We could not have said it any better!

In our mission statement we pledge to serve our patients with “compassion, efficiency, and excellence.” We are gratified that so many of our patients affirm that we are succeeding!

Dental & Oral Cancer Service
“Dr. Davis and her staff are the most wonderful people we have ever dealt with in the medical/dental field. They are professional yet personal.”

Nose & Sinus Service
“We are so very pleased with the entire staff and impressed with the doctor’s knowledge. I have had multiple surgeries and can say this was a dream operation. Thank you all for a very comforting experience.”

Head & Neck Cancer Team
“Close to my 2 year mark - cancer free. I’m blessed and grateful I was put into MUSC’s care. All experiences with staff and doctors involved in my recovery and positive outcome - I couldn’t ask for any better.”

Audiology & Hearing Aids
“Great job! The staff was awesome. First time I have had a hearing test in 30 years. Everyone explained things so that I could understand what was going on.”

Thyroid Service
“Dr. Hornig and his team provided top notch service.”
“Dr. Hornig’s honesty, forthrightness, and knowledge were breathtaking.”

Ear & Hearing Service
“Everything was wonderful and the staff was awesome. I just love Dr. Lambert. I now hear things that I have not heard since I was a small child and I am 68 now.”

Facial Plastic Surgery
“Dr. Skoner and her staff are awesome.”
“Dr. Patel is always prompt and courteous - she is absolutely wonderful.”
“Dr. Skoner and Dr. Patel are extremely caring and compassionate.”

Nose & Sinus Service
“Dr. Soler was very kind and attentive. He was gentle and yet very confident.”

Ear & Hearing Service
“Dr. Meyer was very professional. He explained what my issue was and a treatment plan that would help.”

Allergy Service
“Dr. Hoy has given me the best care for 6 years.”
Minimally Invasive Thyroid Surgery

Eric J. Lentsch, M.D.
Specialist in Head & Neck Tumors

It is estimated that 4-8% of adult women have thyroid nodules that can be felt on physical examination, but closer to 30% of women have nodules detectable by ultrasound. In fact, the diagnosis of a thyroid nodule is one of the most common endocrine problems in the United States. Although the majority of thyroid nodules are benign (not cancerous), the American Thyroid Association estimates that about one in 10 thyroid nodules are cancerous and about one percent of all cancers diagnosed in the United States each year are thyroid cancers.

The usual treatment for malignant nodules is surgical removal, usually a partial or total thyroidectomy. Occasionally, a nodule that's clearly benign may require surgery, especially if it's so large that it makes it hard to breathe or swallow. Surgery is also considered the best option for people with large multinodular goiters, particularly when the goiters constrict airways, the esophagus or blood vessels. Nodules diagnosed as indeterminate or suspicious by FNA biopsy also must be examined more thoroughly for signs of cancer.

For these reasons, thyroidectomy is one of the most common procedures performed by otolaryngologists. Over the last several years, novel endoscopic approaches to thyroidectomy have been developed because of a growing desire for the establishment of less-invasive approaches throughout the surgical community. The Department of Otolaryngology at the Medical University of South Carolina has several surgeons experienced in endoscopic or minimally invasive surgical methods for treating thyroid disease.

Minimally invasive thyroid surgery can be performed in various ways. The most popular technique is the 'minimally invasive video-assisted thyroidectomy' (MIVAT), which has been developed, refined and popularized in Italy and Japan, and has more recently been established in the United States. The procedure requires a small central neck incision and uses external retraction. Special endoscopes and instruments are then used to dissect the thyroid and remove it. With this technique both small benign nodules and small thyroid malignancies can be removed.

Minimally invasive procedures typically involve smaller neck incisions compared with conventional thyroidectomy and, as such, tend to demonstrate improved cosmesis. In addition there is reduced postoperative pain, and shortened hospital stays. In fact the procedure can usually be performed as an outpatient. Importantly, complication rates have been similar to those found in open procedures. Overall, this is an excellent treatment method for many patients with thyroid nodules.
What is “Silent Reflux?”
Ashli K. O’Rourke, M.D.
Specialist in Laryngology (Voice & Swallowing)

“Classic” Gastroesophageal Reflux
Gastroesophageal reflux (GER) occurs when acidic stomach contents travel backwards from the stomach into the esophagus. GER often occurs after laying down or in response to “spicy” foods. It is most often due to incomplete or weak closure of the lower esophageal sphincter (LES). The refluxed stomach contents in GER tend to sit in the lower esophagus for an hour or more before being cleared, causing “classic” symptoms such as heartburn, nausea, dyspepsia, and/or belching.

Extra-ESophageal Reflux or “Silent” Reflux
A different type of reflux occurs when stomach contents travel quickly up through the entire esophagus and spill into the throat. This type of reflux is known as “laryngopharyngeal reflux” or “extra-esophageal reflux (EER).” This type of reflux often occurs during the day and is thought to be related to transient relaxations of the LES. The tissues in the larynx (voice box), pharynx (throat), and back of the nasal passages are very sensitive to EER because they lack the buffers and barriers to acid that esophagus has developed. EER is sometimes called “silent reflux” because it is often not accompanied by the classic symptoms we see in GER, primarily heartburn.

Extra-ESophageal Reflux Symptoms

- Hoarseness
- Trouble swallowing
- Post-nasal drip
- Increased mucous production
- Lump in throat
- Throat clearing
- Sore throat
- Wheezing
- Cough

However, “silent” reflux is not really silent. The symptoms of EER are numerous and vary from patient to patient. Symptoms include hoarseness, trouble swallowing, increased mucous or post nasal drip, a feeling of a lump in the throat, chronic throat clearing, sore throat, wheezing and/or cough.

The Implications of Extra-ESophageal Reflux
It is important to treat EER to avoid damage caused by long term irritation of the tissues of the pharynx and larynx. Over time, this long term inflammation may cause narrowing of the area below the vocal folds, ulcers, and possibly increase the risk of laryngeal cancer (although this is somewhat controversial). Some studies have also shown an association between the atypical symptoms, especially cough, seen in EER with changes in the lining of the esophagus. These changes, such as esophagitis or Barrett’s esophagus, could eventually lead to stricture formation or, in rare cases, cancer. In addition, EER can worsen pre-existing conditions such as chronic sinusitis, emphysema or asthma.

Diagnosis of EER
Oftentimes, the symptoms a patient displays can lead a doctor to make the diagnosis of EER. The first step, after suspicion that EER is occurring, is often a trial of antacid medications. If medications are not effective in treating EER symptoms, further testing is needed. A physician may perform a laryngoscopy to view the larynx and pharynx to look for signs of acid damage. Laryngoscopy is a simple and quick in-office procedure that uses a camera on the end of a flexible scope to view the nasal passages, pharynx, and larynx. It is well tolerated by most patients and does not require any sedation. Signs of acid damage that may be seen on laryngoscopy include thick secretions, swelling (edema), redness, and in extreme cases ulcers or inflammatory growths. (Figure 1)

A pH-impedance probe is the current “gold standard” for the diagnosis of EER. This examination is completed by inserting a small flexible catheter through the nose and into the stomach. The catheter is taped in place to the nose and the patient wears a device that detects any reflux from the stomach for a 24 hour period.

Sometime a radiologic test known as a barium swallow (or esophagram) is ordered. This examination consists of swallowing barium while a radiologist uses fluoroscopy (like a moving X-ray) to evaluate the esophagus. The radiologist may perform a laryngoscopy to view the larynx and pharynx to look for any reflux from the stomach for a 24 hour period.

Conclusion
Extra-esophageal reflux is often mistakenly called “silent” reflux, but can cause numerous bothersome, and sometimes serious, symptoms. Any person with symptoms lasting more than a few weeks should be evaluated by their physician. There are many options to control reflux and alleviate the effects of EER to avoid long term complications.

Treatment of EER
It is essential that patients with EER and/or GER make certain diet and lifestyle changes to help reduce the occurrence of acid reflux. In many cases, these modifications are all that is needed to control EER. Changes that are helpful are weight loss, eating smaller meals, and limiting foods that promote reflux and/or reduce LES tone. Patient should also avoid tight clothing around the stomach and not lay down immediately after eating. Elevating the head of the bed with a wedge under the mattress or blocks under the bed frame is also helpful. Quitting smoking and limiting alcohol consumption are important since both have been shown to decrease LES tone and promote reflux.

The most effective medication for treating EER is a class of drugs called “proton pump inhibitors” (PPIs). Some common PPIs include omeprazole, esomeprazole, lansoprazole and pantoprazole. PPIs are potent acid reducers and work directly on the acid pumps in the stomach. PPIs are best taken at least one half-hour before eating because they are most helpful in suppressing meal time acid production. Depending on the severity of symptoms, these medications can be prescribed for once daily or twice daily use. PPIs may be contraindicated in some patients; specifically those on certain blood thinners, with a history of osteoporosis, or difficulty with low magnesium levels in the blood. A physician should be consulted before beginning any PPI medication.

If medications are not successful in controlling symptoms and testing confirms EER, surgery may be considered to “strengthen” the LES. Since all surgical procedures carry some risk, this is often reserved for the most refractory cases.
Most adults are familiar with getting a poor night’s sleep from time to time and the effects this can have on us. In recent years the importance of proper sleep in children has become a major topic of discussion and research. There are many factors that can influence the sleeping habits of children. As with adults, poor sleep in children can lead to daytime symptoms. There’s an old saying that children are not just little adults, and this holds true when it comes to sleeping problems as children often have unique issues that interfere with proper sleep.

**Poor Sleep Hygiene**
A good night’s sleep often starts before the child has even gone to bed. Regular bedtimes are important for children and should be encouraged in the home, even on weekends. This is sometimes hard to accomplish with busy work schedules and lots of activities at school. Young school-aged children need more sleep than adults do; think somewhere around 10 ½ hours per night, so getting the proper amount of sleep is really critical. Another factor to consider is whether the child actually goes to sleep once they are put to bed. Over the last several years the availability of handheld electronics and other devices has allowed children to play games, talk with their friends or go online when their families think they are sleeping. Many children also have televisions in their rooms which can certainly interfere with getting to sleep at the proper time. Limiting usage of these devices can help ensure that children are getting to sleep on time.

**Obstructive Sleep Apnea**
Obstructive sleep apnea has long been a recognized medical problem in adults. More recently it has been shown to be a common childhood disease as well. People with obstructive sleep apnea will have events during the night when their breathing becomes reduced or even stops for short periods of time. In children, nighttime symptoms of sleep apnea can include loud snoring, witnessed pauses in breathing (apneas) that last several seconds, gasping/choking spells, frequent episodes of waking up and even bedwetting. During these events, the child is trying to breathe but is having difficulty. These repetitive events prevent the child from getting a restful sleep. This very often leads to daytime symptoms which become most noticeable when the child is in school. Certainly some children are just tired. They are difficult to wake up in the mornings and will fall asleep easily either in school or in the car ride back and forth from home. Other children will actually become hyperactive and seem to have too much energy. They may have difficulty paying attention in school and grades may suffer. Obstructive sleep apnea is felt to hurt school performance.

Fortunately, for many children, sleep apnea is caused by enlargement of the tonsils (located in the back of the throat), adenoids (located in the back of the nose) or both (see Figure). This tissue becomes enlarged and basically takes up space in the child’s throat that makes it difficult to breathe during sleep. Children who have symptoms of sleep apnea and are found to have large tonsils/adenoids may warrant referral to an Ear, Nose & Throat (ENT) specialist for further evaluation.

Another risk factor for sleep apnea in children is being overweight or obese. The rates of childhood obesity have essentially tripled over the last several decades. The relationship between being overweight and developing sleep apnea is more complicated that we initially thought but being overweight/obese definitely increases a child’s risk of having sleep apnea. If your child is overweight and has some of the symptoms described above, you should talk to your primary care provider and consider seeing an ENT physician.

Getting proper sleep is critical for the developing child. Many children in this country do not get the recommended amounts of sleep. There are some simple things you can do at home to help ensure that a child gets proper rest. Sleep apnea is a medical condition that is fairly common in children. Overweight/obese children are at increased risk of developing sleep apnea. If your child has symptoms of sleep apnea, referral to an Ear, Nose & Throat specialist may be recommended.
One out of ten Americans experience significant, permanent and irreversible hearing loss that interferes with daily communication and this statistic rises to 1 out of 3 for those over 60. Because hearing loss is an expected part of aging, it is considered an inevitable condition that we simply tolerate. However, this condition often has a significant impact on interpersonal relationships, psychological and social well-being, and on other health issues as well. Fortunately, permanent hearing loss can be successfully managed with the use of hearing aids, effective listening strategies, and assistive listening devices.

**Current Trends in Hearing Aid Technology**
The first electric hearing aids became available at the beginning of the 20th century and the technology advanced into a digital platform by the century’s end. The transition to digital hearing aids has facilitated rapid and significant advances in both form and function. In addition to the traditional in-the-ear and behind-the-ear styles, the innovative designs of modern hearing aids include the IIC (invisible-in-the-canal) and the receiver-in-the-ear (RITE) styles. These offer inconspicuous options for the current technologies available. The RITE design is responsible for the resurgence in behind-the-ear hearing aids and offers great flexibility and comfort in a cosmetically appealing design.

Because of the advancements of digital technology, the current standard features in today’s hearing aids include effective feedback elimination, directional microphones for improved hearing in noise, advanced signal processing for noise cancellation and wireless connectivity to electronics. For example, hearing can now function as wireless such as telephones/cell phones and television, allowing hearing aids to function like a wireless headset. The newest technology advances provide communication between hearing aids to allow the left and right hearing aids to act as one unit versus two separate systems. This provides the most accurate representation of a listening environment and maximizes the power of directional microphones to enhance processing of speech information in noisy environments.

**Foundation to Successful Hearing Aid Use**
Advancements in technology allow great flexibility in delivering a hearing aid that is customized to a person’s hearing loss, listening needs and design preferences. Choosing a hearing aid that provides maximum comfort and benefit requires consideration of multiple factors relative to each individual and the process does not lend itself to an “off-the-shelf” purchase based on hearing test results alone. Identifying specific hearing needs, physical challenges for hearing aid use and personal preferences are as essential as the results of the hearing test when considering the design and hearing aid technology that will provide maximum benefit to an individual. The smallest hearing aid or the most advanced features do not always equal better performance.

Another key factor that is essential for the success with hearing aids is the consistency of use. It is well documented that the ears and brain need exposure and time to properly adapt to amplification. It is necessary to follow-up during the initial fitting of a new hearing aid in order to fine-tune the features and settings as the auditory system adapts to new sounds. Communication with the audiologist regarding satisfactory and less than satisfactory experiences with your newly fit hearing aids is a necessary component of the fitting process to ensure the hearing aid settings and features are maximized for each patient.

**MUSC Audiology Services**
A full complement of hearing aid technology by several manufacturers, accessories, and custom ear molds for hearing protection are available as part of the comprehensive diagnostic and treatment services provided at MUSC Audiology clinics. You can expect to review your hearing test results, discuss your listening needs and strategies to maximize communication, and determine the assistive and hearing aid technologies most suitable to your individual needs during an evaluation or hearing aid discussion appointment with one of our nationally certified and state licensed audiologists. As part of the standard service offered at MUSC, all hearing aids and accessories have a 60-day return period, a 2 year repair warranty for hearing aids, and the first year of batteries are included with hearing aid purchase. MUSC accepts many of the insurance plans that offer a hearing aid benefit as well as other third party payers including Department of Labor and Office of Vocational Rehabilitation. Financing is available with approved application. Hearing aids dispensed at MUSC are fit using the latest evidenced-based practices with consideration of individual needs and preferences. MUSC Audiology is changing what is possible in hearing health care.
Whether your health needs are routine or complex, you can be assured of receiving exceptional, timely care in one of our four offices, Rutledge Tower, Hollings Cancer Center, MUSC Health East Cooper, and North Charleston Specialty Care. We look forward to serving you with compassion, efficiency and excellence.

To all of our current and future patients, we say “Thank You” for the confidence you place in our team of 18 specialists. Your health is our priority.

Paul R. Lambert, M.D.
Paul R. Lambert, M.D., Professor and Chair
Department of Otolaryngology – Head & Neck Surgery, Medical University of South Carolina

Timely Appointments!

For urgent ENT problems, we realize that promptly seeing a specialist is extremely important to you or your family member. If you call our scheduling desk at 843-792-3531 and explain that your problem is urgent, we will see you the same day (or within 24 hours) at one of our four locations: Rutledge Tower, Hollings Cancer Center, MUSC Health East Cooper, and North Charleston Specialty Care.

By providing exceptional and timely care, we are indeed “Changing What’s Possible.”

Whether your health needs are routine or complex, you can be assured of receiving exceptional, timely care in one of our four offices, Rutledge Tower, Hollings Cancer Center, MUSC Health East Cooper, and North Charleston Specialty Care. We look forward to serving you with compassion, efficiency and excellence.