CASE REPORT

A retroperitoneal gastrointestinal schwannoma presenting as a perinephric mass

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There are less than 100 cases of retroperitoneal schwannoma reported in the world literature. These are differentiated from gastrointestinal schwannomas found in the gastrointestinal tract. A case of a rare retroperitoneal gastrointestinal schwannoma presenting as a perinephric tumor is described. Treatment of such masses is local excision and final diagnosis is from histopathology.

Key Words: schwannoma, retroperitoneal tumor

Case report

A 51-year-old woman complaining of epigastric pain was found to have an 8 cm x 6.5 cm x 6 cm hypoechoic mass adjacent to the lower pole of the left kidney on abdominal ultrasound. Imaging with computed tomography and MRI displayed a solid heterogeneous mass medial to the left kidney Figure 1. Imaging suggested the mass did not invade the left kidney or adrenal gland. A metabolic evaluation for pheochromocytoma was negative. Serum hemoglobin, creatinine, CA125, CEA, and liver function tests were all within normal limits. The patient was consented for resection of the undiagnosed retroperitoneal mass with the working diagnosis of sarcoma.

She underwent an uneventful resection of the retroperitoneal mass sparing the left kidney and adrenal gland using a mid-line approach. The final pathology was a retroperitoneal schwannoma with some histologic elements consistent with a schwannoma of gastrointestinal origin. The specimen contained a peritumoral lymphoid cuff and stained positively for S-100 protein and glial fibrillary acid protein (GFAP) Figure 2. Panendoscopy of the GI tract was normal.

Discussion

Gastrointestinal schwannomas are rare tumors that are differentiated from GI stromal tumors (GIST). GI schwannomas are typically found in the stomach, rarely in the colon or esophagus, and only recently have been reported in the retroperitoneum.[1-3] The first

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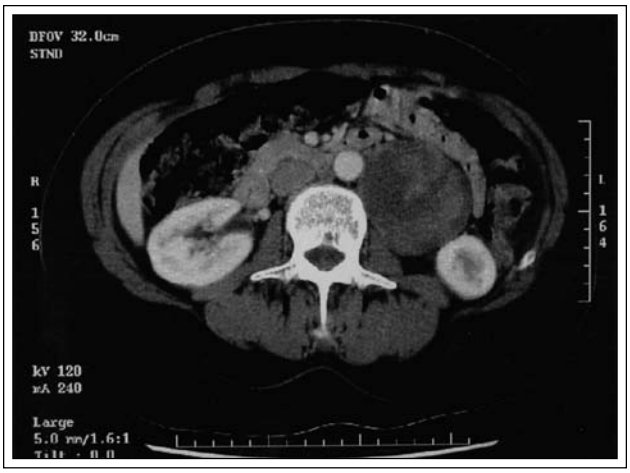

Figure 1. Computed tomography scan identifying a heterogeneous retroperitoneal mass adjacent to the lower pole of the left kidney.

report of 24 patients with GI schwannomas was in 1988. The stomach was the primary location in 23 patients and the ascending colon in one patient.[2] There are less than 100 cases of retroperitoneal schwannoma reported in the world literature.[1]

Patients most often present with an incidental mass found on imaging. Less commonly, patients present with symptoms such as epigastric pain, dyspepsia, dysphagia, or nausea. Treatment of the mass is local excision. Final diagnosis relies on histopathology. Complete local excision requires no further treatment as there have been no reports of recurrence.[3] All reported cases in the literature stained positive for both S-100 protein and GFAP and displayed benign nuclear atypia characterized by various shapes and sizes of nuclei.

Upper GI endoscopy and colonoscopy is recommended to rule out any GI source of tumor, as these schwannomas must be differentiated from other spindle-cell tumors or malignancies. Urologists should keep in mind that retroperitoneal tumors may be a schwannoma of gastrointestinal origin which portend an excellent prognosis after local excision. □

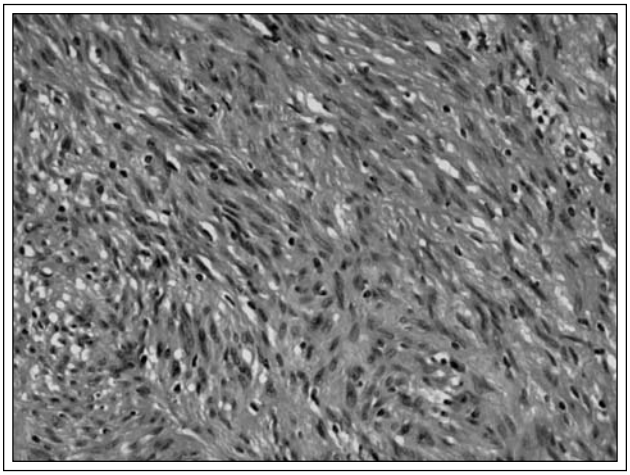

Figure 2. H&E stain displaying cellular spindle-cell neoplasm with distinct fascicular pattern. (X20)

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