[redacted] 731 20 731794 :,Mr Hong

68 year old male. previous review of outside histology of tumour from the right thigh: high-grade pleomorphic sarcoma with multi-divergent differentiation, including areas of osteoid and chondroid, along with a myoid/ rhabdomyosarcomatous component (14184/19). Now excision of large, right thigh abductor sarcoma after pre-operative radiotherapy

MACROSCOPY

Recurrent sarcoma, right thigh: pot contains an unorientated ovoid specimen measuring 168 x 110 x 115mm. There is ellipse of skin measuring 115 x 17mm. Skin bear a liner scar measuring 90mm. The outer surface of the specimen is predominately covered with skeletal muscle with small areas of smooth connective tissue. The resection margins have been inked blue. The specimen has been serially sliced revealing an irregular multilobulated cream necrotic tumour measuring 137 x 79 x 113mm. The tumour has cream areas with possible necrosis throughout. Necrosis approximately 50%. The tumour abuts the surgical resection margin but does not appear to breach. Blocks: 1&2) representative sections from ends; 3) representative section of previous scar tumour; 4-8) representative section of tumour with margins. Tissue and tumour remains.

HISTOLOGY

Sections show skin and subcutis, with dermis and subcutis containing extensive, ill-defined, viable, cellular tumour, composed of sheets of markedly atypical/ anaplastic cells including numerous bizarre and giant forms. There is focal tumour necrosis, and atypical mitoses amounting to approximately 7/10hpf. Prominent infiltration by of skeletal muscle is noted in areas (eg slides 7-8). Intermingled in the neoplasm are ill-defined areas of fibrosis, along with fibrinoid material and a moderate chronic inflammatory infiltrate, likely representing changes secondary to previous radiotherapy. It is not possible to determine how much of the marked anaplasia might be secondary to irradiation. There are areas of hyalinisation and focally (slide 5) small areas suggestive of viable tumoral osteoid. Focally (eg slide 8) there is cavity formation, likely representing the site of previous excision biopsy.

The features are consistent with viable, high-grade pleomorphic sarcoma, with viable tumour accounting for approximately at least 40-50% of the tumour area. Grading is not performed secondary to neoadjuvant treatment. Viable tumour focally extends to the inked peripheral margin, although is at least 22mm from the nearest longitudinal margin.

Dr Magnus Hallin/Dr Khin Thway

T: soft tissue t thigh m mfh