

Small Incision Thyroid and Parathyroid Surgery

Minimally invasive thyroid and parathyroid surgery offers smaller incisions and more rapid recovery to patients with thyroid and parathyroid growths requiring removal. Dr. Edmund Pribitkin and Dr. David Rosen at the Thomas Jefferson University Hospital introduced these procedures to the Delaware Valley over two years ago and have pioneered outpatient surgical treatment of selected thyroid and parathyroid disorders.

The thyroid is a butterfly shaped gland overlying the voicebox and windpipe. The thyroid produces the thyroid hormone, which controls the body's metabolism. Growths (nodules) can arise within the thyroid gland and at least 5% of these nodules will harbor thyroid cancer. The incidence of thyroid nodules is greater in women and increases with age. Although most thyroid nodules are "silent," some can present with pain, tenderness, changes in the voice or difficulty swallowing. Women can perform a thyroid neck check monthly (http://www.thyroidawareness.com/images/neck_check.pdf) much as they would a self-breast exam. Advances in ultrasound and magnetic resonance imaging techniques have also increased the likelihood that these nodules will be discovered when they are small in size. Earlier detection of these nodules typically leads to earlier identification of nodules suspicious for cancer and earlier definitive treatment. At Jefferson's thyroid treatment center (215-955-1925), a multidisciplinary team headed by Dr. Jeffrey Miller evaluates patients with thyroid difficulties and reviews their diagnostic and treatment options.

In the past, patients undergoing thyroid surgery typically received 6-8 cm incisions in their neck, had drains placed, and stayed at least overnight in the hospital. In 1997, Dr. Micoli of Pisa, Italy developed minimally-invasive thyroid surgery


using incisions of 3-3.5 cm without the use of drains. Building upon their extensive research experience in endoscopic head and neck surgery, Dr. Edmund Pribitkin and Dr. David Rosen of Thomas Jefferson's Department of Otolaryngology-Head and Neck Surgery (215-955-6760) introduced a modified, minimally invasive thyroid surgery technique to the Delaware Valley over two years ago. Over two hundred patients have benefited from this new procedure. "Smaller incisions do not mean less visualization or increased risks," Dr. Pribitkin emphasizes. "We employ state of the art monitoring systems to protect the vocal nerves during surgery and advanced endoscopic and non-endoscopic surgical techniques. Our patients typically recover more quickly than similar patients undergoing traditional procedures and do so with less bruising and discomfort." Drs. Pribitkin and Rosen encourage patients undergoing removal of only a portion of the thyroid to go home the same day. Even large thyroid masses can often be managed through surprisingly small incisions in select cases.

The doctors at Thomas Jefferson's Department of Otolaryngology-Head and Neck Surgery have also used small incisions for the removal of parathyroid growths. The four parathyroid glands are located on either side of the thyroid and control the body's calcium levels.

When one or more of these glands become overactive, the body's calcium levels rise and can cause changes in bone density, the development of kidney stones, abdominal pains and trouble concentrating. New radionuclide and ultrasound imaging techniques help pinpoint which of the four glands are to blame and enable their safe removal through small incisions. Confirmation that the correct gland has been removed is accomplished while the patient is asleep through rapid evaluations of parathyroid hormone levels or with the use of radionuclide guided probes.

Again, many patients return to home on the same day as surgery.

The Thomas Jefferson University Department of Otolaryngology-Head & Neck Surgery's (925 Chestnut Street, Sixth Floor, Philadelphia, PA 19107, (215) 955-6760) commitment to advancing the

treatment of thyroid and parathyroid diseases is reflected in its research mission. In association with researchers at the Kimmel Cancer Center and their colleagues at the University, Dr. Pribitkin, Dr. Keane, Dr. Rosen and Dr. Cognetti have co-authored papers on the genetic origins of thyroid cancer, the treatment of advanced thyroid cancer and the potential application of ultrasound guided contrast agents to trace the routes of spread of thyroid cancer. Jefferson hosted the area's first regional Thyroid Symposium in April 2007, which was attended by over 120 physicians representing medical and surgical specialties throughout the east coast. As demonstrated by its introduction of minimally invasive thyroid and parathyroid surgery to Philadelphia, Jefferson's ongoing tripartite mission of outstanding clinical care, innovative research and progressive medical education continues to bring the practical benefits of its academic accomplishments to patients throughout the region. 



Dr. Rosen demonstrating successful removal of a parathyroid adenoma through a one inch incision.



Actual healing thyroid incision one month following surgery.



William Keane, MD
Chairman and Professor



Edmund Pribitkin, MD
Professor



David Rosen, MD
Associate Professor



David Cognetti, MD
Assistant Professor

Traditional Thyroid Surgery

- 6-8 cm incision
- drains in neck
- overnight stay
- prolonged soreness, bruising
- nerve monitoring

Minimally Invasive Thyroid Surgery

- 3-3.5 cm incision
- no drains in neck
- same day discharge in most cases
- rapid recovery
- nerve monitoring