An older man presented with a thyroid mass. The tumor was resected and showed a primary squamous cell carcinoma of the thyroid, which is now classified as anaplastic thyroid carcinoma, squamous cell carcinoma pattern.

What is the most accurate statement regarding this tumor?

a. Anaplastic thyroid carcinomas are the most common type of thyroid carcinoma
b. Anaplastic thyroid carcinomas are never diagnosed concurrently with or subsequent to well-differentiated thyroid carcinoma
c. Anaplastic thyroid carcinomas are a subtype of medullary thyroid carcinoma
d. Anaplastic thyroid carcinoma is a rare and almost uniformly fatal follicular cell–derived thyroid carcinoma

(see page 1585 for answer)
Answer: d. Anaplastic thyroid carcinoma is a rare, almost uniformly fatal follicular cell—derived thyroid carcinoma.

Anaplastic thyroid carcinoma can have a variety of histologic patterns. Squamous cell carcinoma of the thyroid was previously listed separately in the World Health Organization tumor classification; however, it is now regarded as a subtype of anaplastic thyroid carcinoma and classified by the World Health Organization as anaplastic thyroid carcinoma, squamous cell carcinoma pattern (Figures 1 and 2). Similar to other histologic types of anaplastic thyroid carcinoma, squamous cell carcinoma phenotype confers a poor prognosis. Anaplastic thyroid carcinoma often has BRAF p.V600E mutation with a history of or concurrent papillary thyroid carcinoma or other differentiated thyroid carcinomas. RAS and BRAF p.V600E are considered early driver mutations and TP53 and TERT promoter mutations are late events in the pathogenesis of anaplastic thyroid carcinoma.

REFERENCES