[redacted] 16152/19 738249 :,Mr
79 YEAR OLD MALE. REVIEW OF OUTSIDE HISTOLOGY OF CORE BIOPSY, LABELLED AS 'ABDOMINAL BIOPSY', With SPECIMEN SITE DESCRIBED AS 'IVC', PREVIOUSLY REPORTED BY Prof GOLDIN: SMOOTH MUSCLE TUMOUR (NOV 2019). CT abdomen/ pelvis: 10 x 6.9 x 8.7 cm solid, lobulated, vascular mass Arising from suprarenal IVC, extending anteriorly into hepatic porta. This process involves the inferior intrahepatic portion of the IVC but the small IVC and its entry into right atrium are patent. no involvement of hepatic veins or biliary obstruction. Inferiorly there is occlusion of IVC with presumed thrombosis extending into both internal iliac vessels. No renal tract obstruction. The retroperitoneum elsewhere is normal, other than diverticulosis; abdominal and pelvic viscera normal. Bony review shows spinal degenerative changes only. radiologic opinion: appearances consistent with leiomyosarcoma of proximal IVC, with Distal thrombosis. CT thorax: 0.7 cm solid subpleural nodule in right paravertebral gutter in right lower lobe of lung. Elsewhere there is pleural calcification in left anterior upper hemithorax, presumed longstanding. No further focal pulmonary mass lesion, mediastinal adenopathy or free pleural fluid. Radiologic Opinion: Small subpleural nodule at right medial lung base. Surveillance appropriate. No previous RMH histology

MACROSCOPY

HISTOLOGY
The features are as previously described by Prof Goldin, and show cores predominantly comprising liver parenchyma, with small amounts of fibroadipose tissue, and smaller fragments of cellular tumour, composed of loose to intersecting fascicles of variably atypical (mild to focally moderate and relatively marked ) cells with ovoid to spindled nuclei and abundant eosinophilic cytoplasm. The mitotic index is up to 16 per six hpf, with atypical forms. No definite tumour necrosis is seen. The liver parenchyma shows mild periportal chronic inflammation, but no other significant abnormality is noted.

The referring report describes the tumour to be negative for S100 protein, CD34, CD117, DOG1 and cytokeratins. At RMH, the tumour is diffusely and strongly positive for SMA and p16. The tumour is moderately to strongly positive for h-caldesmon in most cells. There is only very scanty desmin expression, and scanty focal expression of AE1/AE3. There is weak diffuse positivity for CDK4.
The tumour is negative for myogenin, CD117, DOG1, CD34, STAT6, HMB45 and MelanA. The proliferation fraction by MIB1 is high.

The features are of a malignant spindle cell neoplasm with myoid differentiation. The radiologic findings are noted, and the features would be in keeping with leiomyosarcoma originating from the IVC, with partial loss of immunophenotype (at least grade 2 in this material). However, clinical and radiologic correlation are required, as a metastasis to the liver cannot be entirely excluded. Although dedifferentiated liposarcoma is unlikely, FISH for MDM2 amplification status is awaited, with a further report to follow.

Dr Magnus Hallin/Dr Khin Thway

T: soft tissue t abdomen m leiomyosarcoma