ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT
742180: [redacted] NHS Number: 482 607 5030

Lab No	6616/20	**Reported**	9 Jul 2020	**Pathologist**	DR HALLIN/DR THWAY
Source	Internal Operation	**Sample Received**	2 Jul 2020	**Ward**	
Sex	FEMALE	**Age**	61	**Branch**	FULHAM ROAD
Clinical Diagnosis		**Operation**	1 Jul 2020	**Consultant**	HAYES,MR A J

SITE	DIAGNOSIS
A SOFT TISSUE AND OTHER CONNECTIVE TISSUE (T1X005)	NEURILEMOMA (Benign) (M95600)
B LEG (TY9400)	NEURILEMOMA (Benign) (M95600)

61 YEAR OLD FEMALE, WITH TENDER MASS IN LEFT CALF. CLINICALLY DESCRIBED TO HAVE NEOPLASTIC SYMPTOMS. USS AT REFERRING INSTITUTION: FEATURES COMPATIBLE WITH BENIGN NEUROGENIC LESION, e.g. SCHWANNOMA. RMH MDT REVIEW: WELL-CIRCUMSCRIBED, AVIDLY ENHANCING 15MM MASS IN SOLEUS MUSCLE, WHICH DOES NOT APPEAR MALIGNANT; PROBABLY SCHWANNOMA. PREVIOUS CORE BIOPSY (5807/20): INTRAMUSCULAR LIPOMA AND HEMANGIOMA CANNOT BE WHOLLY EXCLUDED, BUT MAY NOT BE REPRESENTATIVE OF THE LESION NOTED CLINICALLY. THIS SPECIMEN: EXCISION OF CLINICALLY SCHWANNOMA, LEFT LOWER LEG.

MACROSCOPY
Schwannoma left lower leg: an unorientated ovoid cream mass measuring 25x15x13mm. The outer surface is entirely covered in a thin layer connective tissue. The surgical resection margins have been inked black. Specimen has been serially sliced revealing a circumscribed heterogeneous cream/myxoid tumor mass occupying the entire specimen. No obvious macroscopic necrosis is identified. The nodule appears completely excised macroscopically. Blocks 1) Cruciate of ends. 2-4) Transverse sections. Tissue and tumor remain.

HISTOLOGY

Sections show fibroadipose tissue containing a nodular, well-defined, predominantly sparsely to moderately cellular lesion, composed of patternless arrays or loose fascicles of cells with ovoid to elongated vesicular nuclei, sometimes with prominent nucleoli, in fibrillary cytoplasm in collagen-like stroma. Focally this stroma has a shredded/ nerve bundle-like appearance. Cellular atypia is variable; the cells are plump, with most showing no discernible atypia, but focally there are cells with enlarged, mildly to moderately atypical vesicular nuclei. Binucleate forms are also noted. No mitotic figures are seen in 10hpf, and no tumor necrosis is present. Focally, there are large dilated thin-walled vessels, some containing fibrinoid material, and some with mildly to moderately hyalinized walls, and the tumor is partially encapsulated/ pseudoencapsulated. Focally, there are some intermingled small clusters of mature adipocytes. There is a sparse chronic inflammatory infiltrate, mostly of small lymphocytes. Surrounding fibroadipose tissue shows some mild focal likely fat necrosis, which may be secondary to the previous biopsy.

The tumor is diffusely and strongly positive for S100 protein, with strong nuclear expression of SOX10 in most cells. EMA stains subcapsular perineurial cells, but is negative in the tumor. There is focal CD34 expression. The tumor is negative for SMA, desmin, myogenin, MUC4, STAT6, AE1/AE3 (focal weak background staining only). The proliferation fraction by MIB1 is very low.

The features are in keeping with a nerve sheath neoplasm, and favour schwannoma over neurofibroma. No conclusively atypical features are seen in this material. The circumscribed lesion appears largely excised, although lesional tissue is focally present at the inked circumferential and longitudinal margins.

Dr Magnus Hallin/Dr Khin Thway