Horizon Physician Portal for install immediately following the STAR go-live this fall. Physician Portal is a personalized, Web-based, single point of access tool for physicians to view data available in Horizon Care Manager, Care Record, and other vendor applications with the key patient information the physician requires. Physicians can personalize information according to their workflow and integrate expert sources of knowledge for improved decision making with this product. The anytime, anywhere access from multiple locations, using various electronic devices, builds on the knowledge people already have about using the Internet.
New Physicians on Staff with St. Joseph Hospital

**Jack Bueno, MD**, has joined Nashua-based King Medical Associates, a practice that specializes in adult medicine. Board Certified in Internal Medicine, Dr. Bueno completed his residency at the University of Connecticut Health Center. He undertook his fellowship in Gastroenterology at Memorial Sloan-Kettering Cancer Center, where he studied and practiced the latest treatments for patients suffering from digestive disorders and cancers. This year, about 135,000 people with be diagnosed with colon cancer, but this disease is treatable and curable with early detection. Dr. Bueno is a major advocate of colon cancer screening and encourages everyone 50 years and older, and those with a family history of colon cancer, to be screened once a year. Dr. Bueno received his medical degree from the University of the Philipines College of Medicine, and is a member of the American Gastroenterological Association, American College of Gastroenterology, American Society for Gastrointestinal Endoscopy and American College of Physicians.

**Kelly Shine, MD**, has joined Nashua Surgical Associates, PA., as a General Surgeon. She received her medical degree from Yale University and completed her residency in General Surgery at the University of New Mexico Health Sciences Center. This institution is the trauma center for all of New Mexico and parts of Arizona, Colorado, and Texas. During her residency, she became highly skilled in all forms of surgery including pediatric and vascular surgery.

Dr. Shine is the recipient of the 2001 Khatali award and the 1997 Annual Surgical Teaching Award. She was a board member of REMEDY – Recovered Medical Equipment for the Developing World. This organization transfers usable but outdated materials from the operating rooms of Yale/New Haven Hospital to hospitals in developing countries.

Nashua Surgical Associates is pleased to welcome Kelly, Shine, MD.

**Upcoming Continuing Medical Education Programs 2002**

- **Reproductive Issues in Thyroid Disease**, May 22nd – 12-1:00 p.m. (CAR) - Robert Levine, MD, FCP
- **Advances in the Treatment of Lung Cancer**, May 29th – 12-1:00 p.m. (CAR) - Ravi Salgia, MD, Staff Physician, Adult Oncology – Thoracic Cancer, Dana Farber Cancer Institute
- **Update in the Treatment of BPH**, June 5th – 12-1:00 p.m. (CAR) - John Janeiro, MD
- **Cardiovascular Conference**, June 11th – 7-8:00 a.m. (Board Room), Michael Remar, MD, Vascular Surgeon. Staff members will present specific cardiovascular cases for discussion.
- **Current Management of COPD**, June 12th – 12-1:00 p.m. (CAR) - Richard Rothfleisch, MD, Pulmonologist
- **Type 2 Diabetes – Examining Cardiovascular Complications**, June 19th – 12:1:00 p.m. (CAR) - Lester Shoap, MD, North Suburban Cardiology Associates
- **New Sepsis Drug**, June 26th – 12-1:0 p.m. (CAR)
- **Tumor Conferences** – May 24, June 14, June 26, July 12, July 26, August 9 – (all held from 7:30-8:30 a.m. in the SJH Board Room)