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Neuro Pathology Consultation Report

Name: Reay,John Malcolm Sex: M DOB: 27/12/55 MRN:2497855

Location:WD -referral Order Date: 22/12/99 13:59 HL#:6611339935

Ord. Gen: Shannon,Patrick T. Last Edit: 24/12/99 11:33 DP#: NS9901097

Source: Hospital,Princess Margaret

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slides stained 55 unstained 57
22Dec1999 1430

DIAGNOSIS: Glioma (please see comment)- brain

Received from St. Michael's hospital, 55 stained, 57 unstained slides for consultation.

MICRO:

The specimen labelled 2220-97 shows reactive gliosis affecting cerebral cortex and white matter. The specimen labelled 2797-77 contains fragments of brain, reactive leptomeninges, necrotic tissue and small fragments of unequivocal glioma. The glioma is composed of cells showing at most mild cytological atypia and pleomorphism. The tumour cells have variably round to oval nucleii, and their cytoplasm is stellate to spindled, with a few pale-staining, processes. Mitotic activity is not seen, but there is unequivocal proliferation. The fragments of necrotic tissue are more abundant, and contain the outlines of abnormal vessels.

COMMENT: Both grading and subtyping of this glioma is hampered by the small amount of non-necrotic tumour available for examination. It is difficult to be entirely certain that this tumour represents a fibrillary astrocytoma, although many of the features favour that categorization. If it is an astrocytoma, then the presence of necrosis and endothelial proliferation, by some criteria, indicate a designation of glioblastoma multiforme. However, the nuclear atypia is less than that usually seen in glioblastomas and lower grade astrocytomas occasionally become extensively necrotic without other indications of agressive behaviour. The small amount of tumour and the cytologic features makes it difficult to rule out a significant oligodendroglial component. Oligodendrogliomas can contain large areas of necrosis and vascular abnormalities without any other features of anaplasia.
In summary, although by some accepted criteria this tumour could be classified as a glioblastoma multiforme, I think that the cytological features, the small amount of tissue, and the very extensive necrosis warrant a more tentative diagnostic classification. Dr. Wm. Halliday of this institution has seen this specimen, and agrees with this interpretation.