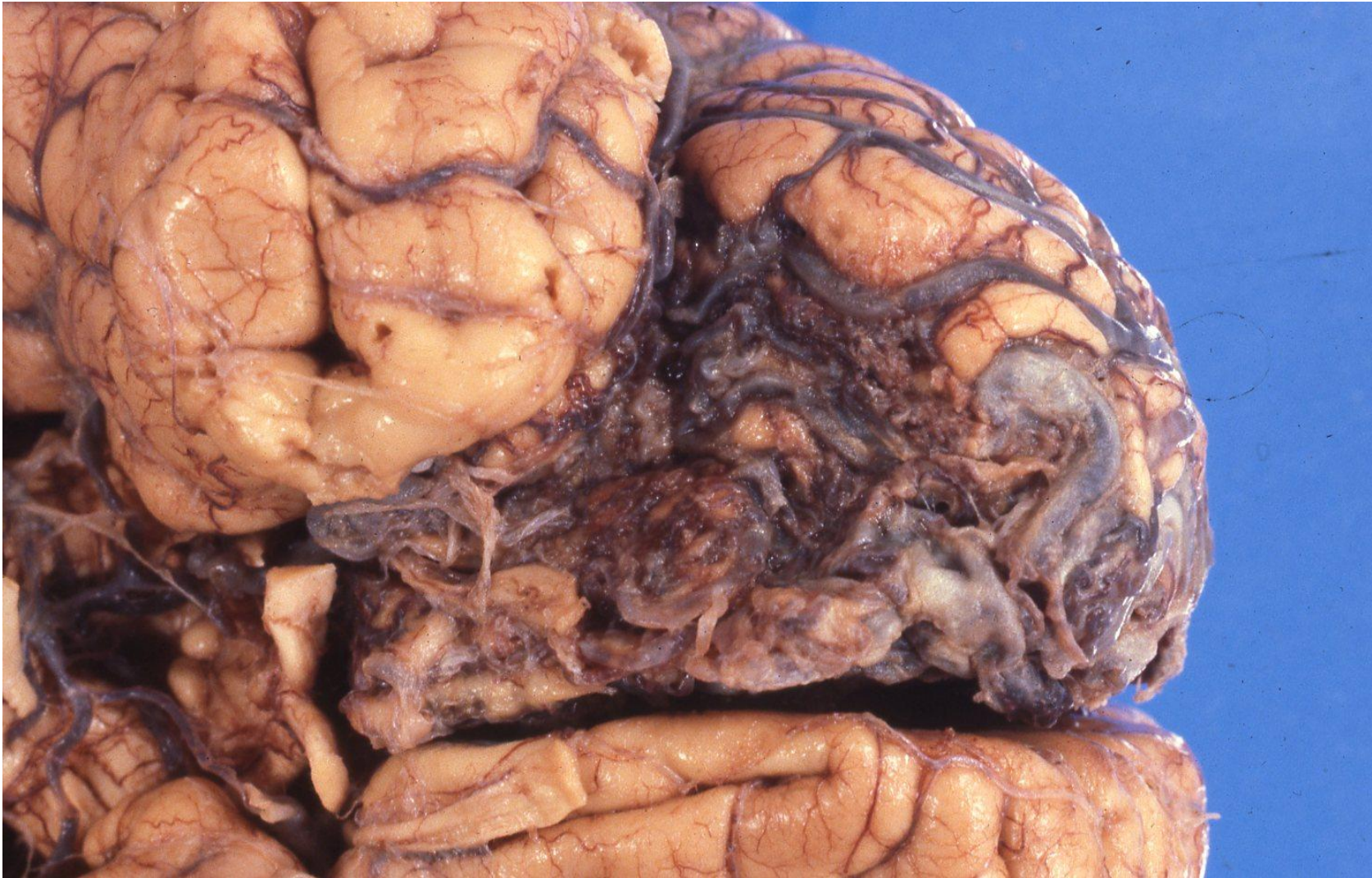


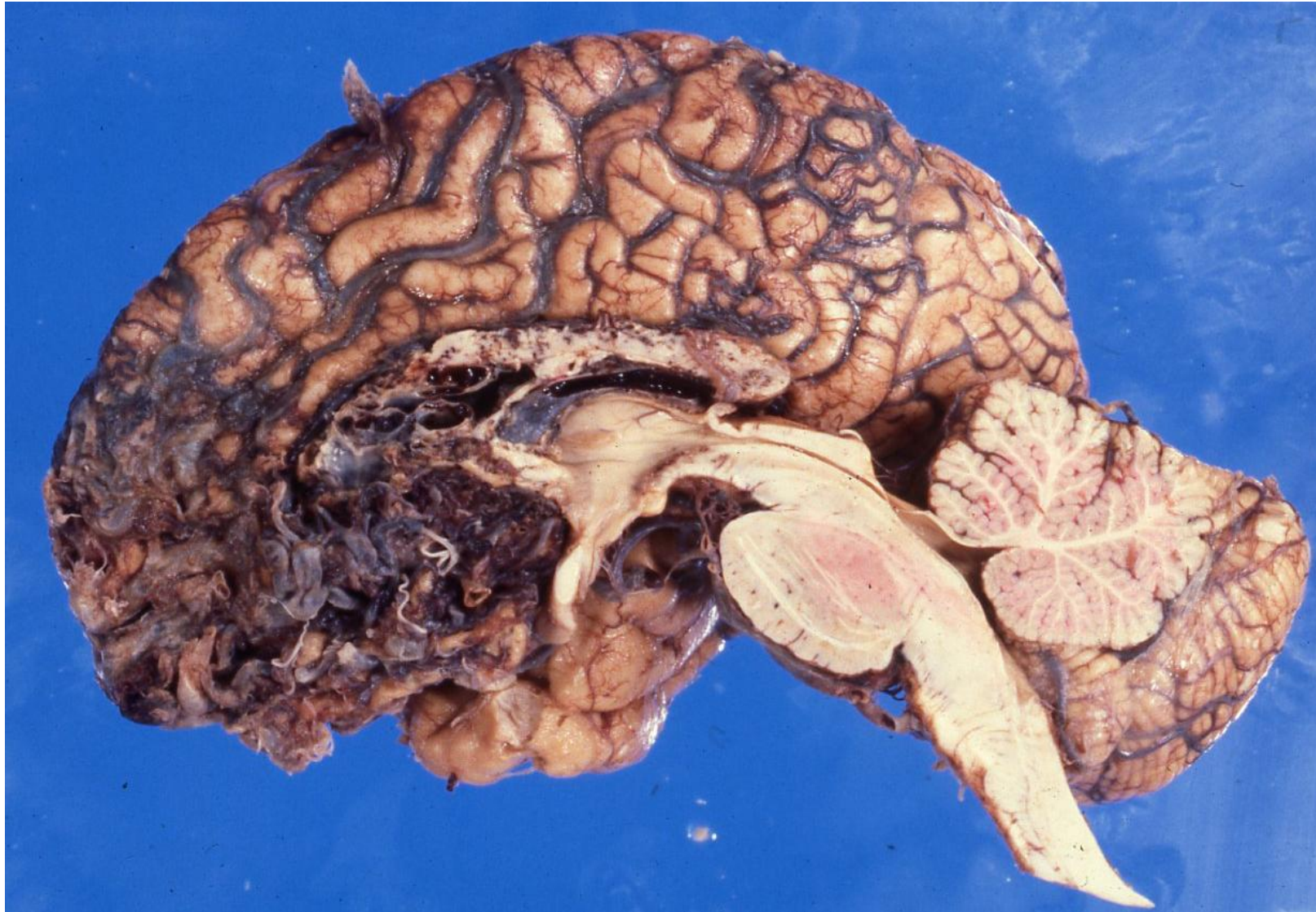
Gross appearance of arteriovenous malformation

Brain arteriovenous malformation (AVM) is an anomalous direct shunt between cerebral arteries and veins that convalesce into a vascular nidus. There is no intervening capillary bed. Brain AVM causes hemorrhage (subarachnoid, intraventricular and intracerebral), seizures and progressive neurological deficits.

A 36-year-old male patient manifested subarachnoid hemorrhage due to large AVM formed in the right frontal lobe. Gross and microscopic features are presented as one typical example.



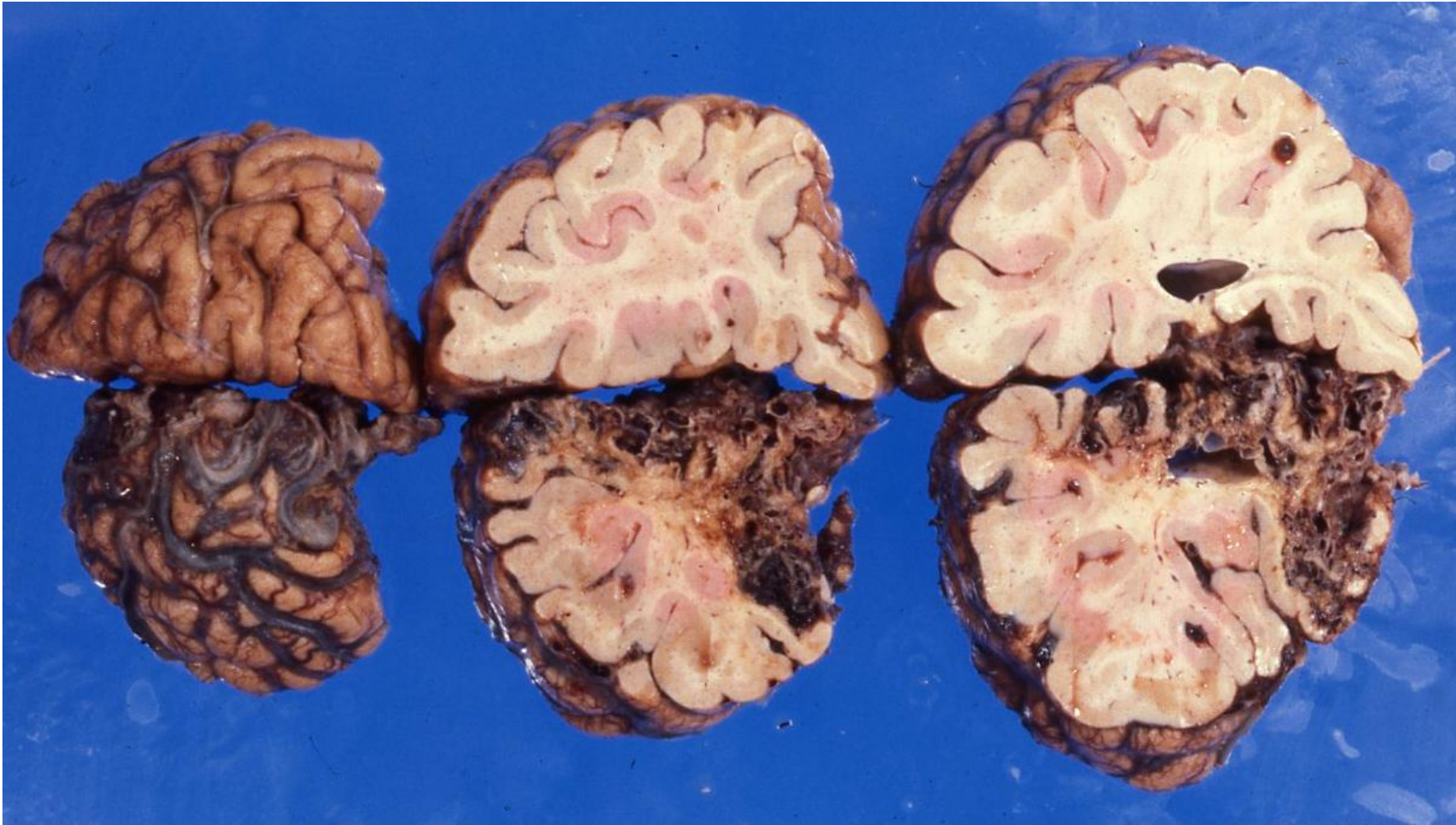
Gross appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage.



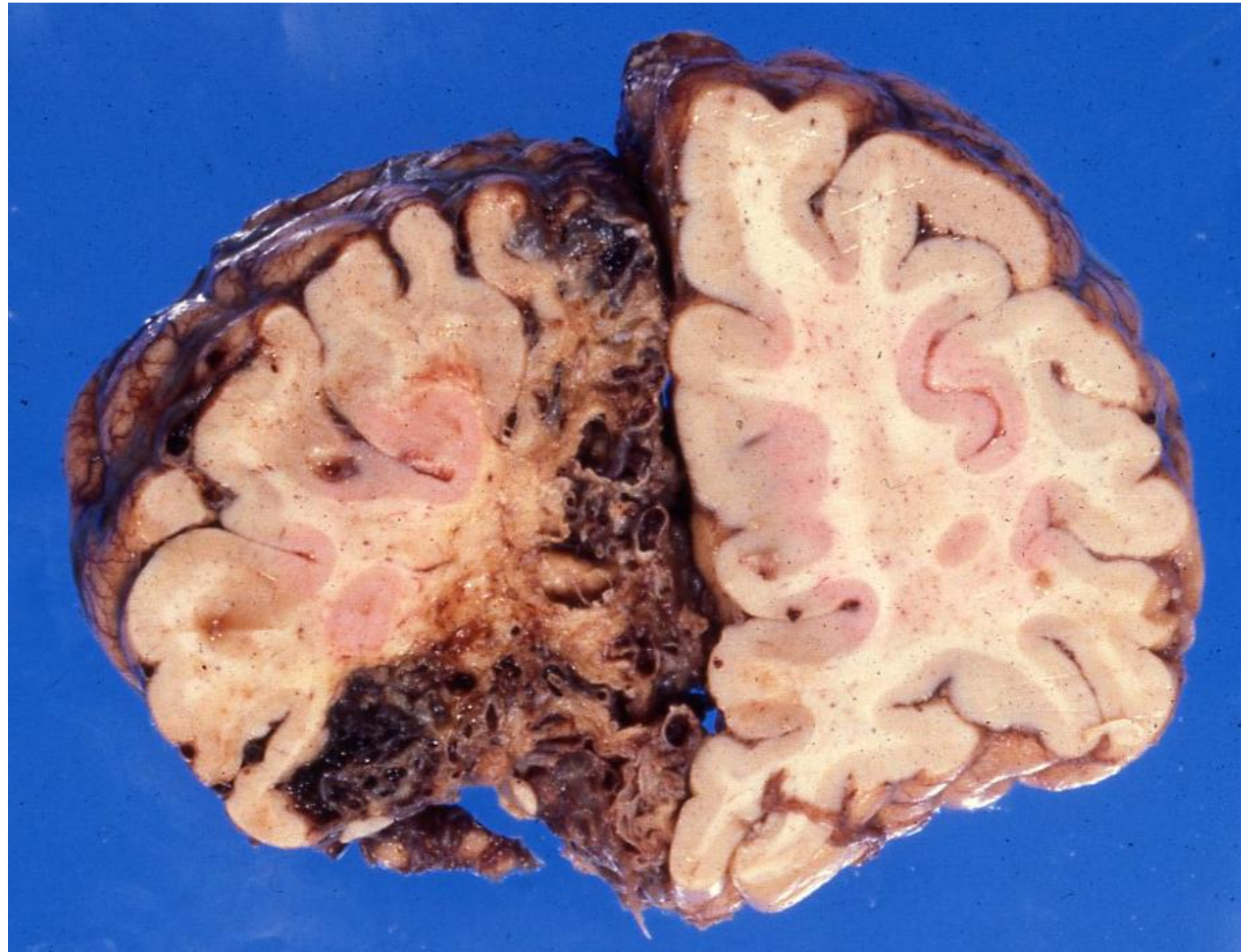
Gross appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Sagittal section of the brain showing right-sided hemisphere.



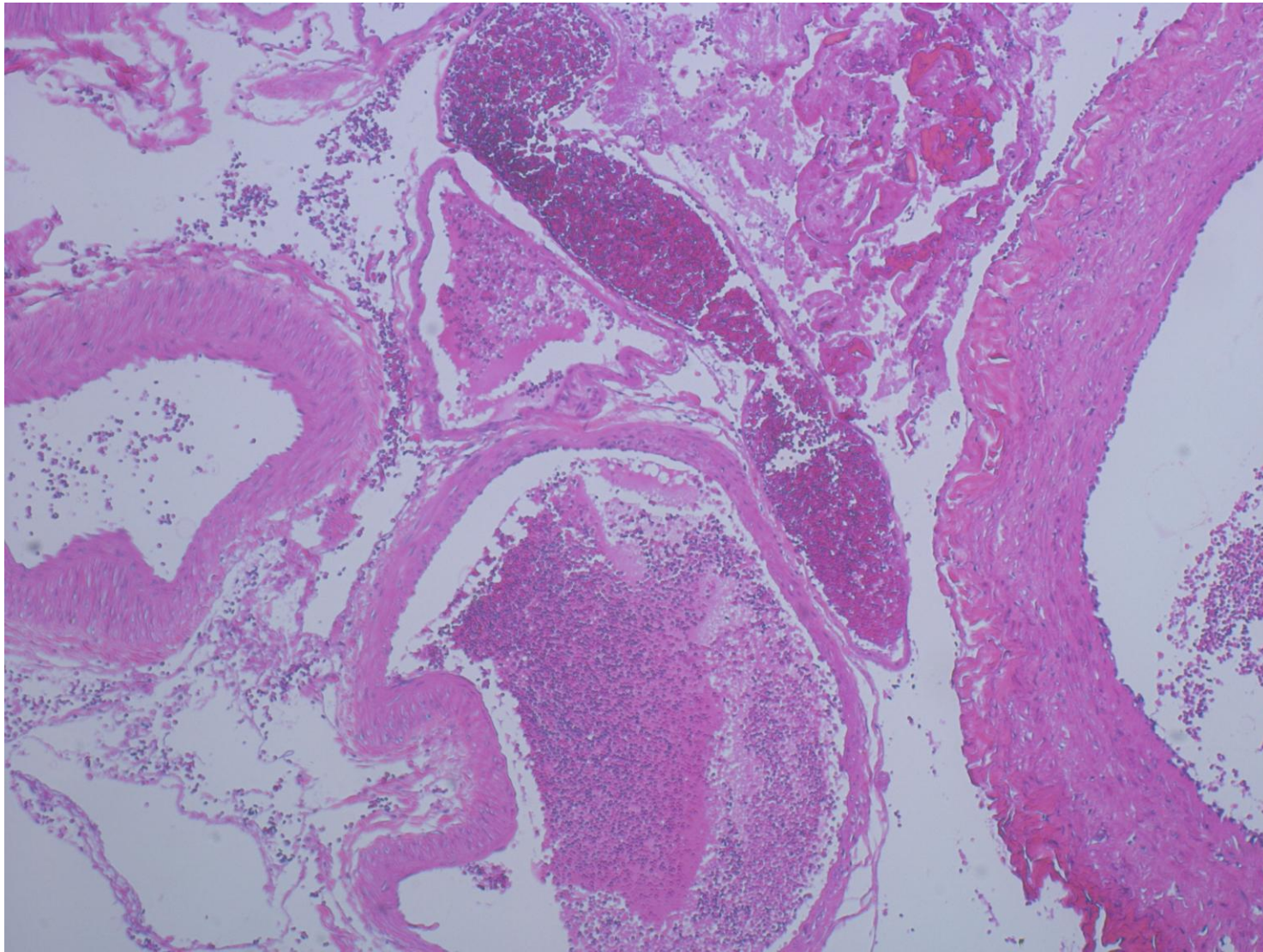
Sagittal section of the brain. Normal appearing left-sided hemisphere is shown as a control of the diseased side.



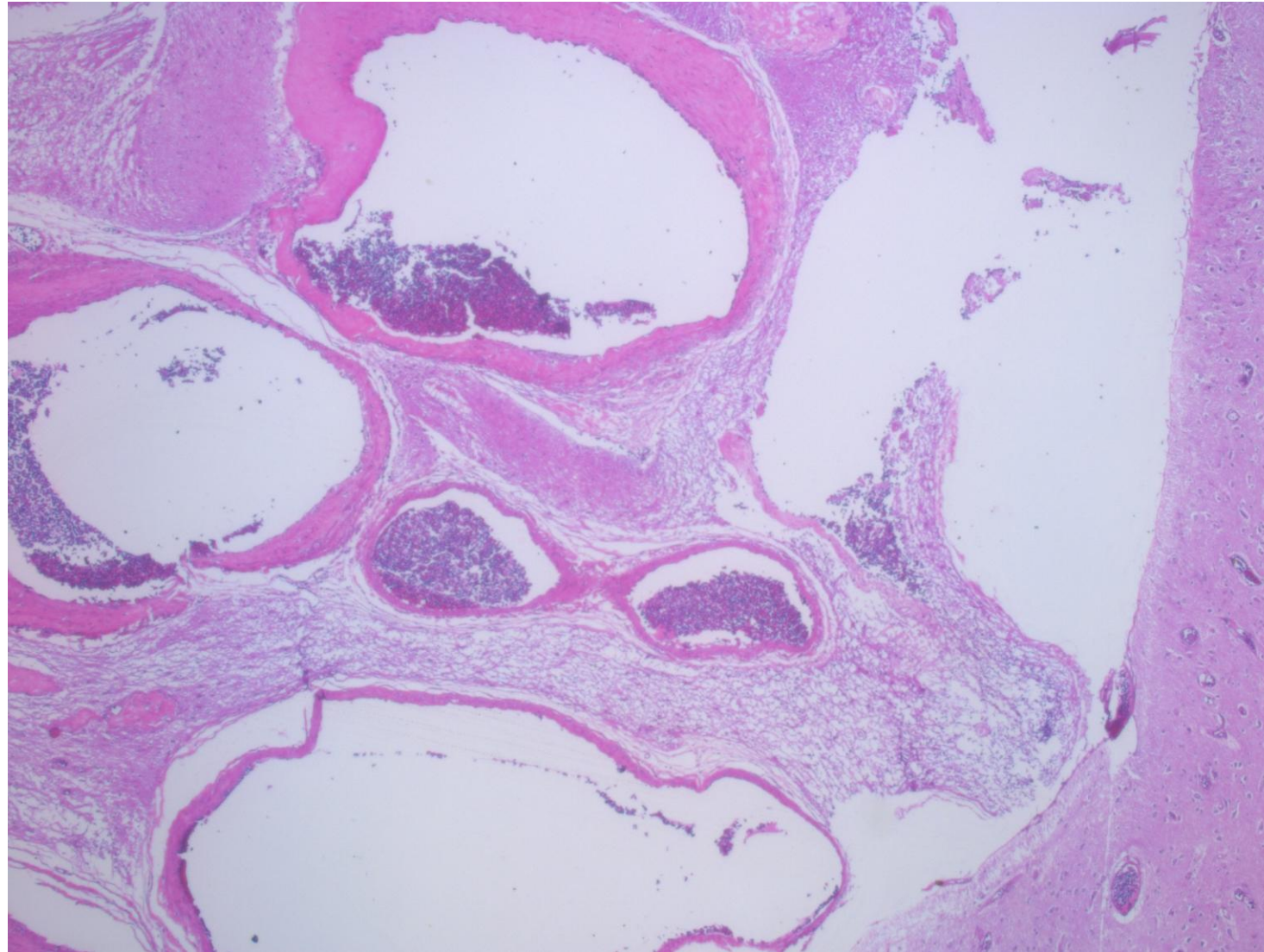
Gross appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Frontal sections of the frontal lobes. Parenchymal involvement is evident.



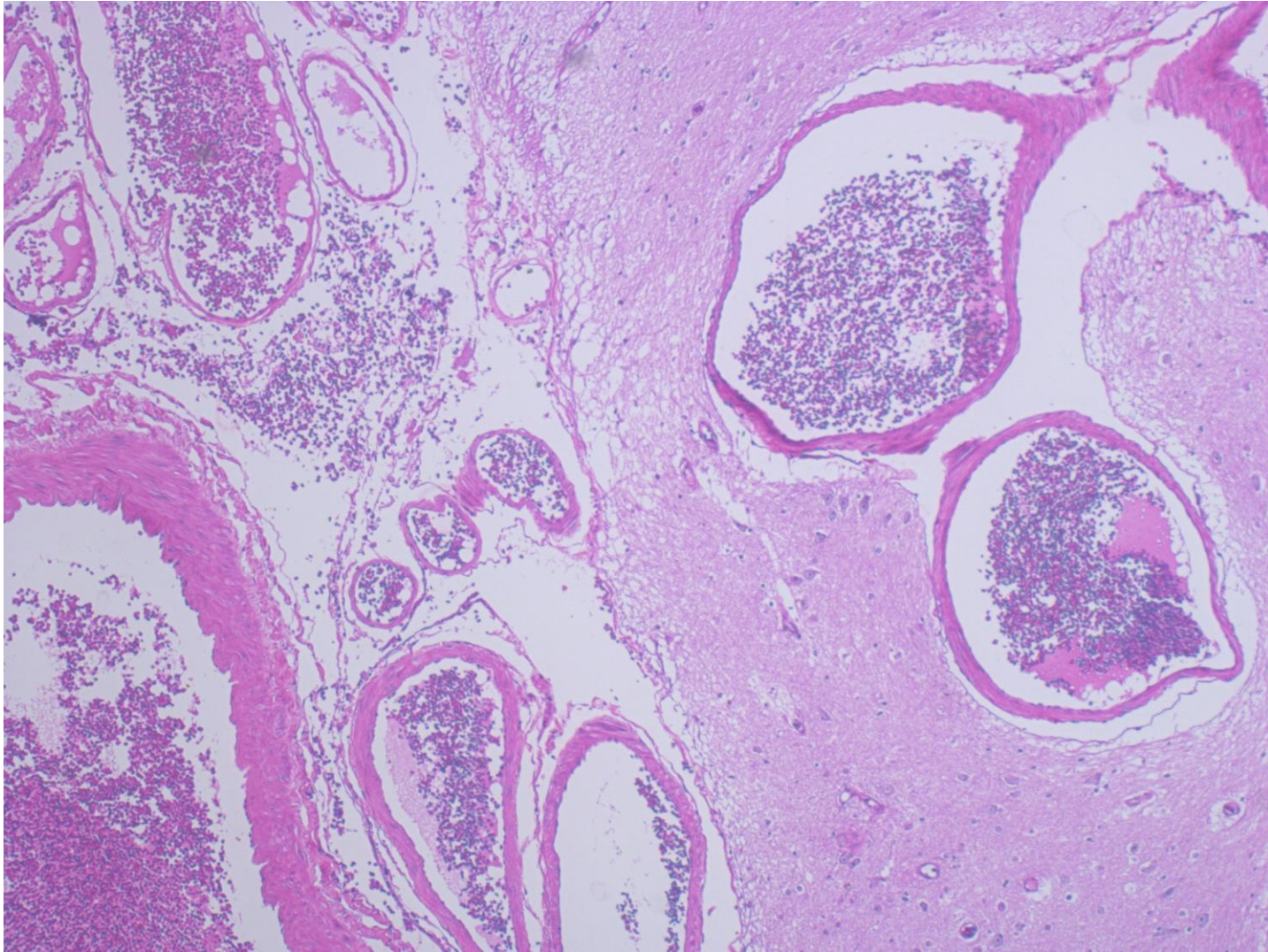
Gross appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Frontal sections of the frontal lobes. Parenchymal involvement is evident.



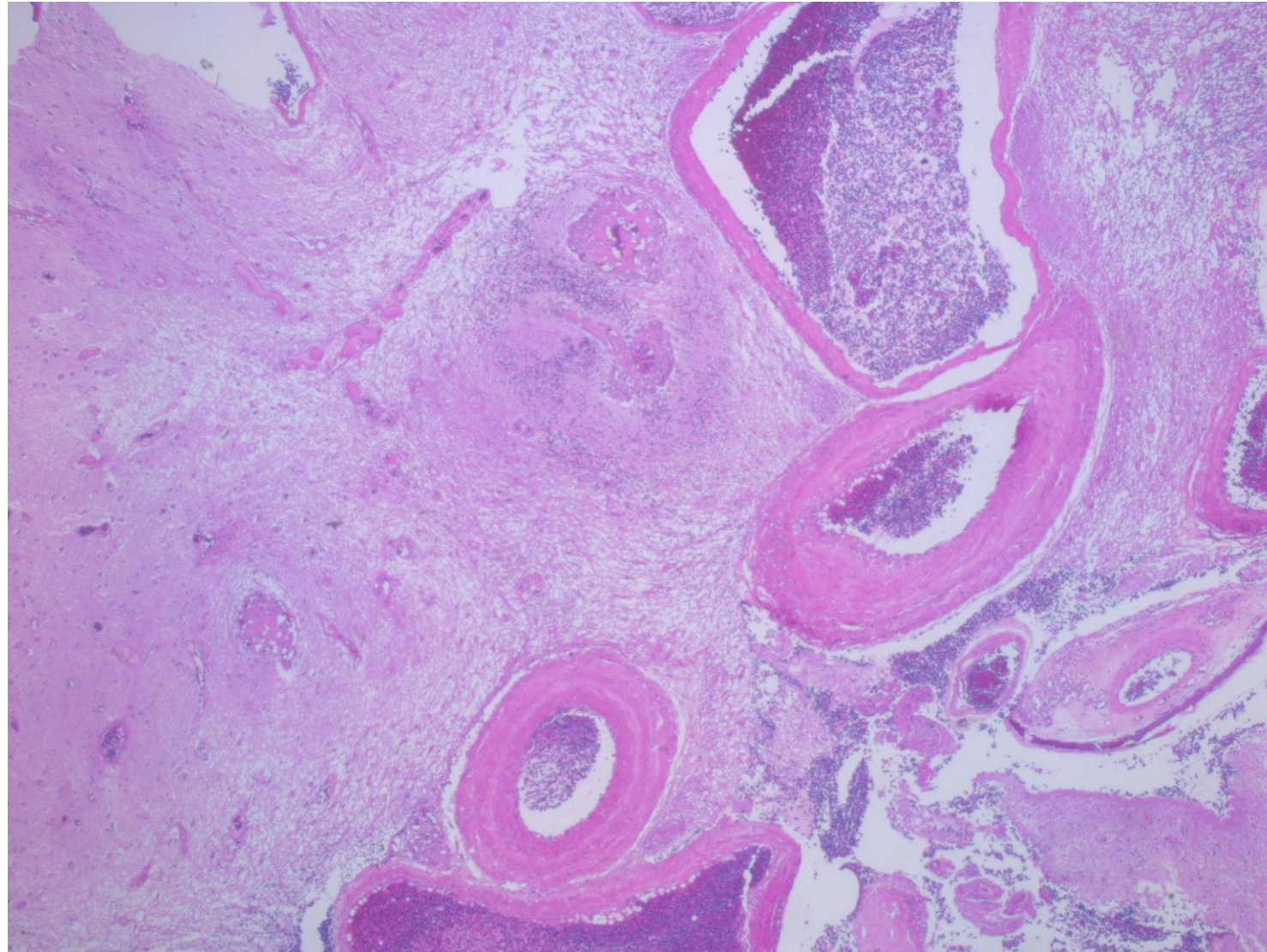
Microscopic appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Abnormal arteries and veins are clustered. H&E-1



Microscopic appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Abnormal arteries and veins are clustered in the subarachnoid space. H&E-2



Microscopic appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Abnormal arteries and veins are clustered on and in the brain tissue. H&E-3



Microscopic appearance of arteriovenous malformation (AVM) in the right frontal lobe, causing lethal subarachnoid hemorrhage. Abnormal arteries and veins are clustered on and in the brain tissue. H&E-4