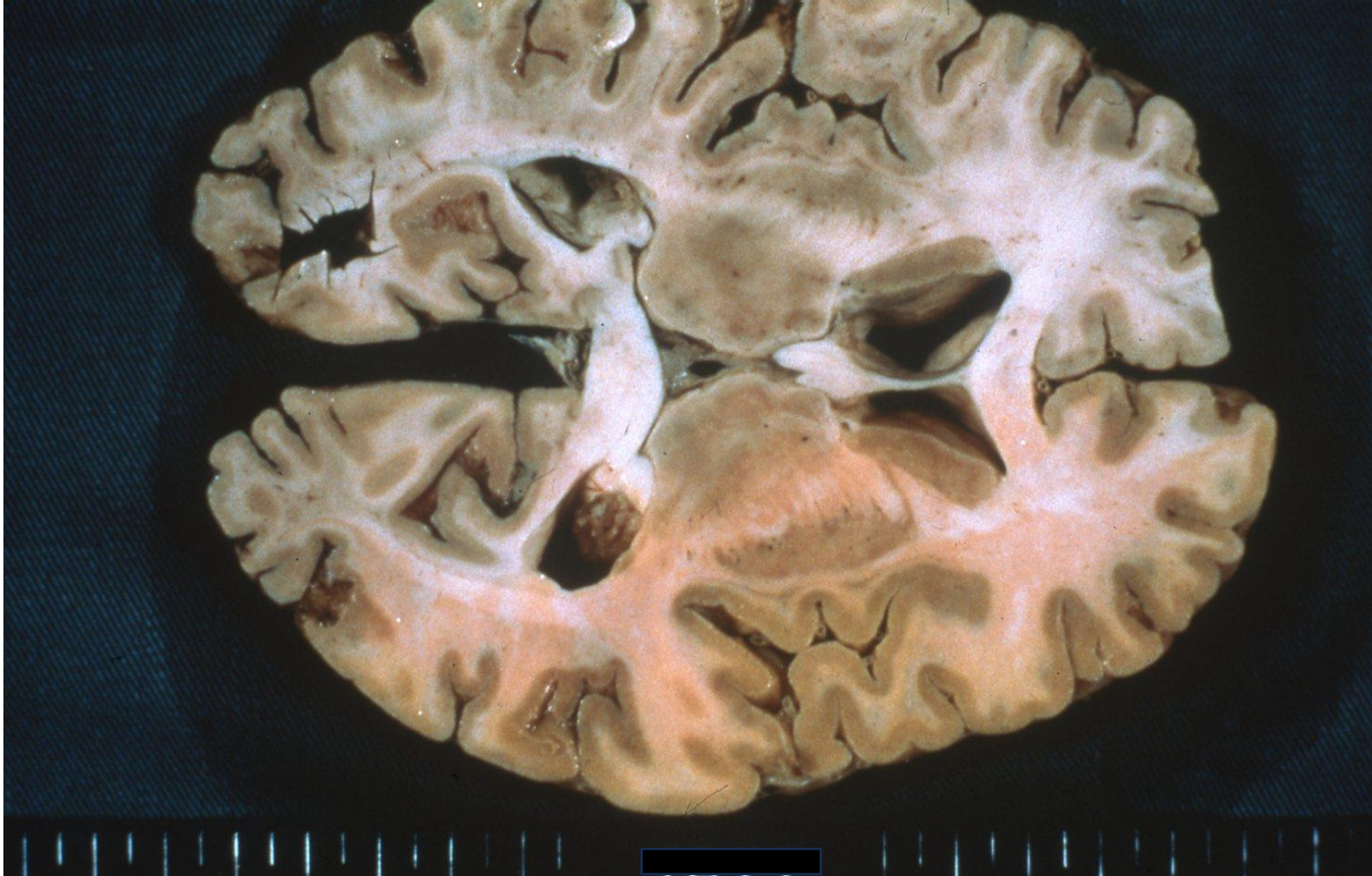


Creutzfeldt-Jakob's disease

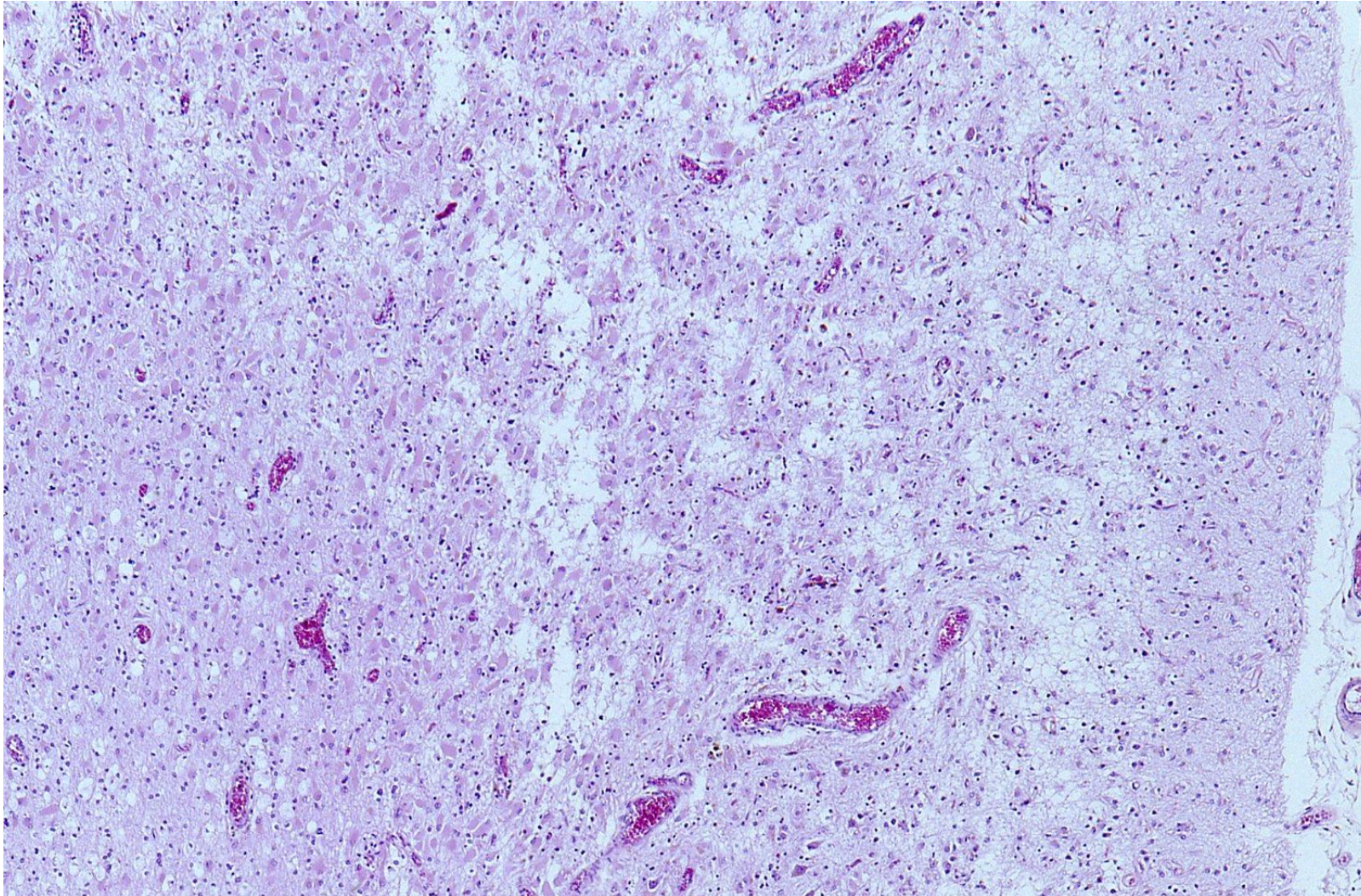
Creutzfeldt-Jakob's disease (subacute spongiform encephalopathy) is a representative fatal prion disease. Infectious prions are misfolded proteins that can cause normally folded proteins to also become misfolded. About 10% of cases are inherited in an autosomal dominant manner. Early symptoms include memory problems, behavioral changes, poor coordination and visual disturbances. Later symptoms include dementia, involuntary movements, blindness, weakness and coma. Most patients die within a year of diagnosis. Onset is typically around 60 years of age.



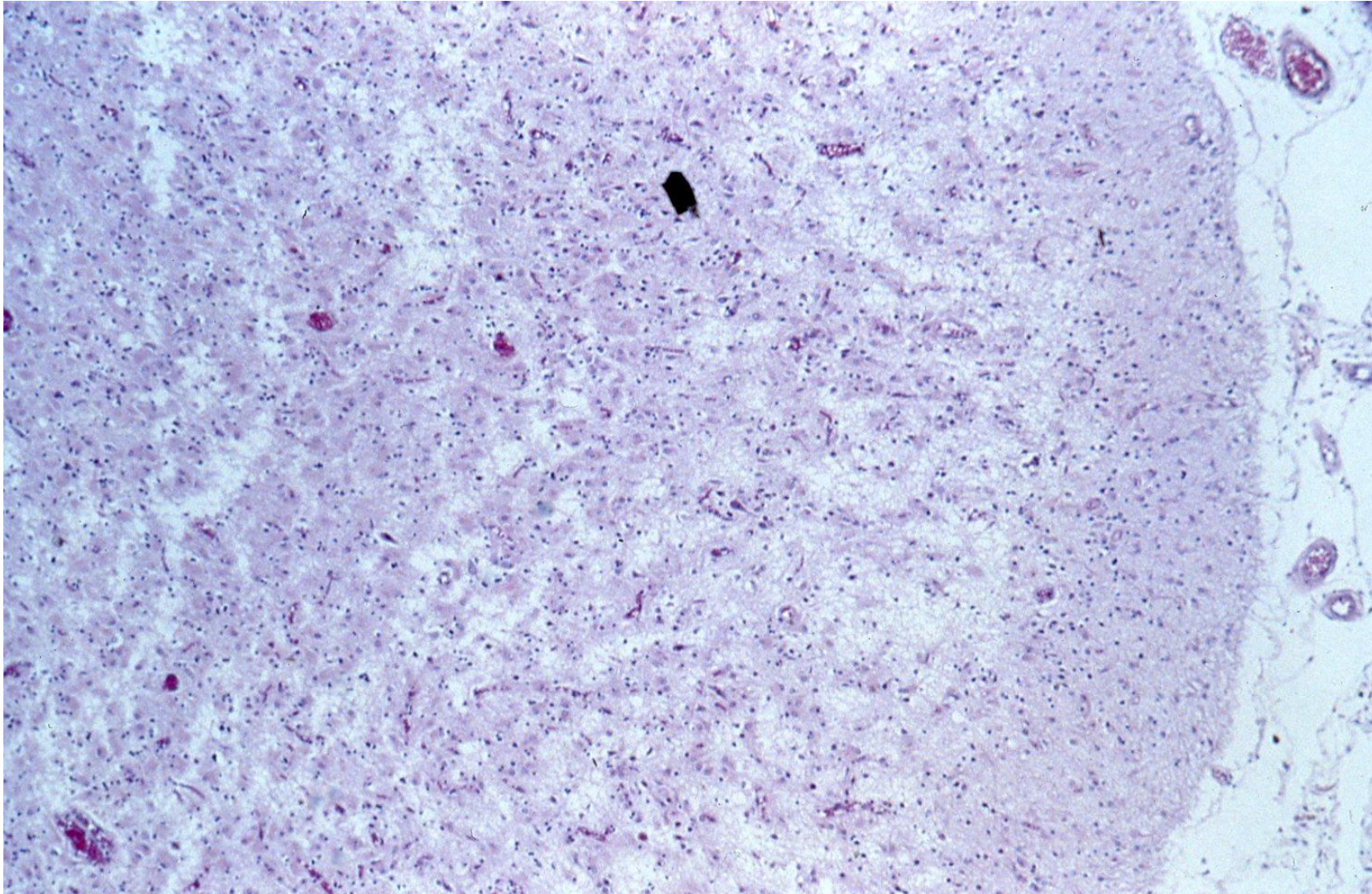
Gross appearance of the autopsied brain of Creutzfeldt-Jakob's disease in a male patient aged 60's. Atrophy of the gray matter with increased pigmentation is diffusely observed. The white matter is also shrunken.



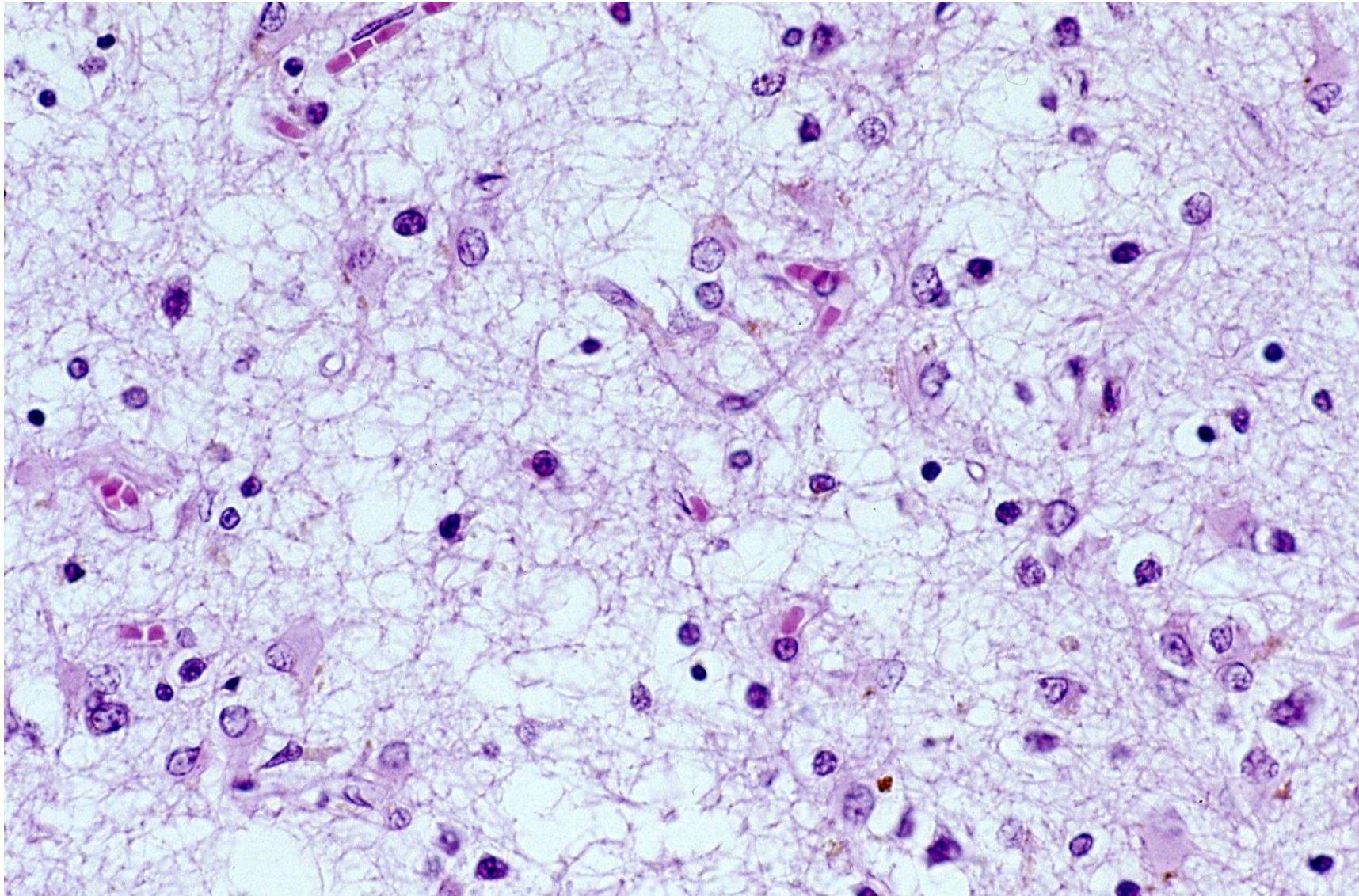
Gross appearance of the autopsied brain of Creutzfeldt-Jakob's disease in a male patient aged 60's. Atrophy of the gray matter with increased pigmentation is diffusely observed.



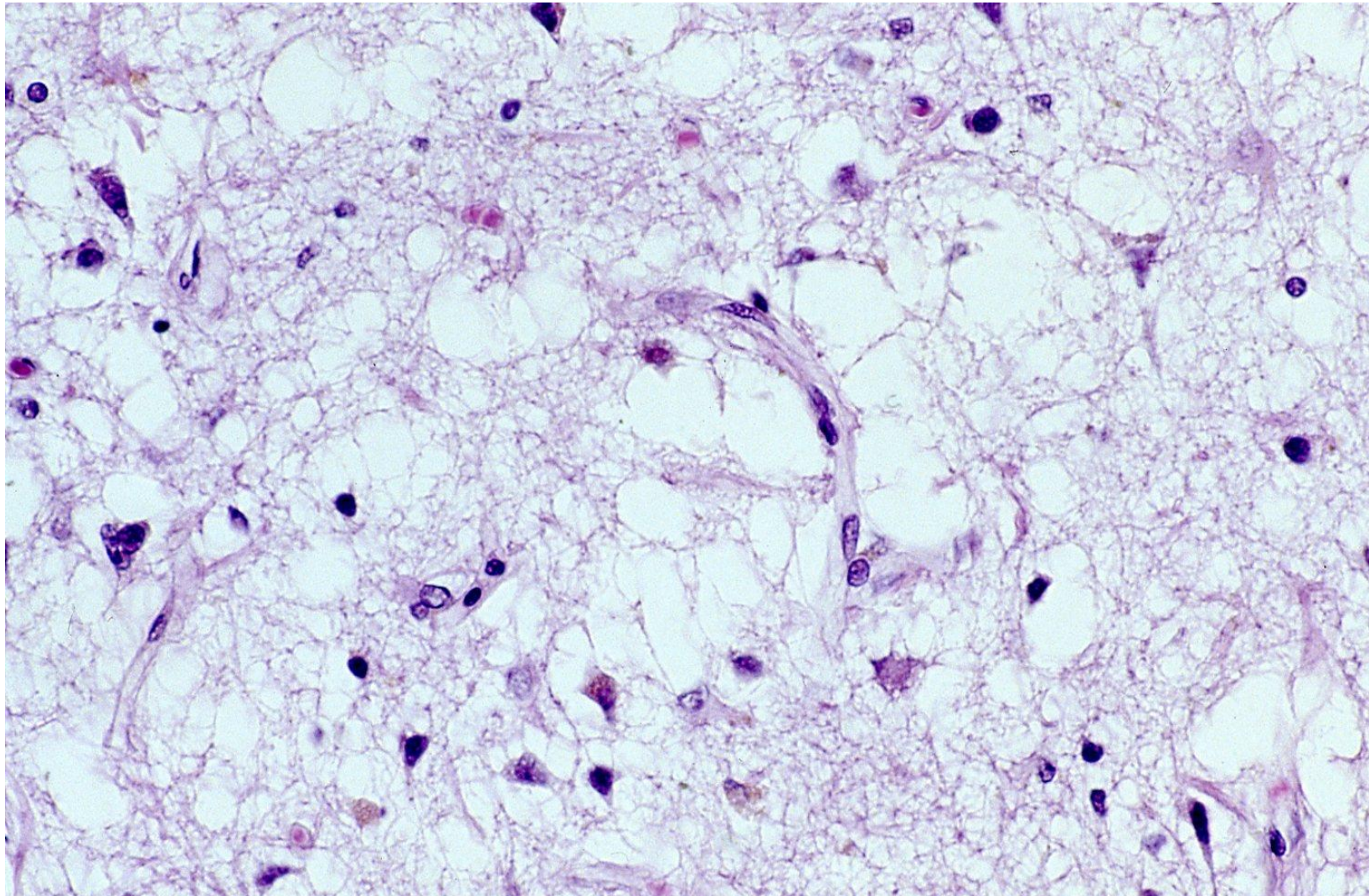
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebral cortex reveals a loose spongy state with reactive gliosis. H&E-1



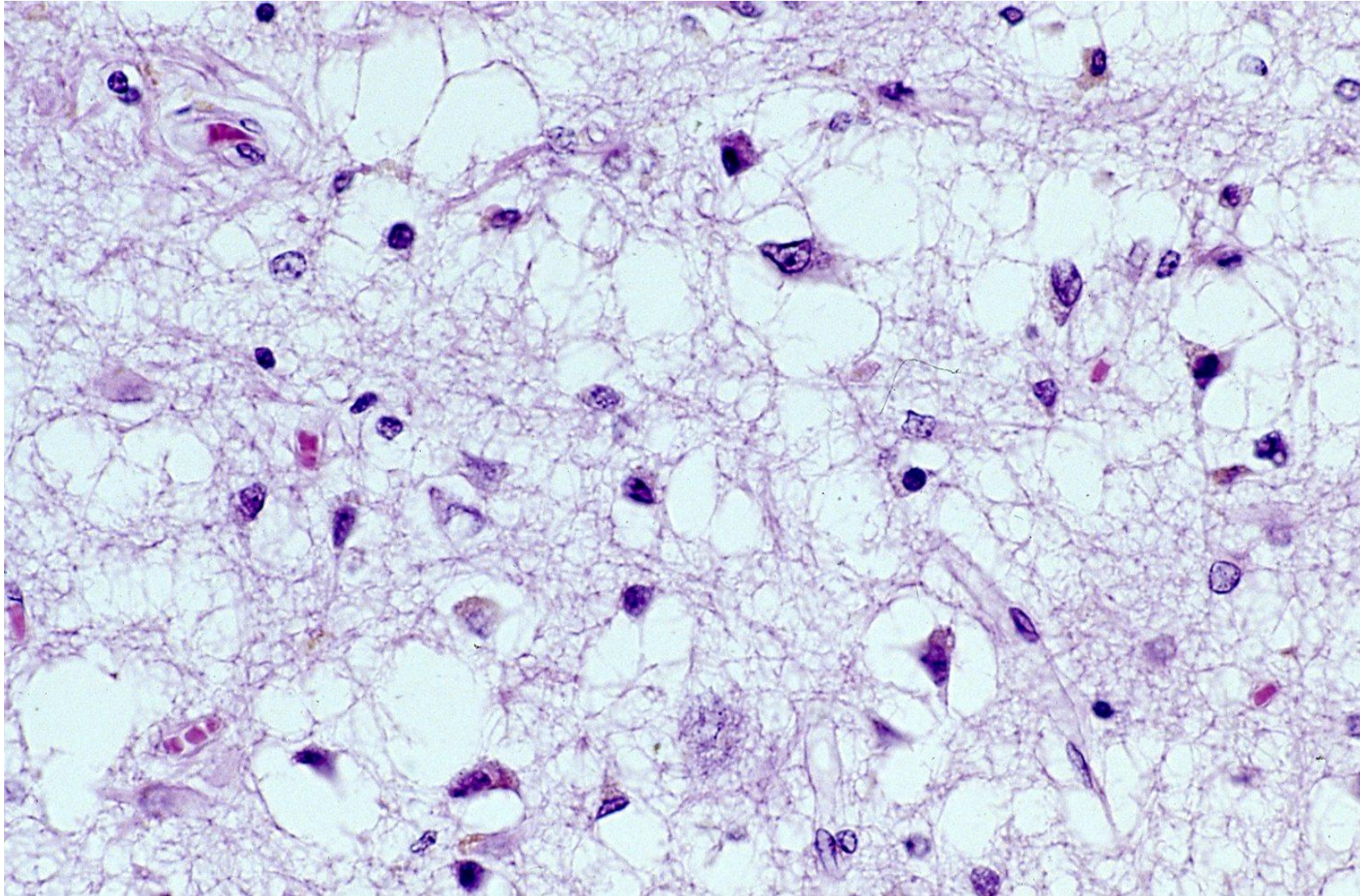
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebral cortex reveals a loose spongy state with reactive gliosis. H&E-2



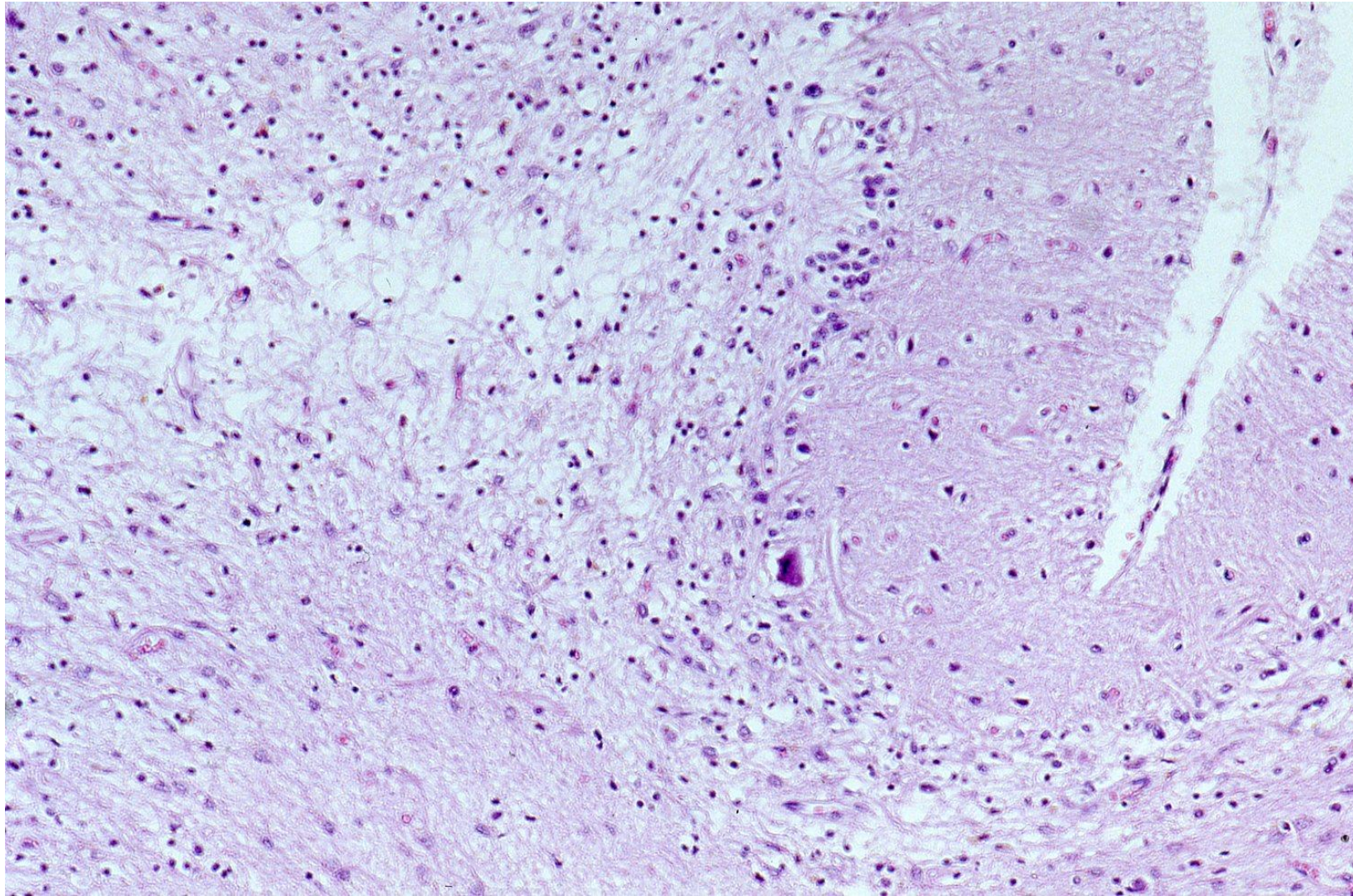
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebral cortex reveals a loose spongy state with reactive gliosis. H&E-3



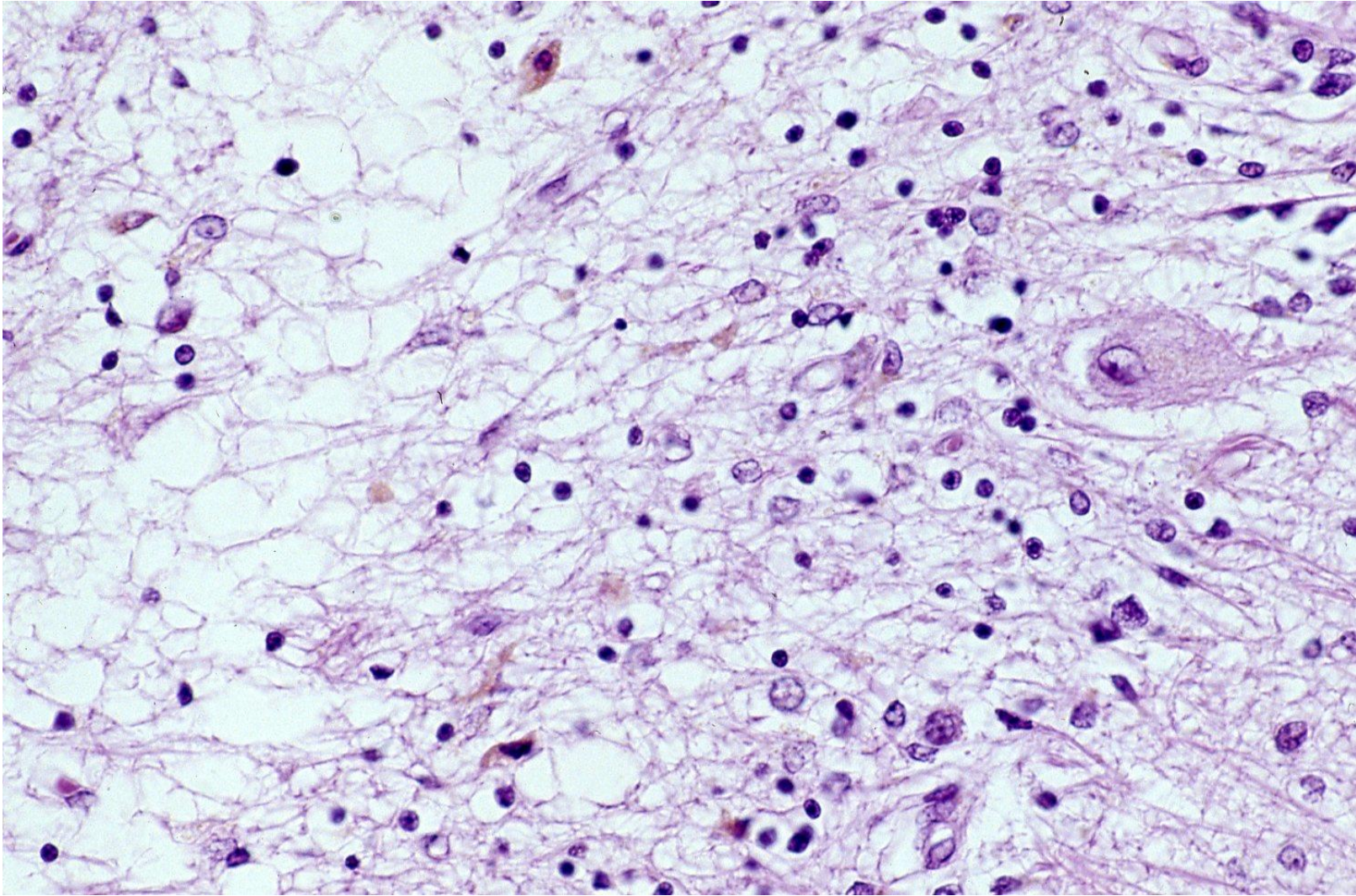
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebral cortex reveals a loose spongy state with reactive gliosis. H&E-4



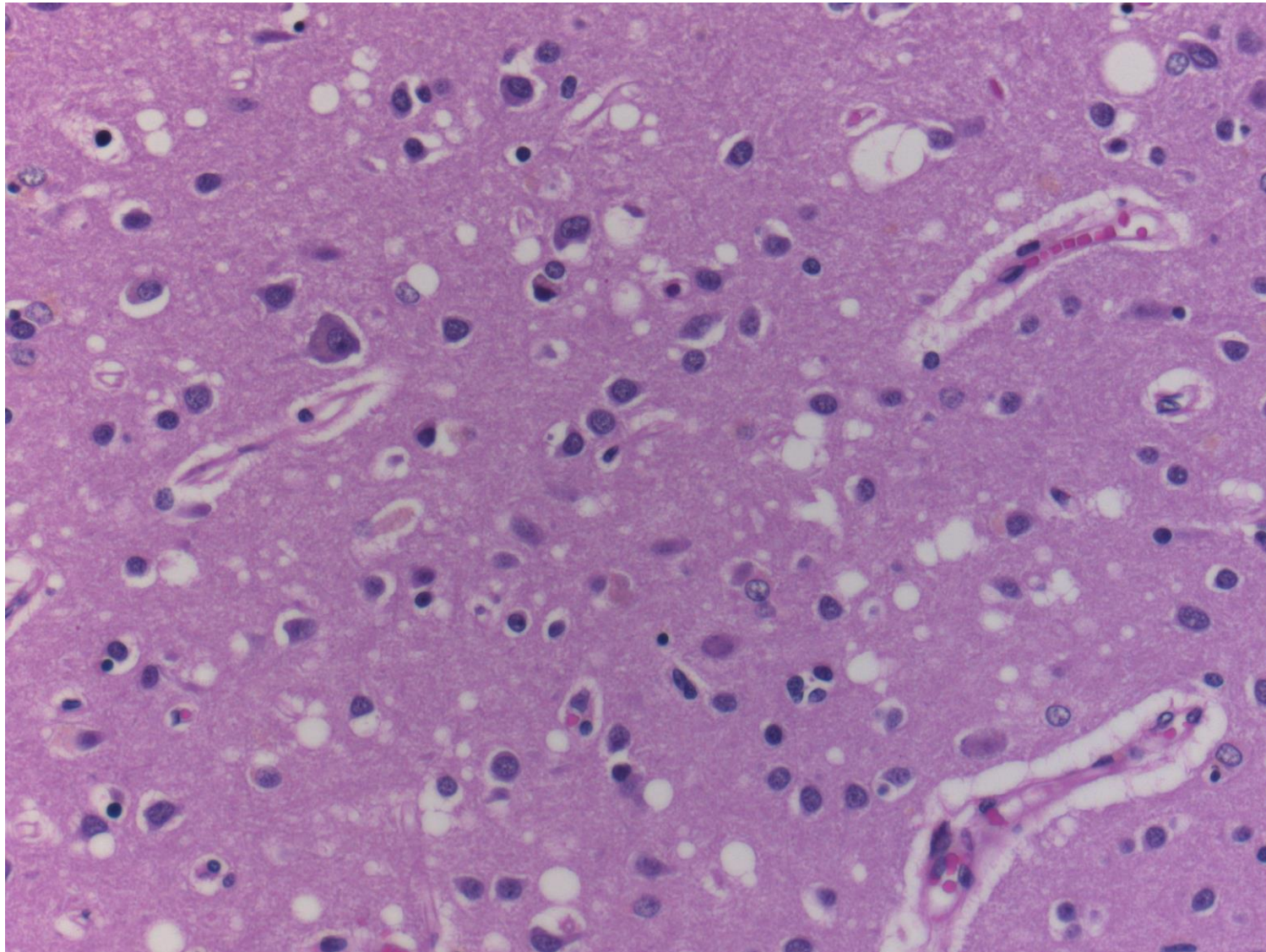
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebral cortex reveals a loose spongy state with reactive gliosis. H&E-5



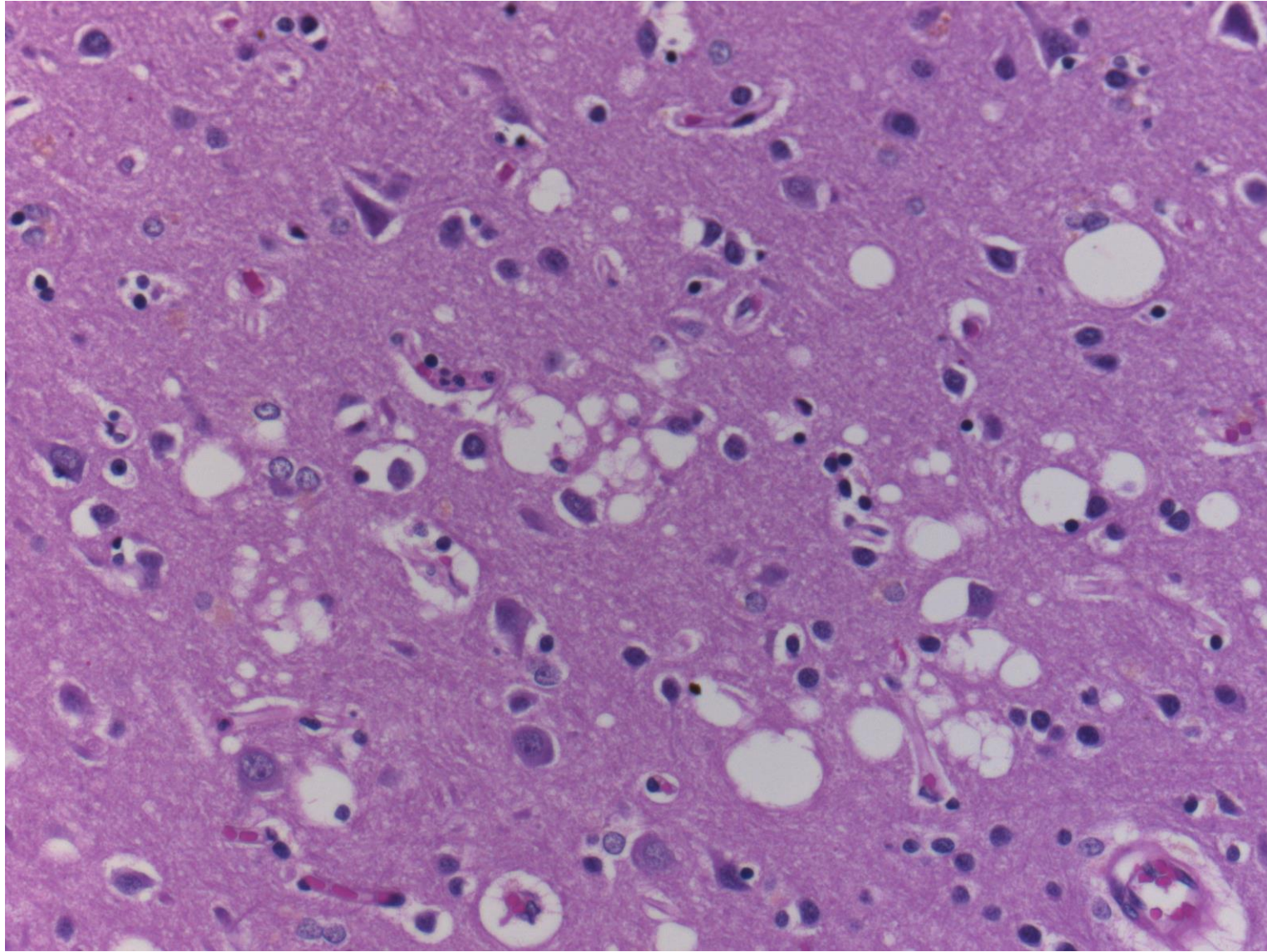
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebellum reveals a loose spongy state with reactive gliosis in the granular layer. H&E-6



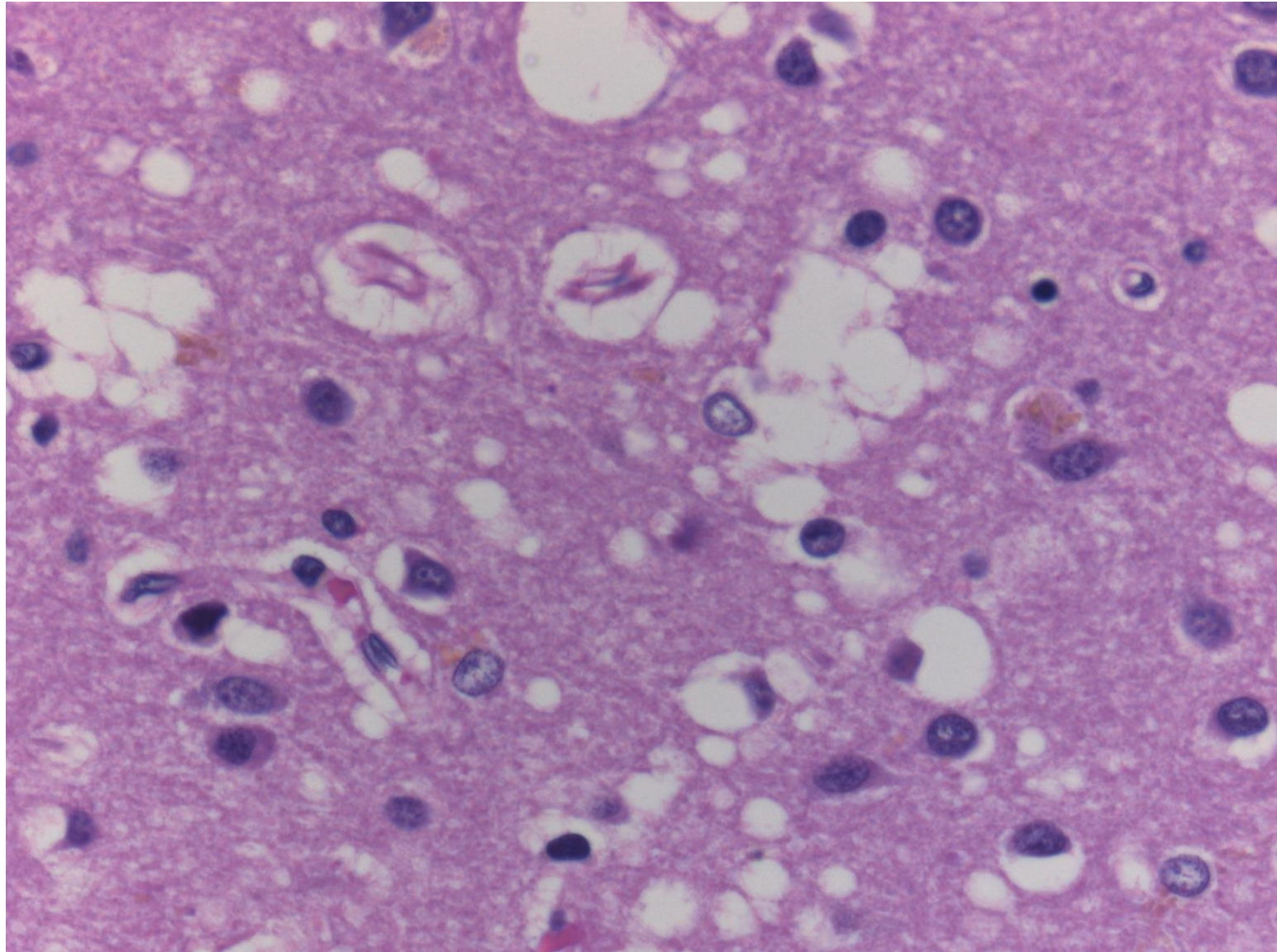
Microscopic appearance of Creutzfeldt-Jakob's disease. The cerebellum reveals a loose spongy state with reactive gliosis in the granular layer. H&E-7



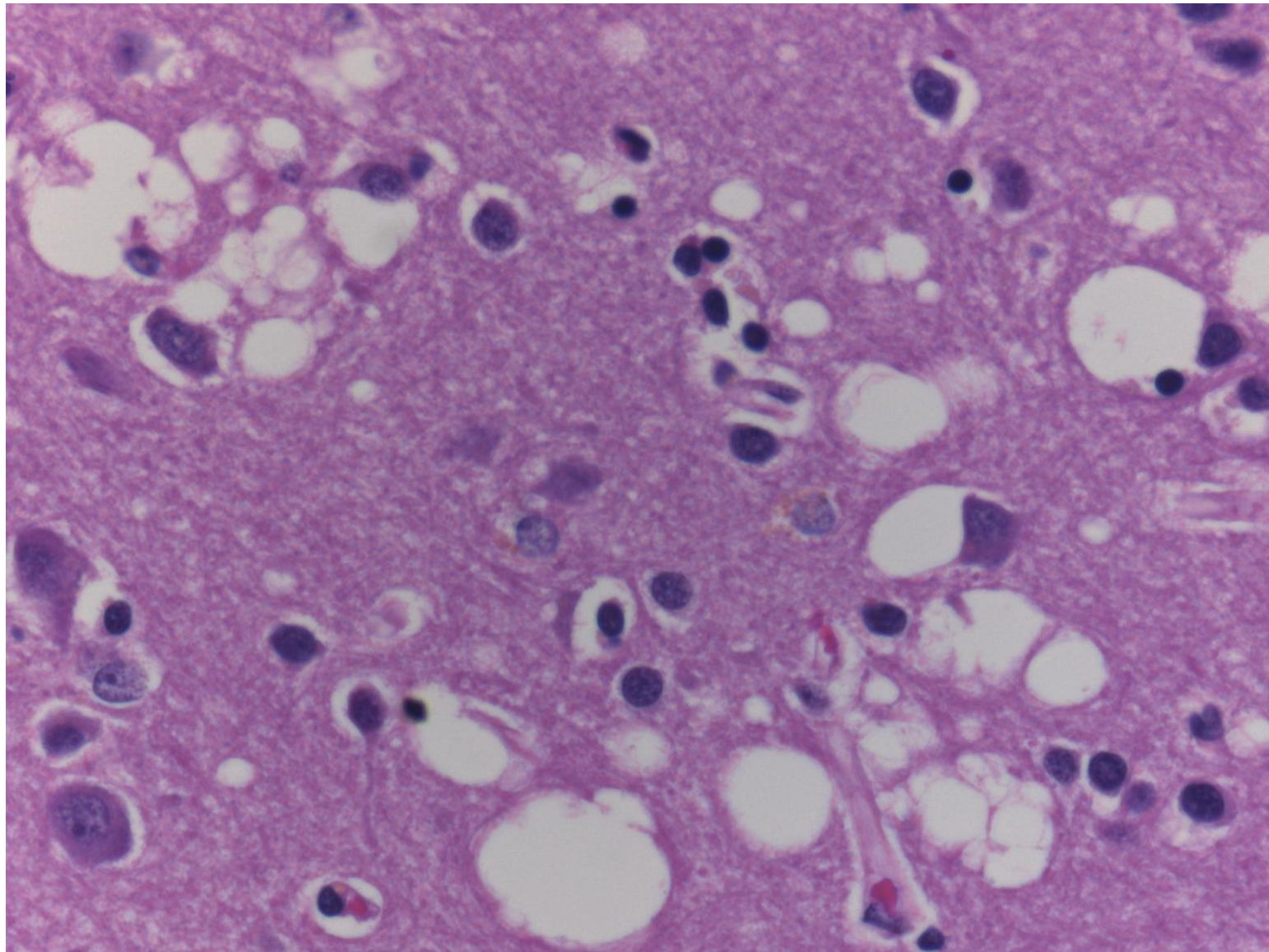
Microscopic appearance of another case of Creutzfeldt-Jakob's disease (a female patient aged 50's). The cerebral cortex reveals a spongy state. H&E-8



Microscopic appearance of another case of Creutzfeldt-Jakob's disease (a female patient aged 50's). The cerebral cortex reveals a spongy state. H&E-9



Microscopic appearance of another case of Creutzfeldt-Jakob's disease (a female patient aged 50's). The cerebral cortex reveals a spongy state. H&E-10



Microscopic appearance of another case of Creutzfeldt-Jakob's disease (a female patient aged 50's). The cerebral cortex reveals a spongy state. H&E-11