

Lancet. 2016 Dec 3;388(10061):2783-2795. doi: 10.1016/S0140-6736(16)30172-6.
Epub 2016 May 27.

Thyroid cancer.

[Cabanillas ME](#)¹, [McFadden DG](#)², [Durante C](#)³.

Author information:

1

Department of Endocrine Neoplasia and Hormonal Disorders, Division of Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA. Electronic address: mcabani@mdanderson.org.

2

Department of Internal Medicine, The University of Texas Southwestern Medical Center, Dallas, TX, USA.

3

Department of Internal Medicine and Medical Specialties, Sapienza University of Rome, Rome, Italy.

Abstract

Thyroid cancer is the fifth most common cancer in women in the USA, and an estimated over 62 000 new cases occurred in men and women in 2015. The incidence continues to rise worldwide. Differentiated thyroid cancer is the most frequent subtype of thyroid cancer and in most patients the standard treatment (surgery followed by either radioactive iodine or observation) is effective. Patients with other, more rare subtypes of thyroid cancer-medullary and anaplastic-are ideally treated by physicians with experience managing these malignancies. Targeted treatments that are approved for differentiated and medullary thyroid cancers have prolonged progression-free survival, but these drugs are not curative and therefore are reserved for patients with progressive or symptomatic disease.

Int J Surg. 2013;11(3):203-8. doi: 10.1016/j.ijssu.2013.01.006. Epub 2013 Jan 23.

Can pre-operative computed tomography predict the need for a thoracic approach for removal of retrosternal goitre?

[Qureishi A](#)¹, [Garas G](#), [Tolley N](#), [Palazzo F](#), [Athanasίου T](#), [Zacharakis E](#).

Author information:

1

Department of Surgery and Cancer, St. Mary's Hospital, Imperial College London, United Kingdom.

Comment in

- [Goitre or "goiter"--a missed opportunity?](#) [Int J Surg. 2014]

Abstract

A best evidence topic was written according to a structured protocol. The question addressed was whether in patients with retrosternal goitre the need for a thoracic approach can be predicted using pre-operative CT. A total of 381 papers were identified using the reported search protocol of which 7 represented the best evidence to answer the clinical question. The authors, journal, date, country of publication, patient group studied, study type, relevant outcomes and results are tabulated. The evidence on this subject is poor, none of the studies were randomised, only one used controls (historical) and all studies were retrospective. Despite these limitations, CT represents the gold-standard imaging modality in the pre-operative evaluation of patients with retrosternal goitre. CT is essential to define the extent and position of a retrosternal goitre. The literature suggests that CT is the single most valuable pre-operative investigation predicting whether a sternotomy or lateral thoracotomy will be necessary for removal of the retrosternal goitre. Although pre-operative CT does not have the precision to predict whether a thoracic approach is required in all cases, the presence of certain radiological features such as extension of the goitre below the aortic arch or into the posterior mediastinum, a dumbbell shape and a thoracic component that is wider than the thoracic inlet are all associated with the need for a thoracic approach. In some cases a pre-operative CT will not only determine that a thoracic approach is mandatory but it will also guide the surgeon upon the type of thoracic approach.

Retrosternal Goiter: 30-Day Morbidity and Mortality in the Transcervical and Transthoracic Approaches.

[Khan MN](#)¹, [Goljo E](#)², [Owen R](#)³, [Park RC](#)⁴, [Yao M](#)², [Miles BA](#)².

Author information:

- 1 Department of Otolaryngology-Head and Neck Surgery, Mount Sinai Medical Center, New York, New York, USA mohammed.khan@mountsinai.org.
- 2 Department of Otolaryngology-Head and Neck Surgery, Mount Sinai Medical Center, New York, New York, USA.
- 3 Department of Otolaryngology-Head and Neck Surgery, Mount Sinai Medical Center, New York, New York, USA Department of General Surgery, Mount Sinai Medical Center, New York, New York, USA.
- 4 Department of Otolaryngology-Head and Neck Surgery, Rutgers New Jersey Medical School, Newark, New Jersey.

Abstract

OBJECTIVE:

Retrosternal goiters pose a significant challenge in determining the indications and appropriate approach for surgical removal while limiting postoperative morbidity and mortality. The objective of this study is to use the National Surgical Quality Improvement Program (NSQIP) database to compare outcomes of transcervical and transthoracic approaches for retrosternal goiter removal and to review the literature regarding the varying indications for the 2 surgical approaches.

STUDY DESIGN:

Administrative database analysis.

SETTING:

NSQIP database.

SUBJECTS AND METHODS:

The NSQIP database was queried for all cases of retrosternal thyroid: 2716 patients were included, which represents one of the largest data reviews of patients with retrosternal thyroid pathology who underwent surgery. Data were analyzed to examine morbidity and mortality of the cervical and transthoracic

approaches.

RESULTS:

Patient demographics and preoperative comorbidities were similar between groups. Patients undergoing a transthoracic approach experienced increased rates of unplanned intubations and need for transfusion and length of stay postoperatively.

CONCLUSIONS:

A transthoracic approach is associated with increased rates of several critical postoperative morbidities, and the data indicate the potential of increased overall mortality. Given equivalent retrosternal extension, a transcervical approach should be attempted whenever anatomically possible, regardless of pathology.