Dear Colleagues:

The Cleveland Clinic was founded in 1921 with a vision of integrating the highest quality patient care with advanced medical research and education. In its early years, a large part of the Clinic’s practice involved the treatment and management of thyroid disease, and many of our physicians and scientists made important contributions to thyroid disorders.

Cleveland Clinic co-founder and surgeon George Crile Sr., described the classic procedure of radical neck dissection in order to remove the cervical lymph nodes for examination and treatment. Today, to minimize cosmetic and functional morbidity, selective neck dissection is used whenever possible. Throughout his career, Dr. Crile specialized in the surgical management of thyroid disease. He performed more than 25,000 thyroidectomies, and he authored a book on thyroid treatment. By 1927, Clinic surgeons were performing an average of 10 thyroidectomies each day, and the mortality rate for the procedure was the lowest ever reported during that time.

In 1922, U. V. Portmann, M.D., was appointed director of radiation therapy at the Clinic. He became nationally known and wrote extensively on the measurement of radiation dosage and its use in treating thyroid and breast cancer.

In the 1930s, D. Roy McCullagh, Ph.D., became a pioneer in the measurement of thyroid function through iodine levels in the blood. He and his brother, Clinic endocrinologist E. Perry McCullagh, M.D., collaborated in the research of pituitary and sex hormones.

The integration of care, research and education – the three cornerstones of our practice today – serves as the driving force behind numerous medical innovations and “world firsts” that our physicians and researchers continue to pioneer. Our mission today is the same as it was nearly a century ago, but our tools have become more sophisticated and disease management even more complex. With the right mix of collaborative expertise, we hope to achieve the best outcomes for our patients.

Sincerely,

S. Sethu Reddy, MD, MBA, FRCPC, FACP, FACE
Chairman, Department of Endocrinology, Diabetes and Metabolism

To refer patients to the Department of Endocrinology, Diabetes and Metabolism, call 216/738-4567.
Thyroid cancer is relatively rare: On average, Cleveland Clinic’s Thyroid Cancer Clinic sees 100 new patients a year; in the U.S., only about 20,000 new cases of thyroid cancer are diagnosed each year.

“That’s between 1 and 2 percent of all cancers,” says Adi Mehta, M.D., in the Cleveland Clinic Department of Endocrinology, Diabetes & Metabolism. “The best prognosis for people with thyroid cancer is for those in their 20s, 30s and 40s. Its aggressiveness increases significantly in older patients, so for them it tends to have a poor prognosis.”

The Thyroid Clinic team is made up of seasoned endocrinologists, nuclear medicine specialists, pathologists, otolaryngologists and general surgeons experienced in thyroid surgery. The multidisciplinary team approach among the members, all of whom are board-certified in their specialties, helps ensure successful patient outcomes.

The Cleveland Clinic offers the latest advances in thyroid function analysis, cancer diagnosis, and medical and surgical treatments. Patients also have access to IRB-approved clinical trials of new therapies.

Clinical assessment of thyroid cancer requires more than palpation, particularly with occult nodules. Diagnosis is determined through thyroid uptake blood tests, radioactive thyroid scans, fine-needle aspiration biopsy, and Doppler ultrasound imaging, which enables physicians to look at the amount and pattern of blood flow to offer more definition and more discretion in determining diagnosis, says Dr. Mehta.

Clinic pathologists assess thyroid function and play a critical role in determining risk for recurrence based on microscopic characteristics and genetic testing.

Patients (and their referring physicians) have results of tests, scans and biopsies in three to five days, and if papillary, follicular, medullary or anaplastic thyroid cancer is diagnosed, patients are staged and, where appropriate, fast-tracked to a surgeon who specializes in minimally scarring surgery (lobectomy or thyroidectomy).

“One of the beauties of this multidisciplinary clinic is how ‘well-oiled’ the system is. We are able to fast-track the people who need to be fast-tracked. Because thyroid cancer is as much a psychological as a physiological problem - no one wants to walk around with cancer cells in their body - that brings patients real solace,” says Dr. Mehta.

Nuclear medicine specialists perform diagnostic imaging to calculate and administer ablative or therapeutic I-131 doses (primarily as an outpatient procedure). They also routinely perform post-therapy scans to determine the effectiveness of I-131 therapy as well as to determine the extent of disease. In those few cases where the thyroid cancer is non-iodine avid, other radiopharmaceuticals (e.g., TI-201, Tc-99m Sestamibi) and sometimes PET scanning with F-18-labeled FDG are used to evaluate patients.

The most recent surgical innovation in thyroid cancer management is selective neck dissection. Used primarily in the management of large neck metastases, the technique minimizes the cosmetic and functional morbidity associated with radical neck dissection. Individuals with recurrent laryngeal nerve injury have undergone neuronal transfer and laryngeal framework surgery at The Cleveland Clinic with excellent results. Clinic surgeons currently are evaluating the efficacy of limited incision surgery using probe localization for parathyroids.

Post-surgery, a higher-dose radioactive iodine treatment and chemotherapy may be indicated to destroy any remaining malignant thyroid cells as well as to reduce risk of recurrence. TSH suppression therapy also is prescribed to discourage recurrence. Routine cancer marker testing is performed by the team’s pathologists as part of post-surgical follow-up to ensure early detection of recurrence, which is of paramount prognostic significance for both cure and survival rates following recurrence.

Long-term follow-up, including scanning, thyroglobulin tests and possible treatment, is vital to ensure that patients stay cancer-free. With surgery and follow-up radio- or chemotherapy, survival rates for thyroid cancer diagnosed in adults average 35 years. “With good treatment, people are far more likely to die with thyroid cancer than because of it,” says Dr. Mehta.

To refer patients to the Thyroid Cancer Clinic, call 216/444-6568 or 800/553-5056, ext. 46568.

---

Thyroid Cancer Clinic’s Goal

Positive outcome and peace of mind

“Thyroid cancer is relatively rare: On average, Cleveland Clinic’s Thyroid Cancer Clinic sees 100 new patients a year; in the U.S., only about 20,000 new cases of thyroid cancer are diagnosed each year.

“That’s between 1 and 2 percent of all cancers,” says Adi Mehta, M.D., in the Cleveland Clinic Department of Endocrinology, Diabetes & Metabolism. “The best prognosis for people with thyroid cancer is for those in their 20s, 30s and 40s. Its aggressiveness increases significantly in older patients, so for them it tends to have a poor prognosis.”

— Adi Mehta, M.D., FRCPC, FACE