



COMPUTED TOMOGRAPHY

- Between 3% and 17% of goitres extend into the thorax, the majority being in the anterior mediastinum. [7](#)

- The use of contrast agents that contain iodine are best avoided because of the risk of inducing hyperthyroidism.
- Although most patients are asymptomatic with an intrathoracic goitre, compression of the trachea may cause dyspnoea, wheezing or stridor. [9](#)
- CT is generally considered the investigation of choice for the investigation of suspected intrathoracic goitre, particularly because of the limited availability of MRI.
- Most mediastinal thyroid tissue retains a connection to the cervical thyroid gland so images of the neck should also be performed [8](#)
- Before the administration of intravenous contrast the attenuation of thyroid tissue exceeds that of other soft tissues of the neck and this characteristic helps distinguish thyroid masses from other types of mediastinal masses such as lymphoma. [8](#)
- After intravenous contrast administration thyroid tissue usually exhibits early and prolonged enhancement. [8](#)

ULTRASOUND

- Not routinely indicated in patients with a goitre. [10](#)
- However, in selected patients it may be useful to measure the volume of the thyroid gland and any response to treatment. [1](#)
- Various methods of estimating the volume of the thyroid gland with ultrasound have been proposed. [2-4](#)
- Although ultrasound is rarely used for suspected Graves' disease some studies have shown that thyroid vascularity and arterial blood flow are higher in patients with active disease [5,6](#)

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