

Martin Wellman 374 20 737791 ; Mr David

68 YEAR OLD MALE. THIS SPECIMEN: EXCISION OF RETROPERITONEAL SFT, WITH LEFT KIDNEY. CORE BIOPSY FORM ABDOMINAL MASS, NOV 19: FEATURES CONSISTENT WITH SFT, WITHOUT SPECIFIC FEATURES OF MALIGNANT POTENTIAL SEEN (15024/19).

MACROSCOPY

Retroperitoneal SFT plus left kidney: Pot contains a large unorientated retroperitoneal mass partially covered in smooth connected tissue and attached fatty tissue. The mass measures 260 x 210 x 185mm. Adrenal tissue is noted at one margins. Specimen is sliced revealing a macroscopically normal kidney measuring 117 x 59 x 49mm. There is a multilobular necrotic heterogenous cream myxoid tumour mass lying immediately adjacent to the kidney and measuring 207 x 185 x 155mm. The tumour abuts the resection margins but does not appear to breach macroscopically. Necrosis approximately 5%. On further slicing of the fatty tissue there is macroscopically normal adrenal gland measuring 45 x 15 x 22mm, which lies at the surgical resection margin. The adrenal gland is 47mm from closest tumour. Tumour abuts kidney. Blocks: 1) Renal vessel resection margin; 2) Renal hilum; 3) Renal cortex tumour; 4) Adrenal gland to resection margin; 5) Tumour to smooth serosa; 6) Tumour to roughened resection margin; 7-10) Representative section of tumour. Tissue and tumour remains.

HISTOLOGY

Sections show variably, predominantly cellular tumour, with features similar to those described in the core biopsy, and composed of patternless arrays of minimally atypical although plump cells with elongated vesicular nuclei and fibrillary cytoplasm, often in prominently collagenous stroma. Areas of myxoid change and slight rosetting are also noted (eg slide 5), with the myxoid areas imparting a reticulated appearance to the tumour cells. The mitotic index is variable but is up to 6-7/10hpf where most frequent (eg slide 6). Focally (slide 5), the sparsely cellular/ acellular areas show some features of degeneration, without nuclear debris, and the features here are not sufficient for tumour necrosis. The tumour has a largely lobulated contour with the surrounding adipose tissue, which appears of mature type, although show focal septation (eg slide 10), with delicately collagenous septa. No atypia is seen here.

The features are consistent with solitary fibrous tumour, as previously described. The slightly increased mitotic index raises the possibility of malignant potential, although morphologic features of frank sarcoma are not seen. However, the behaviour of SFT is unpredictable. The morphology and expression of CD34 and STAT6 in the core biopsy is noted; as previously mentioned, STAT6 is amplified in a subset of dedifferentiated liposarcoma, and while no specific evidence of dedifferentiated liposarcoma is noted in this specimen, in view of the site, **FISH for MDM2 amplification status is awaited**, with a further report to follow.

The tumour is 4.5mm from the inked 'smooth' margin, 5.5mm from the 'roughened' resection margin. The renal vascular resection margin shows unremarkable ureter and large vessels, without tumour. The renal hilum and pelvis appears unremarkable, and are surrounded by mature adipose tissue only. The tumour appears close to the renal cortex without infiltration. The renal parenchyma shows patchy mild chronic inflammation, but no other significant pathology. The adrenal gland appears unremarkable and shows no tumour.

Dr Magnus Hallin/Dr Khin Thway

T: soft tissue t retroperitoneum m Solitary fibrous tumour malignant m morphological description
only neoplasm uncertain whether benign or malignant