

John Carter 1989 20 4060999490 ;,Mr

45 year old male. review of outside histology of excision of mass, left scapula, clinically fibrolipoma, form jan 2020, previously seen by Dr appleton/ Dr grant, as consistent with atypical lipomatous tumour (macroscopically this was described as fatty tissue measuring 90x90x30mm

## MACROSCOPY

## HISTOLOGY

The features are as previously described by Dr Appleton, and show a largely differentiated adipocytic tumour composed of lobules of predominantly mature fat, focally intersected by thin fibrous septa. Occasional likely lipoblasts are scattered (eg slide 2), but pleomorphism lipoblasts are not identified. The septa contain essentially bland spindle cells without discernable atypia, and the septa are irregular and often myxocollagenous; these areas are relatively prominent throughout the neoplasm and some small numbers of ropey collagen bundles are interspersed. The spindle cell population is essentially bland, and composed of cells with elongated to ovoid nuclei with even chromatin and scanty fibrillary cytoplasm. No mitotic figures are seen in 10 hpf, and no tumour necrosis is present. No definite cellular atypia is identified in the specimen. Small numbers of mast cells are interspersed.

The features suggest myxoid spindle cell lipoma, rather than atypical lipomatous tumour or atypical spindle cell lipomatous neoplasm, the presence of focal lipoblasts is unusual, but can be a rare finding. **FISH for MDM2 amplification status is awaited. Given the presence of scattered small lipoblasts, molecular investigations are awaited to exclude myxoid liposarcoma (including for EWSR1 gene rearrangement),** although this appears highly unlikely and the morphology is not supportive. Lesional tissue extends to the edges of the material examined.

Dr Magnus Hallin/Dr Khin Thway

T: soft tissue t scapula m spindle cell lipoma m neoplasm uncertain whether benign or malignant

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53 YEAR-OLD FEMALE. PATIENT PRESENTED WITH RIGHT LOIN PAIN DUE TO OBSTRUCTIVE RIGHT URETER. THE SCANS AND BIOPSY (NOT SEEN AT RMH) REPORTED TO SHOW LEIOMYOSARCOMA ARISING FROM THE RIGHT COMMON ILIAC VEIN. THERE IS ENCASEMENT OF THE RIGHT COMMON ILIAC ARTERY, AND THE LESION STRETCHED UP ON THE VENOUS SIDE TO THE BIFURCATION OF THE DISTAL IVC. THIS SPECIMEN: RESECTION RIGHT ILIAC VEIN LEIOMYOSARCOMA, DISTAL AORTA, RIGHT AND LEFT ILIAC ARTERY AND DISTAL IVC, COMMON LEFT ILIAC VEIN, AND RIGHT NEPHRECTOMY. THERE IS NO PREVIOUS HISTOLOGY FOR REVIEW AT RMH.

#### MACROSCOPY

Right iliac vein sarcoma, distal aorta, left and right iliac artery and kidney: An ovoid irregular mass measuring 135x82x63mm. One surface is largely smooth and peritonealised and other is rough with adherent fat. At one end of the specimen, there is a thick walled vessel measuring upto 12mm in size (presumed artery) with an adjacent thin walled vessel measuring 17mm in size (presumed vein). This end is presumed proximal. At the opposite end under the stapled line there are three smaller vessels identified, measuring up to 5mm in size. Adjacent to the large vein and artery, there is a mass measuring 98x54x52mm, possibly arising from the wall of the vein. The cut surface is pale with areas of haemorrhage and possible necrosis less than 10% of the tumour. The tumour abuts the inked margin. There is a separated kidney measuring 105x55x45mm. The ureter is dilated up to 10mm. There is a tube within the ureter and collecting system. No tumour is present in the kidney. The background shows cortical atrophy. There are pale areas throughout the kidney? necrosis. 1) Resection margin large artery 2) Resection margin large vein 3) Shave of smaller vessels of the presumed proximal end. 4) Shave of vessels under the stapled line and presumed from distal end. 5) Shave separated vessel distal end. 6) Cruciate large proximal vein and lesion. 7) Cruciate large proximal artery and lesion. 8) Lesion with adjacent large vein 9-10) Lesion with peripheral resection margin. 11-12) Tumour with possible necrosis. 13-14) Matted lymph nodes at the distal end of the specimen. 15-16) Likely lymph nodes. 17) Shave of hilar vessels. 18) Ureteric margin 19-20) Representative sections from the kidney. 21) Further representative sections of kidney. TR.

#### HISTOLOGY

Sections show moderately to focally markedly atypical spindle cell tumour composed of nodules of loose fascicles and patternless arrays of cells with ovoid vesicular nuclei and fibrillary cytoplasm. There are 41 mitoses per 10 high power fields, including atypical forms. Tumour necrosis is present, account for approximately 10% of the tumour area. Focally the tumour abuts large vessels (e.g. slide 8) but does not conclusively arise from the vessel wall. The tumour is diffusely and strongly positive for SMA, desmin, and h-caldesmon. The tumour is negative for myogenin, CD34, STAT6, S100 protein, SOX10, ER, PgR and AE1/AE3.

The features are consistent with leiomyosarcoma, grade 2. The tumour is 1.2mm from the peripheral resection margin (block 9). The large proximal artery and vein and three smaller vessels (underneath the stapled line), as well as hilar vessels, are free of the tumour. The ureteric resection margin shows von Brunns nests, but no CIS or malignancy. No tumour is seen in the seven reactive lymph nodes present (0/7).

A separate fragment (slide 6) shows plump smooth muscle adjacent to ovarian tissue. Mitotic activity and atypia here is not prominent, and this is not interpreted as leiomyosarcoma adjacent to ovarian tissue. However, in the apparent parametrial fat, there is additionally some fascicular smooth muscle without the atypical features of the malignant tumour noted; however, tumour extension into the parametrium with some infiltration into ovarian tissue cannot be excluded (slide 14). No other significant pathology is noted in the ovary/ fallopian tube. The kidney shows multiple foci of predominantly acute inflammation composed of neutrophils, a few eosinophils and lymphocytes, in keeping with renal outflow obstruction, as

well as focal microabscess formation. The tumour appears to abut lymph node(s) (slide 6), but there is no definite lymph node involvement. In other areas (slide 8), tumour nodule adjacent to the main tumour shows peripheral lymphoid tissue, but due to the proximity of this to the main tumour this likely represents continuous tumour, rather than a nodal metastasis.

Dr Afsheen Wasif/Dr Magnus Hallin/Dr Khin Thway

T soft tissue T retroperitoneum M Leiomyosarcoma

The kidney show multiple foci of predominantly acute inflammation composed of neutrophils, a few eosinophils and lymphocytes. This inflammatory infiltrate is present in the interstitium and within the tubules in keeping with tubulitis and interstitial nephritis. The ureteric resection margin shows no CIS or malignancy.

**Slide 6 – small fragment.**

An ovary containing epithelial inclusion cysts, corpora albicantia and Walthard rests is present, as well as a fallopian tube. No tumour is seen within these structures.