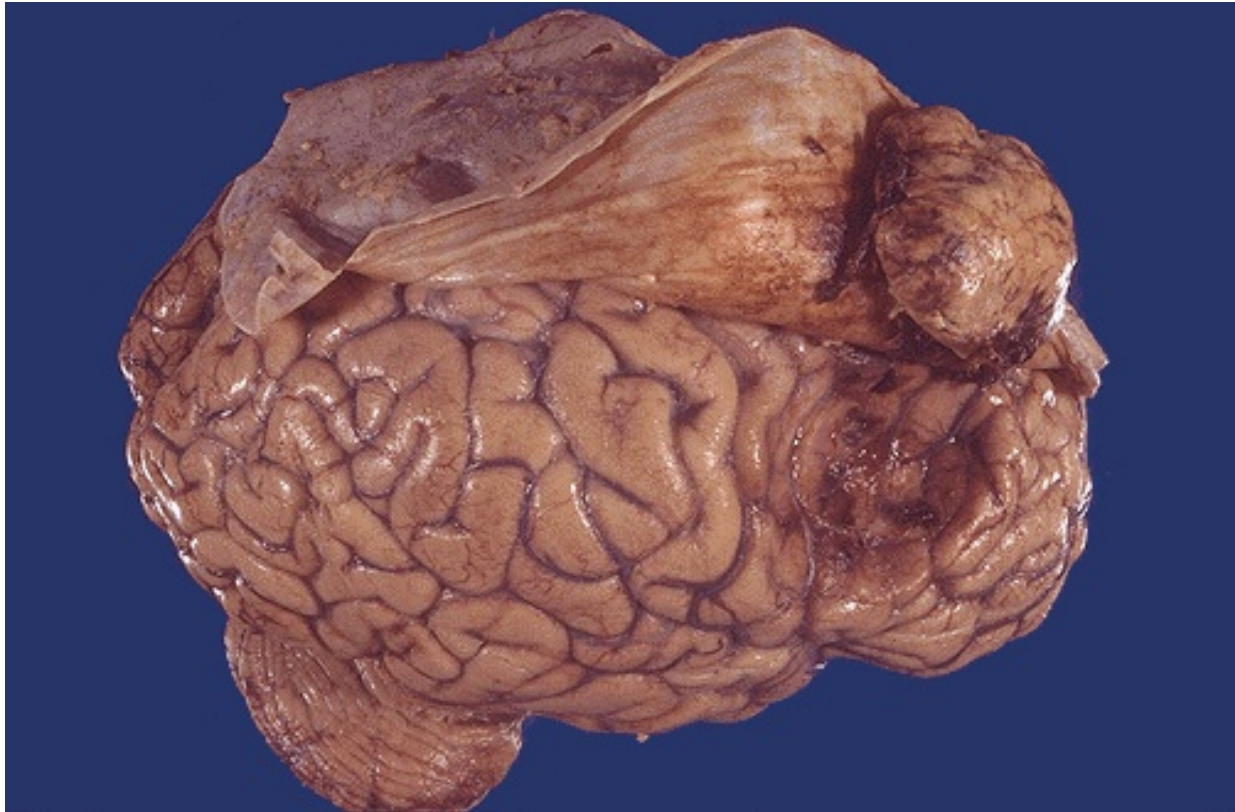


Neuroscience2

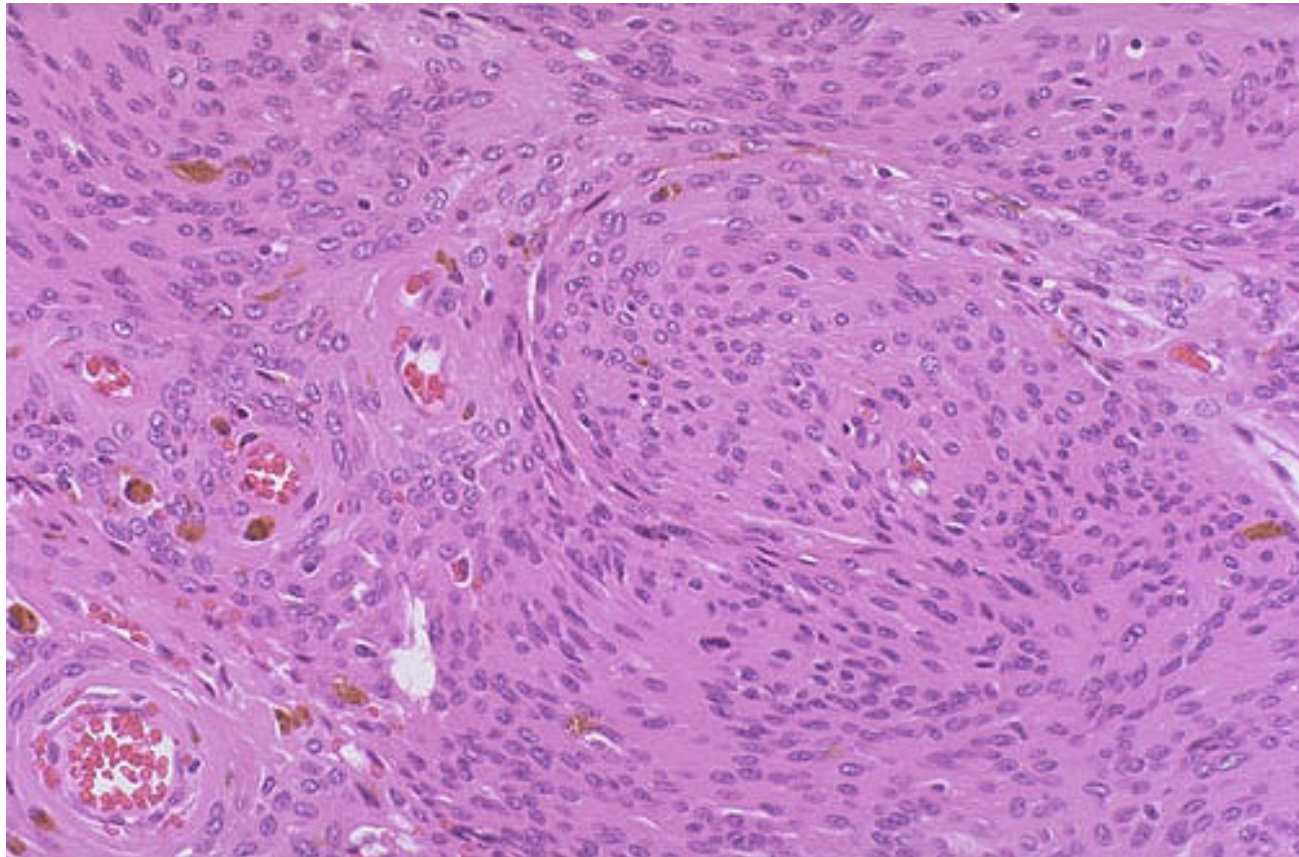
Pathology lab

Dr. Nesreen Bataineh
MD, FRCPath

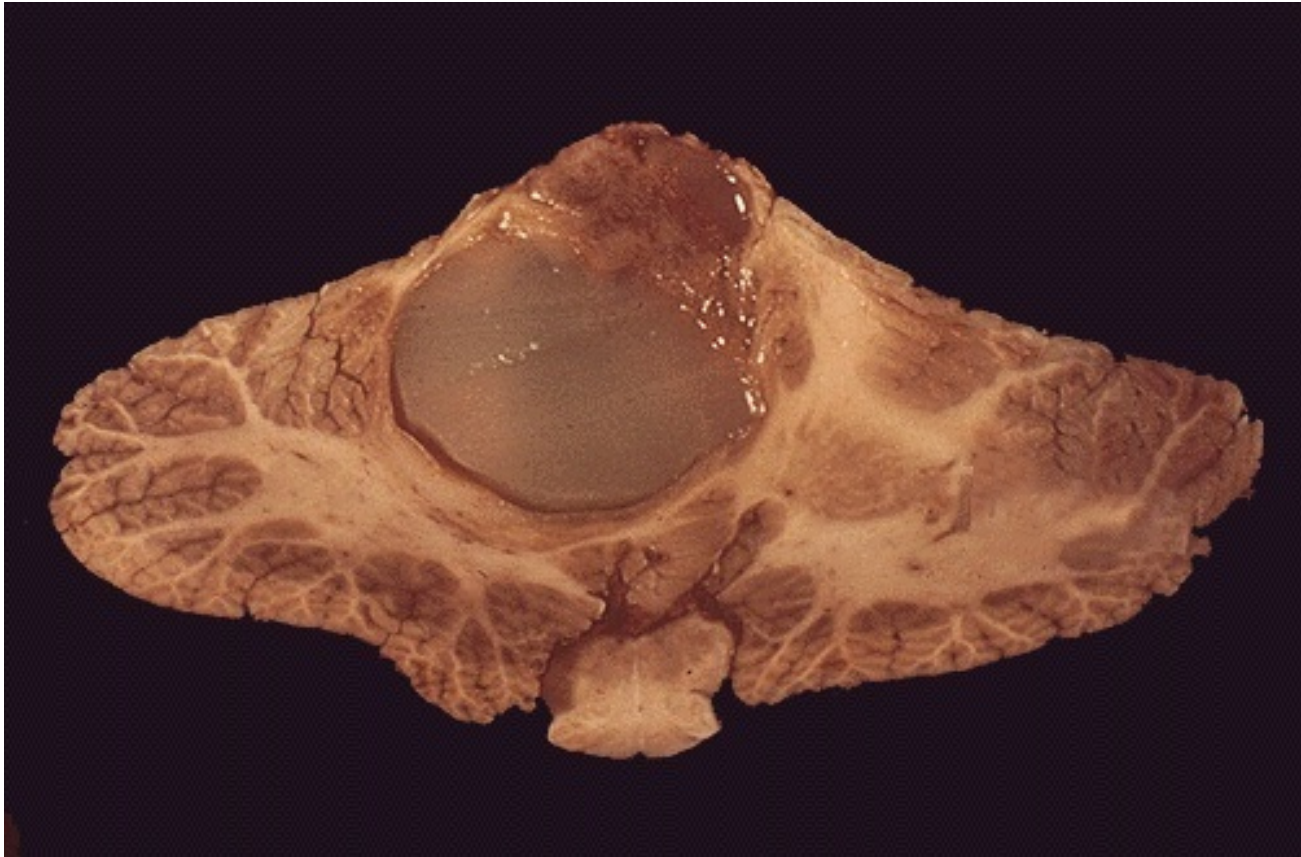


True or false?

This tumor remains localized and it never invades the bone or the brain.



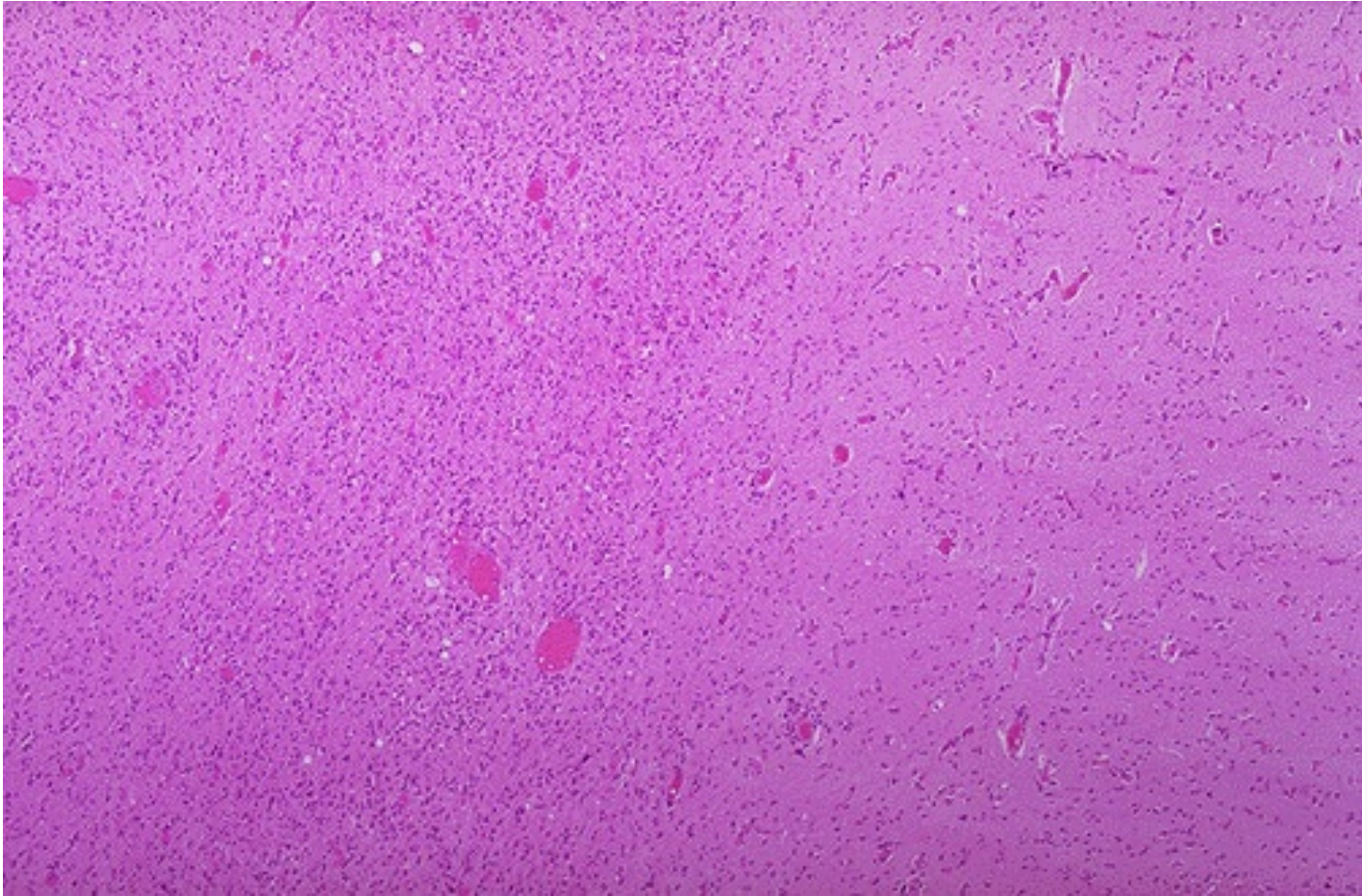
At medium power, this meningioma is composed of whorled nests of cells. A variety of patterns are possible.



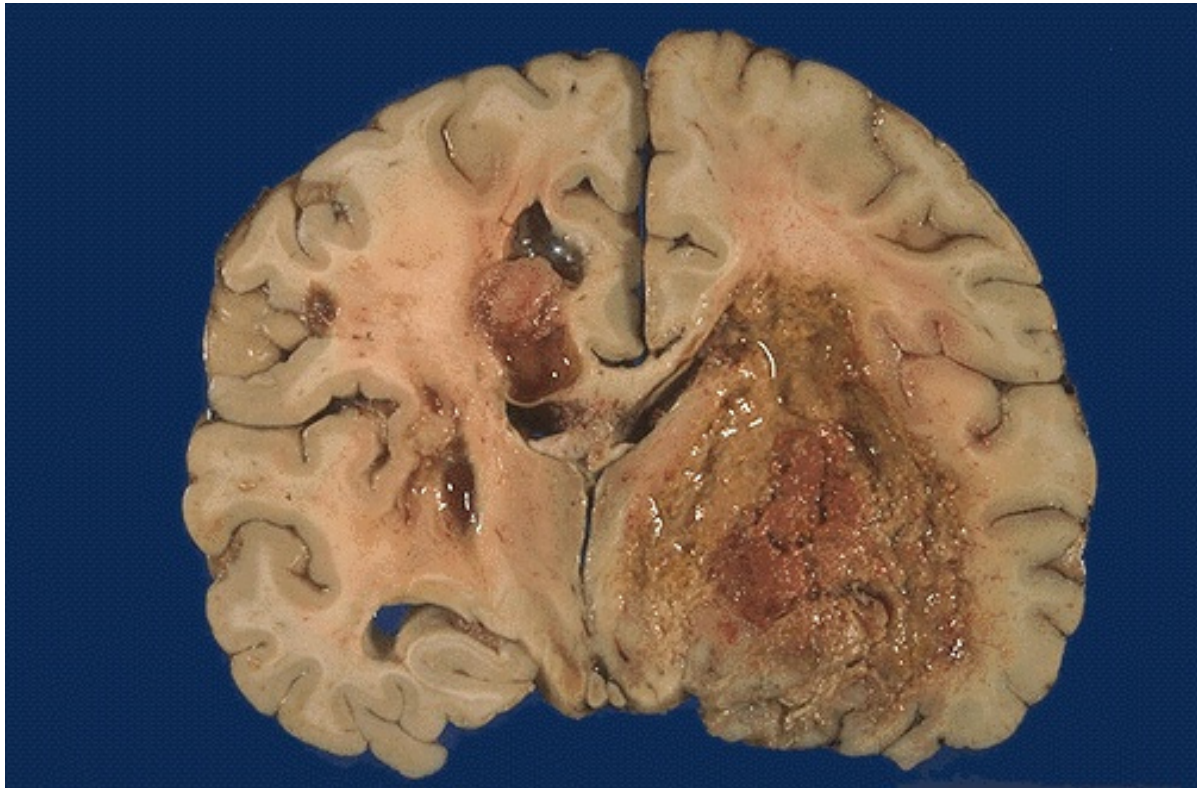
What is the WHO grade of this tumor?



This sagittal section of brain demonstrates a large brainstem glioma.
Most gliomas are astrocytomas.

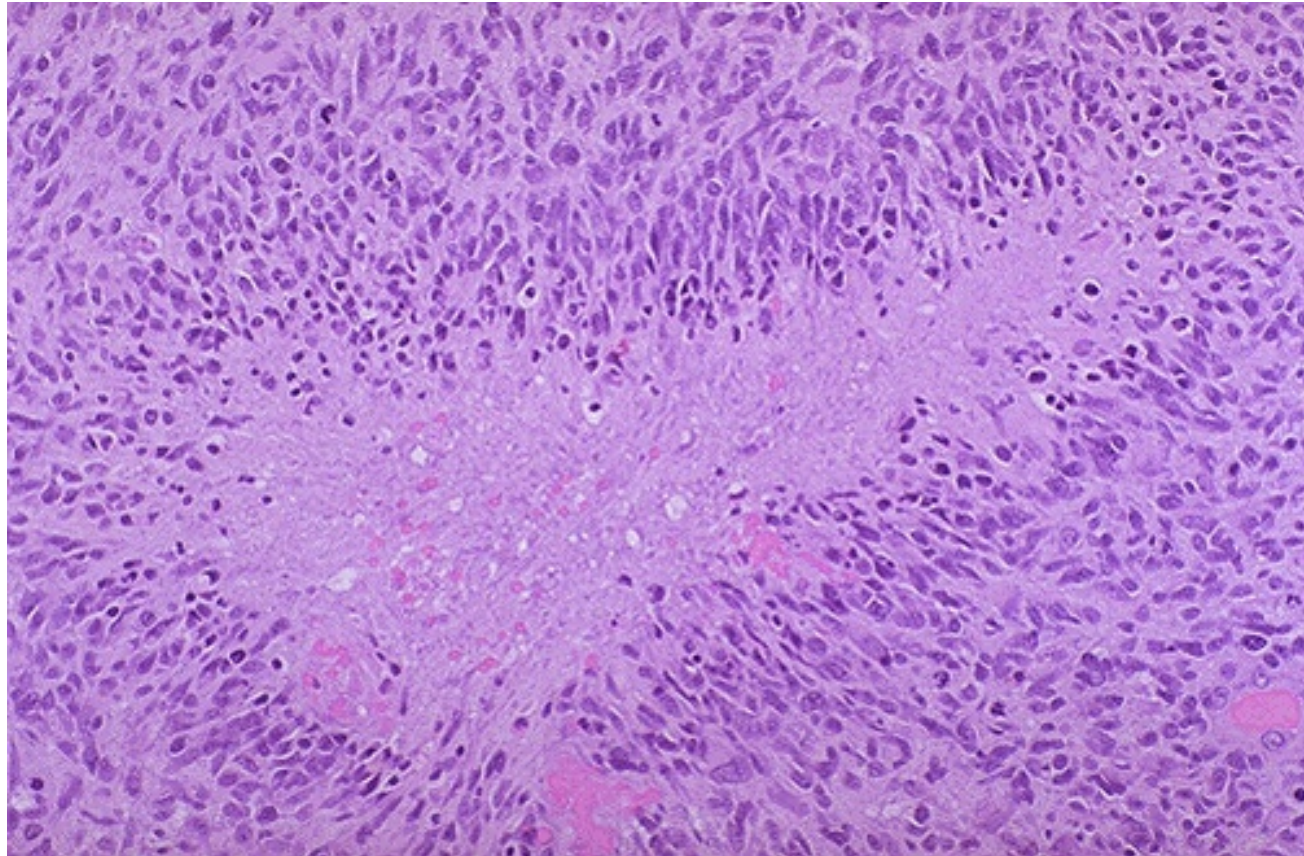


At low power, a glioma at the left shows greater cellularity and pleomorphism than adjacent brain at the right, but the margin is not distinct.

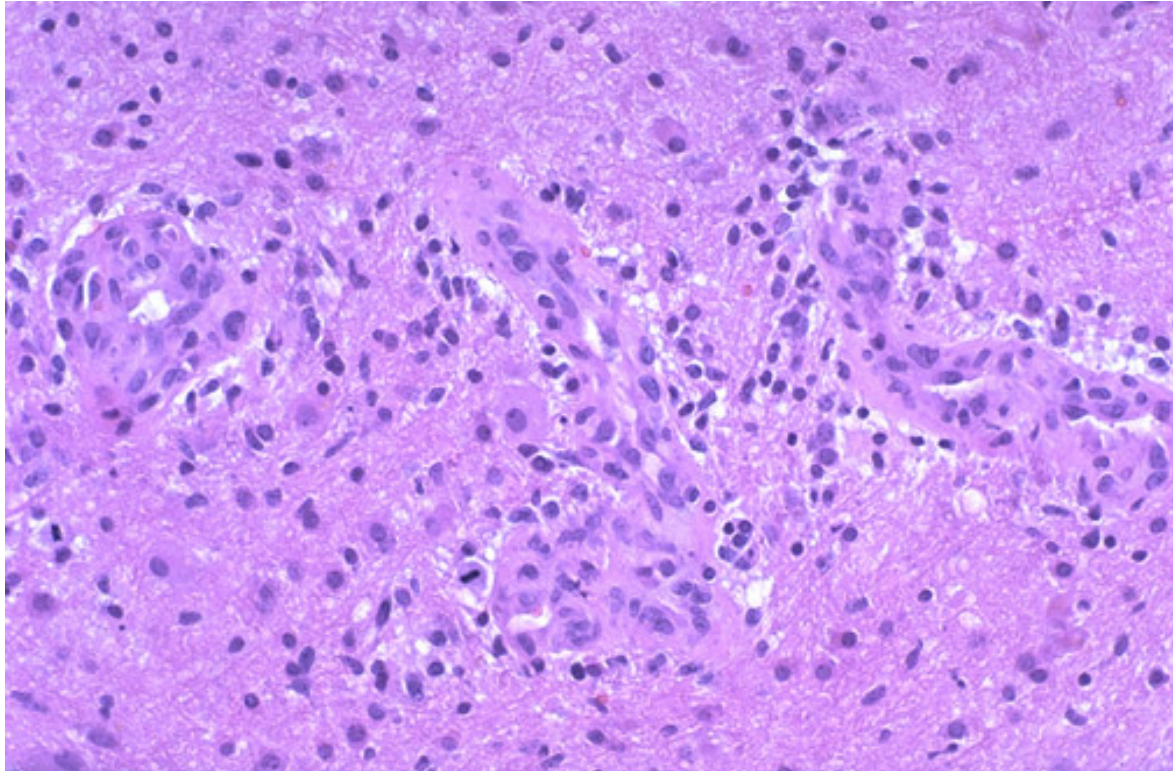


Describe what you see

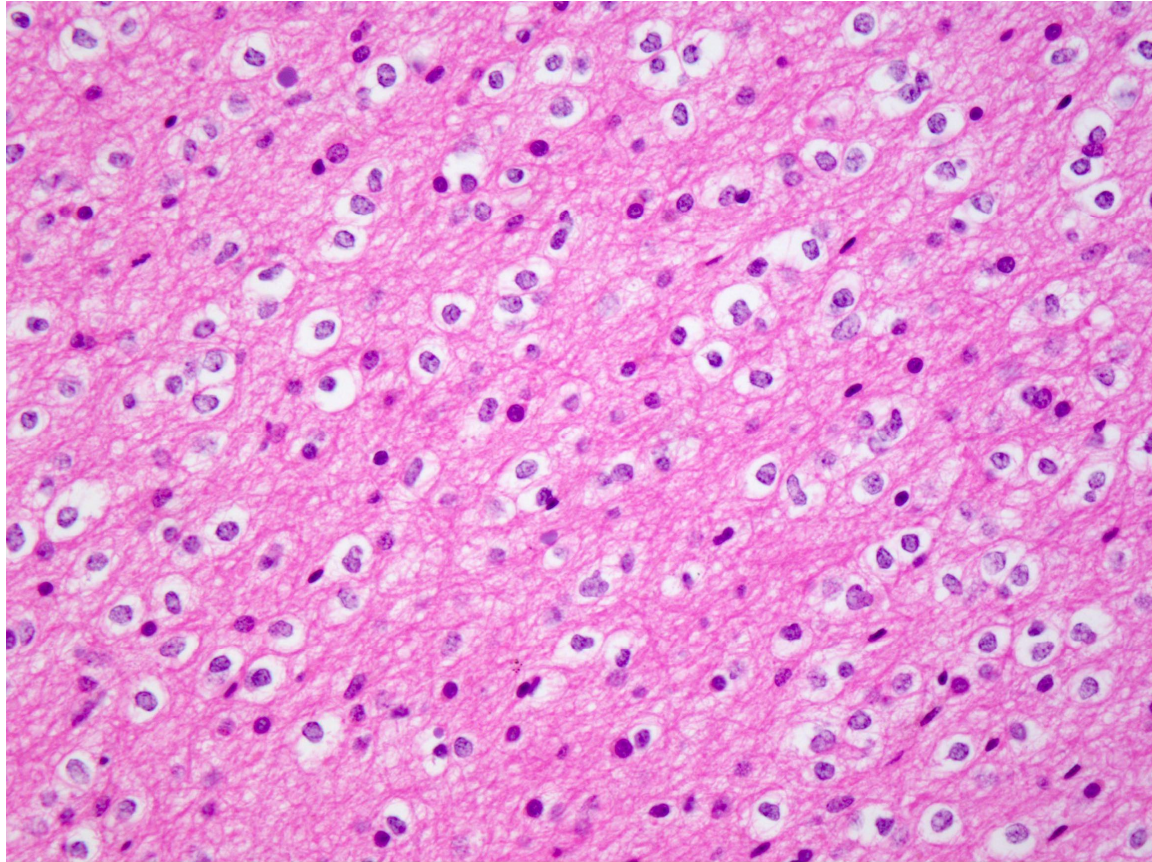
What is your most likely diagnosis?



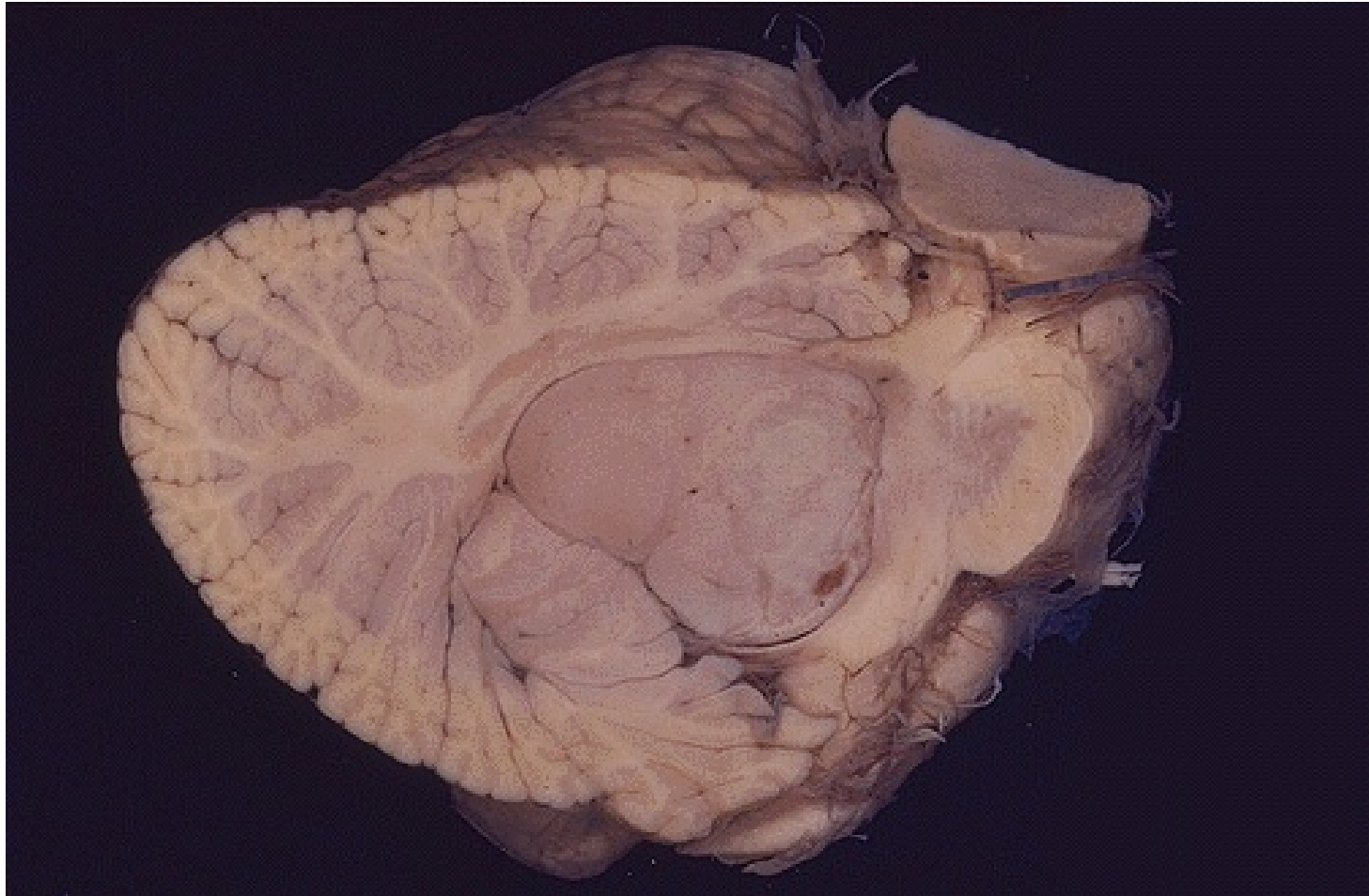
This glioblastoma (GBM) demonstrates marked cellularity with marked hyperchromatism and pleomorphism. This shows necrosis with neoplastic cells palisading around it.



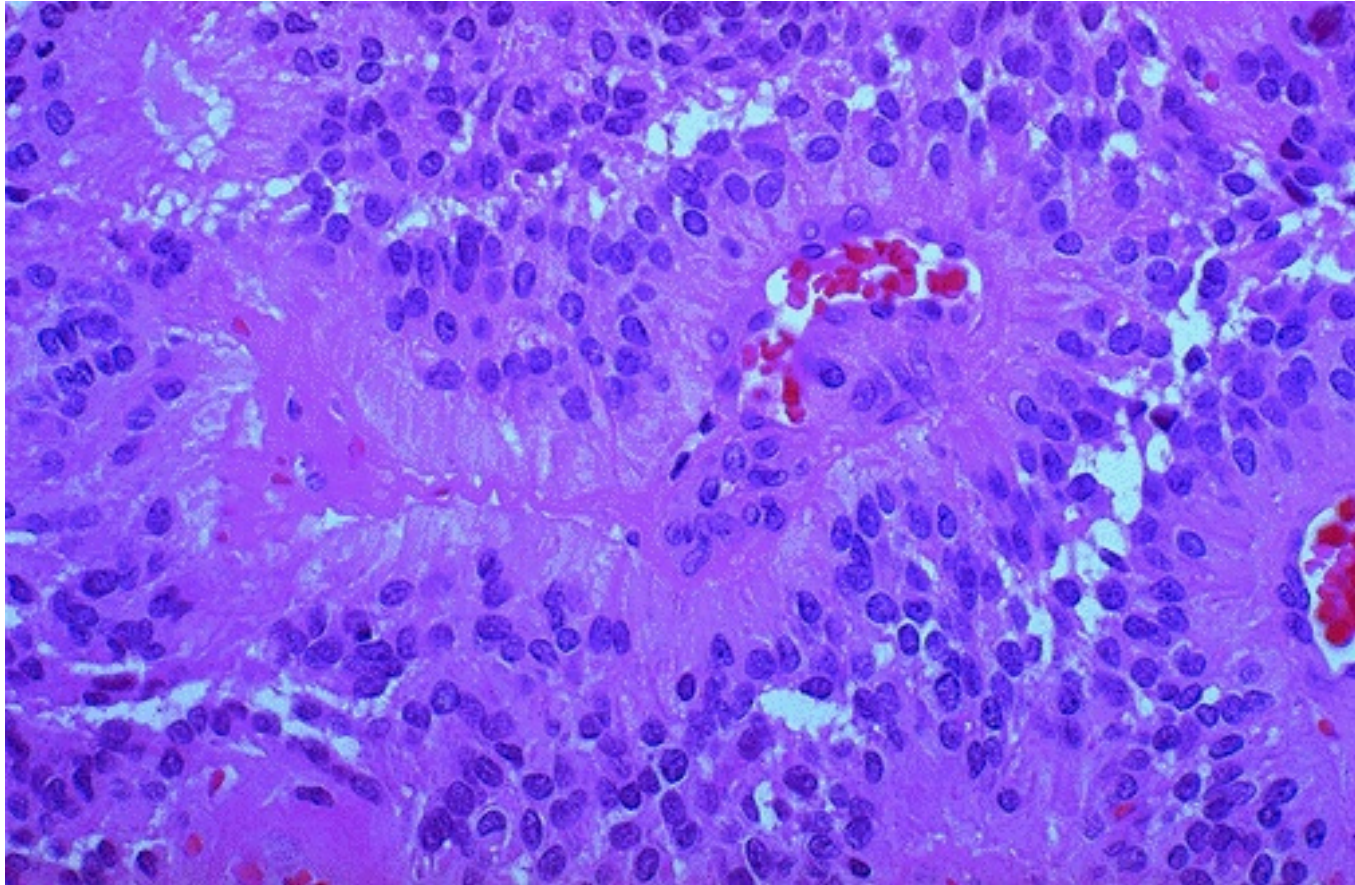
Another characteristic feature of a glioblastoma (GBM) is capillary endothelial cell proliferation.



What is the characteristic genetic finding of this tumor?



This shows a tumor in the fourth ventricle above the brainstem and bulging toward the cerebellum. What is your differential diagnosis of this finding?

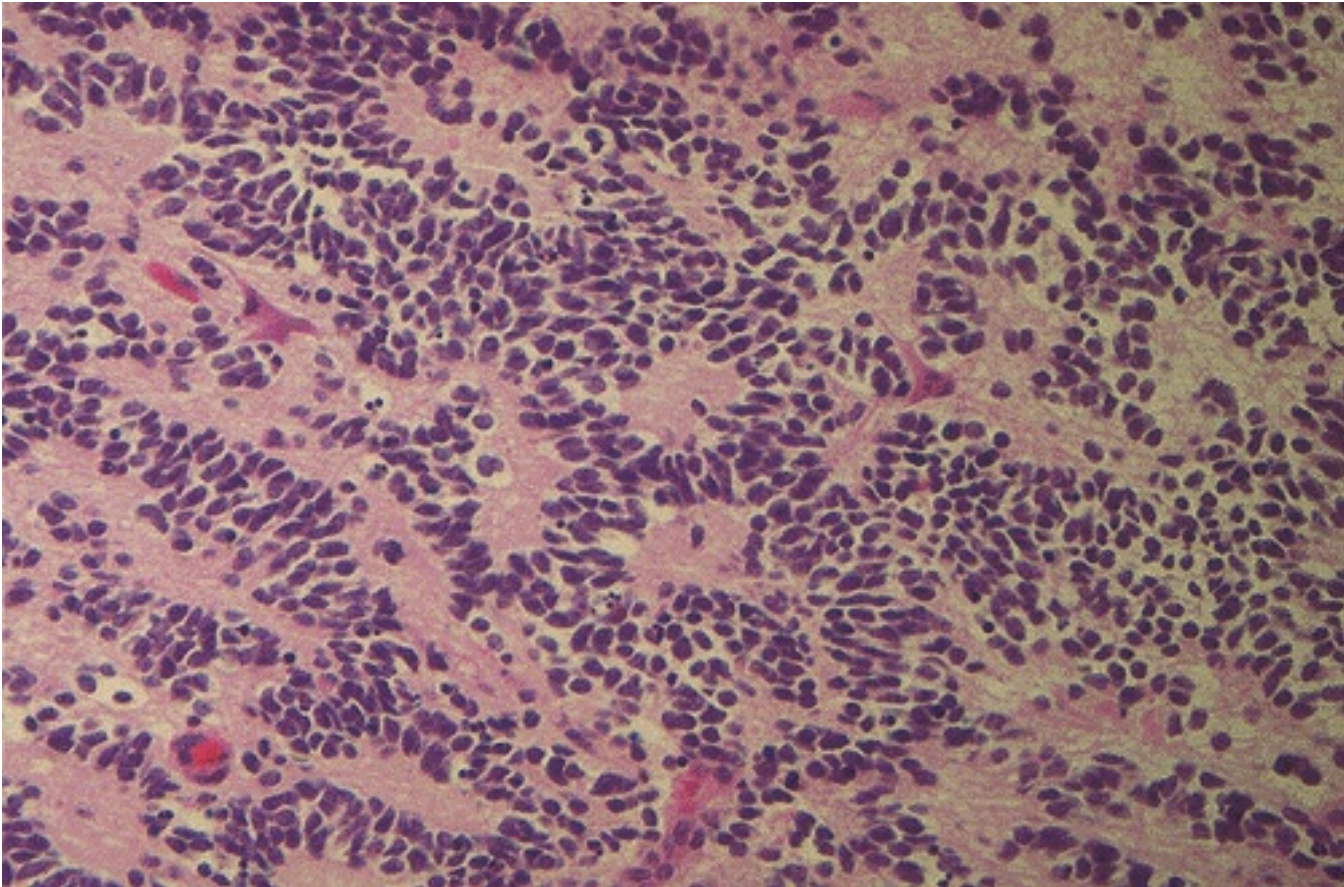


Name this finding



Where is the abnormality?

The irregular mass seen here near the midline of the cerebellum is a medulloblastoma. This is one of the "small round blue cell" tumors and it most often occurs in children

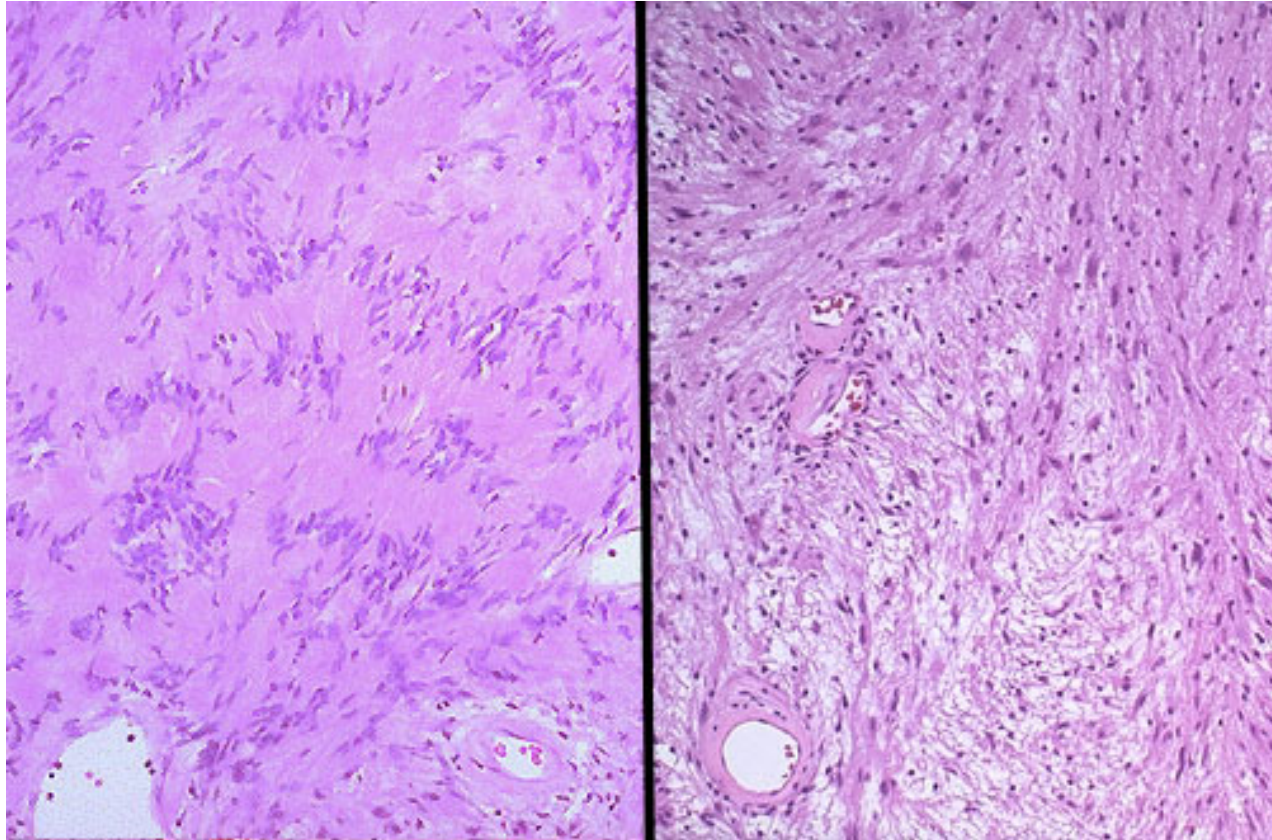


What is your diagnosis?

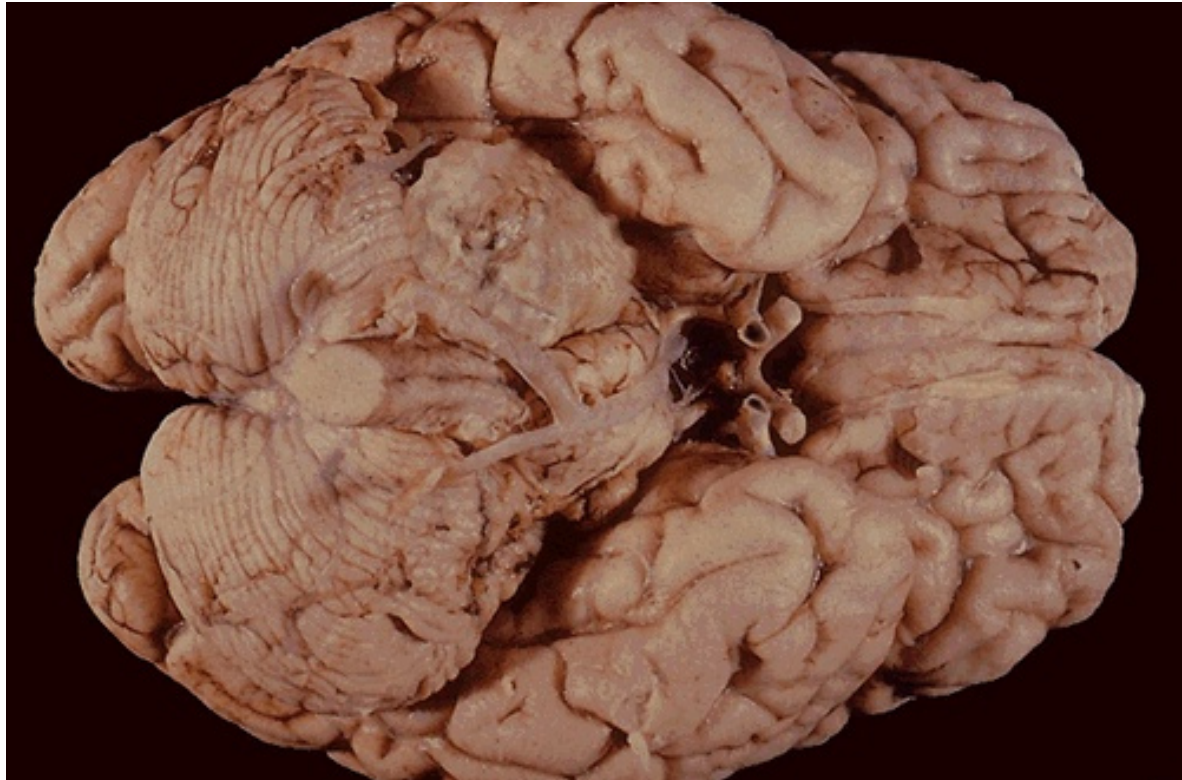
Name the structures seen here



This discreet firm neoplasm was removed from the surface of a peripheral nerve. It is a schwannoma (neurilemmoma) which arises from the nerve sheath Schwann cells.



These are the classic microscopic appearances of a schwannoma, which is benign. Note the more cellular "Antoni A" pattern on the left with palisading nuclei surrounding pink areas (Verocay bodies). On the right is the "Antoni B" pattern with a looser stroma, fewer cells, and myxoid change.



The mass lesion here is arising in the acoustic (eighth cranial) nerve at the cerebellopontine angle. This is a schwannoma. Patients may present with hearing loss. These benign neoplasms can be removed.

THANK YOU