

**ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT**  
**749805: ANTERIOR, LEFT PECTORALIS MAJOR - NHS Number: 639 517 4649**

<b>Lab No</b>	6693/20	<b>Reported</b>	15 Jul 2020	<b>Pathologist</b>	DR HALLIN/DR THWAY
<b>Source</b>	Internal Operation	<b>Sample Received</b>	3 Jul 2020	<b>Ward</b>	
<b>Sex</b>	MALE	<b>Age</b>	43	<b>Branch</b>	FULHAM ROAD
<b>Clinical Diagnosis</b>		<b>Operation</b>	3 Jul 2020	<b>Consultant</b>	STRAUSS,MR D C

<b>SITE</b>	<b>DIAGNOSIS</b>
SOFT TISSUE AND OTHER CONNECTIVE TISSUE A ( T1X005 )	MORPHOLOGIC DESCRIPTION ONLY ( M09350 )
B CHEST WALL ( TY2150 )	MORPHOLOGIC DESCRIPTION ONLY ( M09350 )

43 YEAR-OLD MALE WITH A 2-MONTH HISTORY OF 2X1CM LESION IN PECTORALIS MUSCLE ?SOFT TISSUE TUMOR. THIS SPECIMEN: CORE BIOPSIES OF LEFT PECTORAL MUSCLE/ BREAST LUMP. MRI: WELL-CIRCUMSCRIBED MAXIMALLY 18 X 12 MM LESION RETURNING LOW SIGNAL ON T1-WEIGHTED SEQUENCE AND INTERMEDIATE SIGNAL ON T2, IN ANTERIOR ASPECT OF LEFT PECTORALIS MAJOR. IT EXHIBITS RESTRICTED DIFFUSION, SUGGESTING IT IS A CELLULAR LESION. MORPHOLOGY AND HOMOGENOUS SIGNAL INDICATES A LIKELY BENIGN LESION, POSSIBLY OF NEUROGENIC ORIGIN. THERE IS A SMALL FOCUS OF ABNORMAL SIGNAL IN THE SUBCUTANEOUS FAT OVERLYING THE LESION WHICH IS SUSPECTED TO BE THE RESIDUUM OF HEMATOMA SUBSEQUENT TO PERCUTANEOUS BIOPSY. THERE IS NO PREVIOUS HISTOLOGY FOR REVIEW AT RMH.

#### MACROSCOPY

Pectoral muscle left breast lump: 6 fatty cores ranging from 6-24mm. 1-4) AE.

#### HISTOLOGY

Cores comprising fibroadipose tissue, with adipose tissue of mature type, with focal small areas of fat necrosis, with some prominent histiocytes. The adipose tissue shows relatively prominent intersection by essentially sparsely cellular, moderately collagenous fibrous septa. There is also some detached skeletal muscle with some surrounding mild fibrosis and mild fiber atrophy; there is a very small occasional focus of small lymphocytes within the skeletal muscle, with very mild hemosiderin deposition, but a significant inflammatory component is not otherwise seen in the muscle. A very mild patchy perivascular chronic inflammatory infiltrate is noted in the fibroadipose tissue (slide 6). The fibrous tissue shows scattered plump fibroblasts without discernible atypia; occasional relatively small bi/multinucleate forms are seen (slide 4). No atypia is noted in this material. No tumor necrosis or mitotic figures are seen. The fibrous tissue shows some fibrillary, perhaps ropey collagen (slides 4 and 5).

The fibrous tissue shows strong multifocal expression of CD34. CD68 is positive in the core, likely in the histiocytic/fat necrosis component. S100 protein is negative in the fibrous tissue (positive in adipose tissue only). STAT6, SMA, desmin, myogenin, SOX10, MUC4 and EMA are negative. The proliferation fraction by MIB1 is very low.

The features are of bland, mildly vascular fibroadipose tissue. This is difficult to interpret. A possibility is of spindle cell lipoma, although the features are not wholly typical. This might also represent a differentiated adipocytic tumor, most suggestive of lipoma/ fibrolipoma with fat necrosis, although it is noted that this is not fitting with the imaging appearances. Although no conclusive atypia is noted in this material, FISH for MDM2 amplification status is awaited to assess for atypical lipomatous tumor, with a further report to follow. The features do not support nodular fasciitis, and there is insufficient evidence for any other specific neoplasm; clinical and radiologic correlation are required, and this material may not be representative of the lesion noted clinically.

Dr Magnus Hallin/Dr Khin Thway

