

## **NONINVASIVE ANAPLASTIC THYROID CARCINOMA: REPORT OF A CASE AND LITERATURE REVIEW**

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**Background/Purpose:** Anaplastic thyroid carcinoma (ATC) is an uncommon thyroid malignancy. Noninvasive (encapsulated) ATC is a rare, surgically resectable variant with only four reported cases. The recently published American Thyroid Association (ATA) Guidelines for Management of Patients with ATC did not include this specific form of ATC. We propose that it may be useful to consider noninvasive ATC as a separate disease entity from the traditional highly lethal form of ATC.

**Methods:** An 81-year old man, previously irradiated for a cervical skin cancer, was diagnosed with a 3.1 cm pathologically proven ATC of the right thyroid lobe. Preoperative imaging revealed an encapsulated thyroid tumor without evidence of invasion of surrounding structures or either cervical or systemic metastases.

**Results:** The patient underwent a total thyroidectomy for this noninvasive ATC. No adjuvant therapy was given. At 6 months following diagnosis he remains disease free based on PET CT imaging.

**Discussion & Conclusion:** A review of the outcomes of similar cases reported in the literature, as well as observations from our case suggest a favorable prognosis for patients with noninvasive ATC.

Noninvasive ATC may represent a distinct subset of resectable ATCs with an improved prognosis. Future studies separating noninvasive (encapsulated) ATC from invasive ATC may help further stratify prognostic groups and therefore alter the staging system for ATC, impacting the extent of surgery and need for adjuvant therapy. Clinicians must therefore be aware of this ATC variant, its prognostic implications, and the role of adjuvant therapies in its management.