ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT
4440291465 [redacted] NHS Number: 444 029 1465

Lab No	0488/20	**Reported**	23 Jun 2020	**Pathologist**	DR HALLIN/DR THWAY
Source	Second Opinion	**Sample Received**	13 Jan 2020	**Ward**	
Other Hospital				**Other Hospital Number**	34615/19
Sex	FEMALE	**Age**	53	**Branch**	FULHAM ROAD
Clinical Diagnosis		**Operation**		**Consultant**	BRYANT/KT

SITE	DIAGNOSIS
A SOFT TISSUE AND OTHER CONNECTIVE TISSUE (T1X005)	MORPHOLOGIC DESCRIPTION ONLY / NEOPLASM UNCERTAIN WHETHER BENIGN OR MALIGNANT / SARCOMA (Malignant) (M09350 / M80001 / M88003)
B UTERUS (T82000)	MORPHOLOGIC DESCRIPTION ONLY / NEOPLASM UNCERTAIN WHETHER BENIGN OR MALIGNANT / SARCOMA (Malignant) (M09350 / M80001 / M88003)

53 YEAR OLD FEMALE. MYXOID SPINDLE CELL TUMOR IN THE ISTHMIC REGION OF UTERUS AND MYXOID CHANGE ALSO IN THE NEARBY FIBROIDS (WHICH SHOW SOME UNUSUAL FEATURES, BUT ARE NOT OBVIOUSLY SARCOMATOUS) ?POSSIBLE LOW-GRADE SARCOMA. MATERIAL (TAH BSO) SENT BY DR BRYANT (SEEN BY DR BRYANT AND ALSO DR COUTTS AND DR GUPTA) WHO KINDLY PROVIDED THE FOLLOWING INFORMATION: IT IS UNDERSTOOD THAT THE PATIENT WAS TREATED WITH GNRH (ZOLODEX) PRIOR TO SURGERY, BUT NO PRIOR EMBOLIZATION OF FIBROIDS. P1 BY NORMAL DELIVERY. NO OTHER FIBROIDS OR MASSES ELSEWHERE IN PELVIS AT TIME OF SURGERY.

MACROSCOPY
Received from Maidstone And Tunbridge Wells NHS Trust; 1 blocks 55 s/s ref 34615/19.

HISTOLOGY

The features are as previously described by Dr Bryant, and show myometrium with infiltrative, vaguely nodular, essentially sparsely cellular tumor, composed of spindle and stellate cells with ovoid nuclei and sometimes small nucleoli, in patternless arrays within prominent, relatively hypovascular myxoid stroma, with occasional foci of hemorrhage. There are small numbers of interspersed thin- walled small and medium-sized compressed vessels. The cells are plump, but no definite atypia is seen. No definite mitotic figures are noted in 10 hpf, and no tumor necrosis is identified.

Immunohistochemistry from the referring institution shows only scant focal positivity for CD99 (largely negative). The tumor is negative for CD31, CD34 (very scanty focal possible staining only), SMA, desmin, h-caldesmon, CD117, DOG1, CD10, beta-catenin, S100 protein, HMB45 and MNF116. The proliferation fraction by MIB1 is low to very low.

The sections from the fibroids show leiomyomas, some with cellular degeneration, (eg slide 7), likely due to previous treatment with GnRH. In many areas, as previously described, these show irregular borders, with variable (including areas of high) cellularity, and are composed of essentially uniform cells with ovoid vesicular nuclei; there is frequent myxoid stroma, which is hypovascular, with some interspersed hemosiderin-laden macrophages, and some scanty mixed inflammatory cells. No definite atypia is noted. No tumor necrosis or mitotic figures are identified (and the original report describes that no mitoses are seen in 40 hpf). Although the focal myxoid change in these areas is noted, the appearances, including cytology, appear different from those in the isthmic tumor; a block is not available for further investigations from these lesions, but the features would be supportive of myxoid change in leiomyomas. In other areas, the fibroids are of moderate cellularity, with cell morphology typical of smooth muscle, with some focal to perhaps occasional moderate atypia, with hyperchromatic nuclei; no definite tumor necrosis is seen, and no definite mitotic figures are identified in 30 hpf, and these are interpreted as atypical ('symplastic') leiomyomas/ at most smooth muscle tumor(s) of uncertain malignant potential (STUMP).

As previously described by colleagues, the isthmic tumor is an essentially bland, although somewhat infiltrative, myxoid spindle and stellate neoplasm without specific immunoprofile. Although markedly atypical features are not noted, this cannot be further characterized, and might be managed as for a low-grade myxoid sarcoma (NOS). Disease at other sites should be excluded, and close clinical follow-up is warranted. The features are not typical for NRTK- or BCOR-related uterine neoplasms/ sarcomas, but molecular investigations for these are awaited, along

with molecular investigations to exclude low-and high-grade endometrial stromal sarcoma, extraskeletal myxoid chondrosarcoma and EWSR1/ FUS- associated myxoid neoplasms, and to assess for fusions of myxoid liposarcoma (although the morphology is not typical of any of these entities). The referring report describes that the tumor is predominantly within the isthmic region, but is present in occasional cervical blocks. The ovaries are unremarkable. The fallopian tubes show mild chronic salpingitis. The endometrium shows an inactive appearance consistent with treatment effect. Please also see the detailed original report (including macroscopic description) for further information.

Dr Magnus Hallin/Dr Khin Thway

SUPPLEMENTARY REPORT 23.06.20
The tumor is negative for MUC4 and SOX10. The interpretation remains as above.

Dr Magnus Hallin/Dr Khin Thway