ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT

Lab No 6694/20 Reported 8 Jul 2020 Pathologist DR HALLIN/DR THWAY Internal Operation Sample Received 3 Jul 2020 Ward Source Branch **FULHAM ROAD** Sex MALE Age 49 3 Jul 2020 Consultant HAYES.MR A J **Clinical Diagnosis** Operation

DIAGNOSIS SITE

SOFT TISSUE AND OTHER CONNECTIVE

A TISSUE (T1X005)

MORPHOLOGIC DESCRIPTION ONLY / MYXOMA (Benign) (M09350/M88400)

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B CHEST WALL (TY2150)

49 YEAR OLD MALE, WITH MEDICAL HISTORY INCLUDING TYPE 2 DIABETES, RAISED CHOLESTEROL AND HYPERTENSION. PATIENT NOTICED LUMP IN LEFT PECTORAL REGION ABOUT 4 WEEKS AGO, BUT POSSIBLY THERE FOR A LONGER TIME. HE THINKS IT MAY HAVE SLIGHTLY ENLARGED SINCE THEN. EXTERNAL MRI AND CT: LARGE MASS WITHIN LEFT PECTORAL MUSCLE, WHICH MAY WELL BE SARCOMA (NO RMH IMAGING REVIEW AVAILABLE AS YET), AND CLINICALLY IT IS NOTED THAT BENIGN ENTITIES SUCH AS MYXOMA MAY GIVE THIS APPEARANCE. NO OBVIOUS METASTASES ON REVIEWING IMAGES. ALTHOUGH THE PATIENT HAD A BIOPSY VERY RECENTLY IN BRIGHTON, A BIOPSY WAS OFFERED AND PERFORMED HERE. THIS SPECIMEN: CORE BIOPSY FROM LARGE MYXOID MASS IN LEFT PECTORALIS MAJOR (PLEASE ALSO SEE THE PREVIOUS RECENT BSUH BIOPSY THAT WAS VERY KINDLY FORWARDED BY DR TAYLOR (6832/20). NO PREVIOUS RMH HISTOLOGY

MACROSCOPY

Left pectoralis major: 4 cores ranging from 21-22mm. 1-4) AE.

HISTOLOGY

Cores of moderately to relatively sparsely cellular tumor, composed of patternless arrays of spindle and stellate cells with ovoid to elongated vesicular nuclei and fibrillary cytoplasm in prominent, essentially hypovascular myxoid or myxocollagenous stroma. The cells are often plump, but conclusive cellular atypia is not seen. No mitotic figures are seen in 10hpf, and no tumor necrosis is noted. Small numbers of mast cells are interspersed.

The tumor shows strong CD34 expression in most cells. There is diffuse nuclear and cytoplasmic positivity for STAT6, and although this may be overcooked, the staining pattern appears relatively clean. Many cells show moderate positivity for h-caldesmon, although this marker is often aberrantly overexpressed in this laboratory. The tumor is negative for SOX10, S100 protein, SMA, desmin, myogenin, MUC4, AE1/AE3 and EBER. The proliferation fraction by MIB1 is low.

The features would be in keeping with myxoma. The diffuse STAT6 expression is unusual; the features do not resemble myxoid solitary fibrous tumor and although morphologically this appears highly unlikely, this cannot be entirely excluded given the immunoprofile. STAT6 can also be expressed in a subset of dedifferentiated liposarcomas; the bland morphology is not in keeping with 'low-grade pattern' dedifferentiated liposarcoma or sclerosing well- differentiated liposarcoma, but FISH for MDM2 amplification status is awaited to exclude DDL, with a further report to follow.

Dr Magnus Hallin/Dr Khin Thway