ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT 749243 NHS Number: 402 758 7928

Lab No	6574/20	Reported	6 Jul 2020	Pathologist DR HALLIN/DR THWAY
Source Sex	Internal Operation MALE	Sample Received Age	1 Jul 2020 91	CRITICAL CARE UNIT Ward (CHELSEA) Branch FULHAM ROAD
Clinical Diagnosis		Operation	30 Jun 2020	Consultant STRAUSS,MR D C

SITE

SOFT TISSUE AND OTHER CONNECTIVE TISSUE A (*T1X005)

B RETROPERITONEUM (TY4600)

DIAGNOSIS

DEDIFFERENTIATED LIPOSARCOMA (Malignant)

(M88583)

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91 YEAR OLD MALE. HISTORY OF RIGHT NEPHRECTOMY IN 2017 FOR PLEOMORPHIC, MALIGNANT SPINDLE AND POLYGONAL CELL TUMOR WITHOUT SPECIFIC IMMUNOHISTOCHEMICAL DIFFERENTIATION; MDM2 AMPLIFIED, SUPPORTING THE DIAGNOSIS OF DEDIFFERENTIATED LIPOSARCOMA (PROF CYRIL FISHER SECOND OPINION; 1396/17). THIS SPECIMEN: RESECTION OF RECURRENT RIGHT RETROPERITONEAL LIPOSARCOMA, WITH RIGHT HEMICOLECTOMY AND WEDGE EXCISION EDGE OF LIVER

MACROSCOPY

Right recurrent retroperineal sarcoma + right colon: a hemicolectomy specimen with adjacent tumor mass. The overall specimen measures 230x145x85mm and comprises a section of ileum measuring 75mm in length and 18mm in maximum diameter and a section of ascending colon measuring 185mm from cecum to resection margin by up to 59mm in maximum diameter. Towards the cecum there is a sutured staple line measuring 63mm in length. No obvious appendix is identified. On the opposite side there is a firm roughened resection margin measuring 53x12mm. The tumor mass lies between these two resection margins and measures 73x84x83mm. The tumor abuts the colonic mucosa, however no obvious macroscopic breach is identified. The tumor appears completely resected macroscopically. On slicing the tumor has revealed to be a well circumscribed heterogeneous cream/ necrotic tumor. The second described resection margin appears to be liver. The stapled resection margin has been inked orange, the liver resection margin = red and the outer smooth serosal resection margin = black. Necrosis is approximately 30%. Blocks 1) Ileal resection margin. 2) Longitudinal section of ileum adjacent to tumor. 3) Right colon resection margin to tumor (red). 7) Outer smooth serosal resection margin to tumor (inked orange). 6) Liver resections of tumor. Tissue and tumor remain.

HISTOLOGY

Sections show cellular tumor, composed of loose fascicles of moderately to markedly atypical spindle cells with ovoid or elongated vesicular or hyperchromatic nuclei and fibrillary cytoplasm, in collagenous stroma. The cells show focal vacuolation (slides 9-10), but no lipoblasts are noted. The mitotic index is focally up to 11/10hpf, with atypical forms. There are areas of prominent necrosis. The adjacent fibroadipose tissue is of mature type, and no definite well-differentiated component seen. The tumor focally infiltrates the large bowel muscularis propria. The overlying large bowel mucosa is stretched, with loss of architecture and autolytic changes, but no infiltration or ulceration of large bowel mucosa is identified. No definite infiltration of the small bowel wall by tumor is seen.

The features are consistent with recurrent dedifferentiated liposarcoma, grade 3. The tumor is 8mm from the stapled resection margin, which is composed of mature fat. The tumor appears largely pseudoencapsulated, and is clear of the inked smooth surface/ margin, being separated from it by a thin layer of connective tissue measuring approximately 0.3mm at its thinnest. The ileal resection margin is free of tumor; this shows slightly stretched small bowel wall/ mucosa; no tumor or other significant pathology is noted, and the surrounding adipose tissue is of mature type without atypia. The right colon resection margin also shows mildly stretched large bowel mucosa and wall, with no tumor or other significant pathology; the surrounding adipose tissue is of mature type.

Although the tumor is focally close to the liver, separated by a variably thick fibrous capsule and mature adipose tissue, no invasion of the hepatic parenchyma is seen. The tumor is at least approximately 4.5mm from the liver resection margin. The liver parenchyma shows mild congestion, which may be secondary to the neoplasm, and there is mild focal periportal chronic inflammatory infiltrate and some focal mild fatty change, but no other significant abnormality is identified within it.