Radiologists perform a thyroid ultrasound exam to help diagnose a lump in the thyroid or a thyroid that is not functioning properly. The thyroid gland is located in front of the neck just below the Adam’s apple and is shaped like a butterfly, with two lobes on either side of the neck. The thyroid is one of nine endocrine glands located throughout the body.

Typical uses of a thyroid ultrasound exam:

- To determine if a lump in the neck is arising from the thyroid or an adjacent structure.
- To analyze the appearance of thyroid nodules and determine if they are the more common benign nodule or if the nodule has features that require a biopsy.
- To see if a thyroid nodule has substantially grown over time.

Because ultrasound provides real-time images (images that are renewed continuously), it can also be used as a guide through procedures such as needle biopsies, in which needles are used to extract sample cells from an abnormal area for laboratory testing.

There is no special preparation required prior to a thyroid ultrasound exam.