Benign Retroperitoneal Schwannoma: A Rare Case Report.

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Abstract: The occurrence of massive retroperitoneal schwannomas are extremely rare and their presence may be identified on cross sectional imaging or by insidious onset of non-specific and misleading symptoms with a predominance of lower back pain. They generally reach large proportions before producing such symptoms due to mass effect. Diagnosis is based on histopathologic examination and immunohistochemistry. Here we report the case of a large retroperitoneal mass in an 18 year old boy, that was excised in toto, which can sometimes be difficult due to the close proximity of the presacral venous plexus.

INTRODUCTION

Schwannomas (also called neurilemmas on neurinomas) are benign tumors that arise from the neural sheath Schwann cells. They may occur nearly anywhere in the body and comprise 6% of primary retroperitoneal neoplasms. Retroperitoneal location is much less common than cranial or extremity location. Among all schwannomas, only 0.7% benign and 1.7% malignant ones are reported to be located in the retroperitoneal region. As they are well demarcated by a thick capsular lining and not growing invasively, local excision is considered the treatment of choice. Retroperitoneal schwannomas are usually found in the paravertebral space or presacral region.

CASE REPORT

This 18 year old boy presented with history of lower abdominal pain and heaviness associated with increased frequency of stools. The symptoms were increased upon consumption of meals. General physical examination was grossly unremarkable. The abdomen was soft and non tender with a palpable soft, well defined, non tender, non mobile mass in the suprapubic region which did not fall forward in the knee elbow position. There was no apparent lymphadenopathy. On per rectal examination, the lower portion of the mass was palpable as a soft well defined mass. The rectum was not involved. There was no neurological deficit. Dual phase CT scan of the abdomen revealed a well defined, rounded, mainly solid, isodense mass with heterogenenous enhancement post contrast; measuring 7.7 x 7.3 x 6.4 cm in the midline lying in the pelvic cavity. The mass was seen to extend from the level of the bifurcation of the aorta till the superior dome of the urinary bladder; displacing the bowel loops and the right iliac vessels, but preserving the fatplanes between them and the mass. The patient underwent an exploratory laparotomy with excision of the mass. Intra-operatively, the mass was adherent to the sacrum towards the right side displacing the right iliac vessels laterally. Rest of the abdominal viscera was grossly normal. Histopathological examination revealed a moderately cellular tumour composed of spindle shaped cells arranged in bundles, fascicles and haphazardly; with bland oval to elongated nuclei and moderate eosinophillic cytoplasm blending with intercellular collagen fibrils. No atypia or increase in mitosis was noted. On immunohistochemistry the tumor cells were strongly positive for S-100; negative for Desmin and SMA with a low Ki67 proliferative index suggestive of a benign retroperitoneal nerve sheath tumor- Schwannoma (Fig. 1). Post operatively, the patient had an uneventful recovery. He is on regular follow up in the out-patient department and is doing well.

REFERENCES

1. Lane MR, Stephens DH, Reiman HM. Primary retroperitoneal neoplasms: CT findings in 90 cases with clinical and pathological correlation. AJR 1989; 152: 83-89.