

Follicular thyroid carcinoma

[Hürthle cell carcinoma](#) (HCC) is an unusual and aggressive variant of the follicular type of differentiated [thyroid cancer](#) (DTC), accounting for less than 3% of DTCs but posing the highest risk of metastasis.

Most patients with follicular carcinoma of the thyroid present with a thyroid mass, but up to 11% of patients present with the first presentation with distant metastases, such as bone pain, fracture, or a pulsatile mass in soft tissue ¹⁾. In contrast to [papillary thyroid carcinoma](#), the main mode of spread in patients of follicular carcinoma is hematogenous (predilection sites being bone and lung) rather than lymphatic ²⁾.

Follicular thyroid carcinoma skull metastases

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As advanced therapies allow cancer patients to live longer, disease failure in the central nervous system increases from limited therapeutic penetration. Primary thyroid malignancies rarely metastasize to the brain and have a small number of investigations in the literature on the subject. The majority of brain metastases involve the brain parenchyma, reflecting the mass and blood distribution within the brain and central nervous system. Here, we report two cases of the most common differentiated thyroid cancers; [follicular thyroid carcinoma](#) having brain involvement from extra-axial growth and [papillary thyroid carcinoma](#) having brain involvement from a single intraventricular metastases, presumed as a metastases from the vascular choroid plexus. Both of our cases had widespread systemic involvement. For our follicular thyroid cancer, brain involvement was a result of extra-axial growth from calvarial bone, and our papillary thyroid cancer had brain involvement from a single intraventricular metastases that was initially resected and nearly a year later developed extensive brain involvement. Unlike the usual gray-white junction metastases seen in the majority of metastatic brain tumors, including thyroid, our cases are uncommon. They reflect differences in tumor biology that allows for spread and growth in the brain. Although there is growing genetic knowledge on tumors that favor brain metastases, little is known about tumors that rarely involve the brain ³⁾.

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