**Risk Factors for Thyroid Cancer:**

Thyroid cancer is the most common type of endocrine cancer. They are classified by histological features, such as pure papillary, mixed papillary-follicular, follicular, and medullary thyroid cancer. Papillary thyroid cancer (PTC) and follicular thyroid cancer (FTC) are often curable with good prognosis for early diagnosis. In contrast, anaplastic thyroid cancer (ATC) is aggressive, responds poorly to treatment, and is associated with bleaker prognoses.

**General Risk Factors:**

* **Sex:** Thyroid cancer more common in women, but higher mortality in men.
* **Age:** thyroid cancer can occur at any age but is most commonly diagnosed between 20 and 55 y/o, wit the median age residing around 50 y/o. ATC usually diagnosed after 60 y/o. MTC can often develop in older infants, especially if they carry the RET proto-oncogene mutation.
* **Radiation exposure:** Exposure of radiation to head and neck, especially in patients born before 1950. Exposure to radioactive fallout, such as Chrenobyl in 1986, also predisposes
* **Genetics:** MEN2 Syndrome is a common hereditary cause of medullary thyroid cancer (MTC). Oncogenes such as the activation of the RET-RAS-BRAF pathway is seen in up to 70% of papillary thyroid cancers (PTC)
* **Low dietary iodine**
* **Race:** more common in white and Asian patient populations
* **Hx of breast cancer:** breast cancer survivors have a higher risk, especially within the first 5 years after diagnosis and those diagnosed at an earlier age.

**SOURCES:**

Mayo Clinic. *Thyroid Cancer.* < <https://www.mayoclinic.org/diseases-conditions/thyroid-cancer/symptoms-causes/syc-20354161>>

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