

Thyroid cancer classic papers

From Sabiston textbook of surgery – online

HISTORICAL PERSPECTIVE

The name thyroid is derived from the Greek description of a shield-shaped gland in the anterior aspect of the neck (*thyreoides*). Classic anatomic descriptions of the thyroid were available in the 16th and 17th centuries, but the function of the gland was not well understood. By the 19th century, pathologic enlargement of the thyroid, or goiter, was described. Iodine-rich seaweed was used to treat this condition. Direct surgical approaches to thyroid masses had frighteningly high complication and mortality rates.

In the late 19th century, two surgeon-physiologists revolutionized treatment of thyroid diseases. Theodor Billroth and Emil Theodor Kocher established large clinics in Europe and, through development of skilled surgical techniques combined with newer anesthetic and antiseptic principles, provided surgical results that proved the safety and efficacy of thyroid surgery for benign and malignant problems. As a result of his pioneering developments in the understanding of thyroid physiology, Kocher received the Nobel Prize in 1909.

The 20th century started with the contributions of Kocher and Billroth. In rapid succession, the understanding of altered physiology, including hypothyroidism, hyperthyroidism, and thyroid cancer, and advances in imaging, epidemiology, and most recently, minimally invasive diagnostic and surgical techniques have taken place. These advances have allowed the diagnosis and treatment of thyroid diseases to become rapid, cost-effective, low-morbidity procedures.

Selected References

Bojaunga J, Zeuzem S: Molecular detection of thyroid cancer: An update. *Clin Endocrinol* 2004; 61:523-530. An excellent update on new molecular biologic techniques for detection of thyroid cancer by FNA or peripheral blood markers. Good discussion of promising research and current pitfalls.

Castro MR, Gharib H: Continuing controversies in the management of thyroid nodules. *Ann Intern Med* 2005; 142:926-931. Good update that includes a discussion of micro nodules and markers for malignancy.

Hartl DM, Travagli JP, Leboulleux S, et al: Clinical review: Current concepts in the management of unilateral recurrent laryngeal nerve paralysis after thyroid surgery. *J Clin Endocrinol Metab* 2005; 90:3084-3088. An excellent discussion of the pathophysiology of surgically induced damage to the external branch of the superior laryngeal and recurrent laryngeal nerves. Must reading for any thyroid surgeon.

Hay ID, Thompson GB, Grant CS, et al: Papillary thyroid carcinoma managed at the Mayo Clinic during six decades (1940-1999): Temporal trends in initial therapy and long-term outcome in 2444 consecutively treated patients. *World J Surg* 2002; 26:879-885. Another excellent Mayo Clinic contribution in the area of thyroid cancer that possibly represents the longest study of this cancer. It confirms the use of more extensive resection and postoperative radioablation and substantiates their data with 50 years of follow-up.

Hermus AR, Huysmans DA: Treatment of benign nodular thyroid disease. *N Engl J Med* 1998; 338:1438-1447. An excellent update on the diagnosis and treatment of solitary nodules, multinodular goiter, and nontoxic and toxic nodules. This paper has 77 references and is based on the authors' extensive experience in the field.

Hundahl SA, Cady B, Cunningham MP, et al: Initial results from a prospective cohort study of 5583 cases of thyroid carcinoma treated in the United States during 1996. *Cancer* 2000; 89:202-217. An excellent update of the U.S. experience compiled by the Commission on Cancer of the American College of Surgeons.

Sabel MS, Staren ED, Gianakakis LM, et al: Use of fine-needle aspiration biopsy and frozen section in the management of the solitary thyroid nodule. *Surgery* 1997; 122:1021-1027. This study was presented at the American Association of Endocrine Surgeons meeting in 1997. It reviewed FNA and frozen section in 561 patients and assessed the accuracy, sensitivity, and specificity of both procedures. The clinical usefulness of FNA was documented.

Schlumberger MJ: Papillary and follicular thyroid cancer. *N Engl J Med* 1998; 338:297-306. An excellent update on the topic, with 93 references. Modern controversies and classic observations are well discussed and presented. The author's experience with 1700 patients is included in the discussion.

Sherma SI: Thyroid carcinoma. *Lancet* 2003; 361:501-511. An excellent seminar on the diagnosis, treatment, and follow-up monitoring of all four cancer groups. This review includes 168 references and excellent discussion.

Wong CKM, Wheeler MH: Thyroid nodules: Rational management. *World J Surg* 2000; 24:934-941. A good review and discussion of workup and management strategies from an internationally known surgical group from Wales, United Kingdom.

Zarnegar R, Brunaud L, Clark OH: Prevention, evaluation and management of complication following thyroidectomy for thyroid carcinoma. *Endocrinol Metab Clin North Am* 2003; 32:483-502. Excellent review of the incidence and management of complications of thyroid surgery

From the Countway Collection

Surgical case-histories from the past / Harold Ellis. Published: London ; New York : Royal Society of Medicine Press, c1994.

Link to this record: <http://hollis.harvard.edu/?itemid=|library/m/aleph|005581280>

Countway Medicine WO 11.1 E47s 1994

Of course you will want to look at the sources referenced by these accounts.

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