## ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT 540687 NHS Number: 402 175 0789

Reported 16 Jul 2020 Pathologist DR HALLIN/DR THWAY Lab No 6997/20 Internal Operation Sample Received 13 Jul 2020 Ward SURGICAL UNIT Source Branch **FULHAM ROAD FEMALE** Age 73 Sex 13 Jul 2020 Consultant MIAH, DR A B Operation Clinical Diagnosis

SITE DIAGNOSIS

A SOFT TISSUE AND OTHER CONNECTIVE TISSUE ( T1X005 )

B FLANK (TY1310)

FIBROMATOSIS (M76100) FIBROMATOSIS (M76100)

73 YEAR OLD FEMALE, WITH HISTORY OF FIBROMATOSIS ARISING FROM THE RIGHT AXILLA (RIGHT LATISSIMUS DORSI). 2008: COMPLETE RESECTION OF FIBROMATOSIS RIGHT LATISSIMUS DORSI MUSCLE (PROF THOMAS). 2009: RESECTION OF RECURRENT FIBROMATOSIS, RIGHT UPPER ARM, WITH ADJUVANT RADIOTHERAPY. THE PATIENT NOW HAS A NEW, NON-SPECIFIC LUMP ON THE BACK/ FLANK/ RIGHT POSTERIOR CHEST WALL. CLINICALLY, THIS IS A NEW RIGHT FLANK MASS IN A DISCONNECTED/ REMOTE SITE, ?CAUSE. THIS SPECIMEN: CORE BIOPSY FROM THE RIGHT FLANK MASS.

**MACROSCOPY** 

Right flank side mass biopsy: 4 cores ranging from 10-15mm, and fragmented core in aggregate 10mm. 1-4) Cores 5) fragments. AE.

## **HISTOLOGY**

Cores of fibroadipose tissue, with a fibrous lesion of relatively low to moderate cellularity, and composed of loose fascicles of essentially uniform spindle cells with elongated vesicular nuclei and fibrillary cytoplasm, in moderately collagenous stroma. The cells are sometimes plump, with some mild nuclear enlargement, and occasional mild hyperchromasia (eg slide 4), but conclusive atypia is not seen. No mitotic figures are seen in 10hpf, and no tumor necrosis is noted. A mild focal perivascular chronic inflammatory infiltrate is present. Focally, there is some skeletal muscle with some mild fiber atrophy.

Most tumor nuclei show strong expression of nuclear beta-catenin, and there is focal strong SMA, with relatively scanty focal desmin expression. STAT6 is positive in many lesional nuclei, and appears technically unsatisfactory. Myogenin shows weak non-specific nuclear expression in likely scattered mast cells; no convincing nuclear expression is seen in tumor nuclei. The tumor is negative for CD34, STAT6, SOX10, S100 protein, MUC4 and AE1/AE3. The proliferation fraction by MIB1 is essentially low.

The features suggest desmoid-type fibromatosis. Beta-catenin mutational analysis is awaited, with a further report to follow. The clinical findings of this lesion apparently being in a disconnected site is noted. This current lesion is on the right flank (previous lesions noted to be from the right latissimus dorsi and right upper arm). Clinical correlation is required, to assess whether this might represent recurrent disease rather than a new focus of disease. Fibromatosis can rarely also occur secondary to previous irradiation. No specific features of atypia or malignancy are identified.

Dr Magnus Hallin/Dr Khin Thway