Oncocytoma

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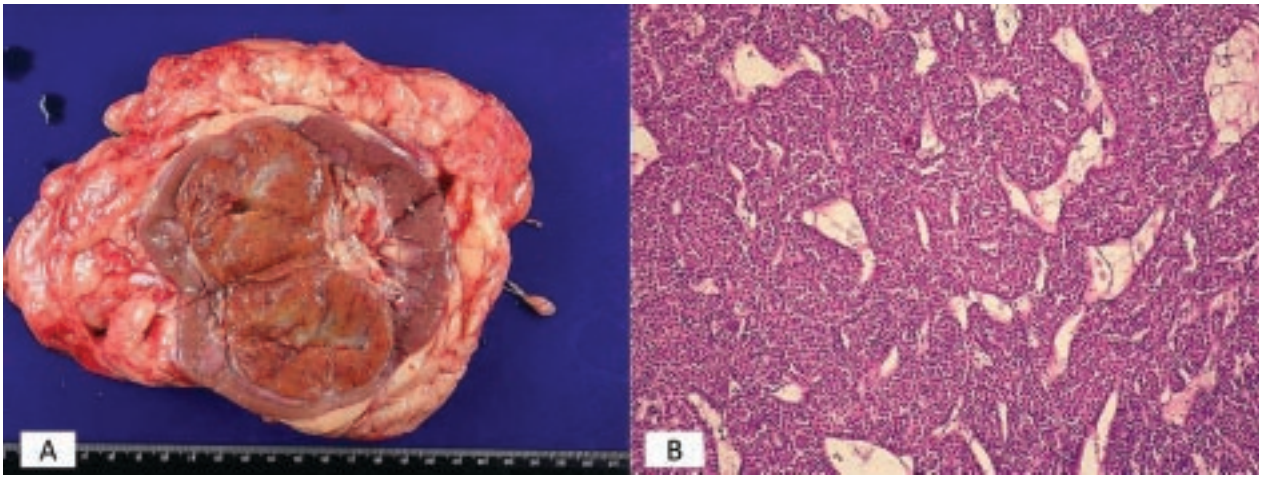

Fig. 1. (A) Grossly, one well defined, brownish mass with a central scar. (B) Histopathology shows round-to-polygonal cells with an eosinophilic cytoplasm arranged in a trabecular pattern (HE ×400).

A 63-year-old man had gross hematuria for one week. He visited our hospital where renal computed tomography (CT) scan showed a homogenous 5.5 cm x 5 cm mass in the left upper kidney. A nephrectomy was performed. Grossly, one well-defined, 5.5 cm x 5 cm x 5 cm brownish mass with a central scar occupied the left upper kidney (Fig. A). Histopathology showed uniform round large cells with a prominent eosinophilic cytoplasm arranged in a trabecular pattern, which was diagnosed as an oncocytoma (Fig. B). Oncocytoma comprises approximately 5% of all neoplasms of the renal tubular epithelium in surgical series. The peak age incidence is in the seventh decade of life. Males are affected nearly twice as often as females. Most occur sporadically. The majority of patients are asymptomatic at presentation with discovery occurring during radiographic examination of unrelated conditions. Few patients present with hematuria, flank pain or a palpable mass. The tumor cells are round-to-polygonal with a densely granular eosinophilic cytoplasm. Ultrastructural examination shows these tumor cells contain numerous mitochondria consistent with an origin in the intercalated cells. Renal oncocytomas are benign neoplasms with an excellent prognosis.

FURTHER READING

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