ANNE Morley 1770/20 519535 :,Mrs

86 year old female, with history of RECURRENT MYXOID LIPOSARCOMA LEFT THIGH/ INGUINAL AREA SINCE 2006 (3981/06). FISH OF previous RECURRENCE showed FUS and DDIT3 gene rearrangements. RADIOTHERAPY IN 2007 AND 2014, then excision of LEFT INGUINAL NODE AND LEFT GROIN MASS in 2014. The patient had recent ilp, with very good response with considerable diminution in size of multifocal tumour in leg, although one component in the mid femur appears to have enlarged since MRI in Dec 2019. Now Resection of multifocal sarcoma, of the left thigh

MACROSCOPY

A) Sarcoma, upper left thigh: pot contains an unorientated ovoid specimen measuring 75 x 40 x 30mm. One face is partially covered in fibrofatty tissue the opposite face reveals a cream myxoid multilobulated tumour mass entirely encapsulated in a thin layer of connective tissue. The tumour mass occupies the entire specimen. The outer resection margins have been inked black. Specimen is serially sliced across the short axis and reveals a cream red myxoid heterogenous tumour occupying the entire specimen. Tumour does not appear to breach the thin connective tissue. No obvious macroscopic necrosis is seen. Blocks: 1-2) cruciate of ends; 3-5) representative sections of tumour. Tissue and tumour remain.

B) Multifocal sarcoma, lateral lower thigh: pot contains an unorientated elongated piece of fibrous tissue measuring 130 x 45 x 27mm. There are multiple cream nodules which are soft/myxoid in appearance attached to one surface. These nodules range from 6 x 4 x 5mm to 60 x 30 x 24mm and span 90 x 50mm. The outer surface has been inked black. Specimen has been serially sliced revealing multiple homogenous cream/myxoid nodules. No obvious macroscopic necrosis is seen. Blocks: 6-9) representative sections of tissue with nodule; 10) representative section of fibrous tissue towards one end. Tissue remains

HISTOLOGY

MACROSCOPY

A1-5) Sarcoma, upper left thigh:

Sections show fibroadipose tissue and skeletal muscle enclosing lobulated, essentially demarcated, thinly encapsulated moderately cellular tumour, composed of minimally, uniform cells with bland ovoid nuclei and fibrillary cytoplasm in prominent lightly basophilic myxoid stroma with prominent curvilinear vessels. Mitotic figures are not prominent, with an index of <1/10hpf, and no tumour necrosis is seen. Only very focally, there are more sparsely cellular myxoid areas (accounting for approximately <5-10% of tumour area), which may possibly changes secondary to previous treatment.

The features are consistent with viable myxoid liposarcoma. Small areas of possible transitional change are noted (approximately <5%), but no high-grade ('round cell') areas are seen. Viable tumour appears excised, being separated from the inked margin by its fibrous capsule/ pseudocapsule (although this is focally <0.5mm), and is approximately focally 1.5mm from the nearest longitudinal margin.

B6-10) Multifocal sarcoma, lateral lower thigh:

Sections from the nodules described macroscopically all show similar features. There is fibroadipose tissue, and focally mildly hyalinised, often densely collagenous (fascial) fibrosis and skeletal muscle enclosing sparsely cellular tumour, composed of small, bland ovoid to focally slightly more spindled cells in prominent mildly hyalinised to focally myxoid stroma. No cellular atypia, tumour necrosis or mitotic figures are seen. In areas, the tumour is lined by bland cuboidal cells, likely synovium.

The features are consistent with myxoid liposarcoma with extensive treatment response. No high-grade areas are present. It is difficult to estimate the viability of the sparse cells present (and many of these likely represent fibroblasts), but viable tumour is estimated to account for <5% of the tumour area). Tumour of uncertain viability focally extends to the inked peripheral margins.

Dr Magnus Hallin/Dr Khin Thway

T: soft tissue t thigh m myxoid liposarcoma