ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT
749378: [redacted] - NHS Number: 452 654 8154

Lab No	6314/20	**Reported**	30 Jun 2020	**Pathologist**	DR HALLIN/DR THWAY
Source	Internal Operation	**Sample Received**	24 Jun 2020	**Ward**	
Sex	MALE	**Age**	65	**Branch**	FULHAM ROAD
Clinical Diagnosis		**Operation**	23 Jun 2020	**Consultant**	STRAUSS,MR D C

SITE	DIAGNOSIS
SOFT TISSUE AND OTHER CONNECTIVE TISSUE A (T1X005)	GIANT CELL SARCOMA (Malignant) (M88023)
B LEG (TY9400)	GIANT CELL SARCOMA (Malignant) (M88023)

65 YEAR OLD MALE, WITH 2-MONTH HISTORY OF MASS, RIGHT LOWER LEG. BIOPSY: DRAINED OLD BLOOD, ?RELATED TO VEIN/ INFLAMMATORY/ THROMBOPHLEBITIS, ?SOFT TISSUE TUMOR. THE PATIENT PRESENTS WITH A 2.5-MONTH HISTORY OF SWELLING ON MEDIAL ASPECT OF RIGHT LOWER LEG. ON EXAMINATION, IT FELT CYSTIC, AND WAS SITUATED IN THE SUBCUTANEOUS TISSUE. ON PASSING THE CORE NEEDLE BIOPSY THROUGH THE LESION, SMALL AMOUNT OF OLD BLOOD DRAINED, AND LUMP DISAPPEARED; MULTIPLE CORES TAKEN FROM WALL OF LESION. THE PATIENT IS OTHERWISE FIT AND HEALTHY, EXCEPT FOR TYPE 2 DIABETES, AND A MINI-STROKE MANY YEARS AGO. THIS SPECIMEN: CORE BIOPSY FROM LUMP, RIGHT LEG. NO PREVIOUS RMH HISTOLOGY

MACROSCOPY
Lump, right leg: 6 fatty cores ranging from 18-24mm 1-6) AE

HISTOLOGY
Cores of fibroadipose tissue, with fibrous tissue containing variably, mostly hypercellular tumor, composed of sheets of moderately to markedly atypical ovoid to focally spindle cells with hyperchromatic ovoid nuclei and moderate amounts of darkly eosinophilic cytoplasm. There are numerous bizarre and multinucleate forms, as well as osteoclast-like giant cells. True mitotic figures are difficult to identify, due to the marked hyperchromasia of the cells, but the mitotic index appears up to 18/10hpf with definite atypical forms (slide 2). No definite tumor necrosis is seen. There is prominent intermingled hemosiderin deposition (Perls positive), as well as surrounding hemorrhage/ blood. No tumoral osteoid or other heterologous elements are noted. Some detached fragments of skeletal muscle (slide 3) are present, but conclusive muscle infiltration is not seen.

CD68 is strongly positive in the osteoclast-like giant cells and surrounding histiocytes, but negative in the pleomorphic tumor cells. There is relatively scant, strong focal SMA expression, with some subplasmalemmal accentuation. The tumor is largely negative for desmin, with only scanty staining in a very occasional cell. The tumor is negative for myogenin, SOX10, S100 protein, CD34, STAT6, ERG, MUC4 and AE1/AE3. The proliferation fraction by MIB1 is essentially high.

The features are in keeping with pleomorphic sarcoma with giant cells, at least grade 2 in this material.

Dr Magnus Hallin/Dr Khin Thway