

Cytologic Findings in progressive Multifocal Leucoencephalopathy. A case report

Yuri K. Batoroev, MD,
PhD,
Lada Y. Kislitsina, MD
Olga S. Samarskaya,
MD

Department of
Cytopathology,
Oncology Hospital,
Irkutsk, Russia



Male, 42 years, headaches, cognitive impairment,
convulsive attack, focal neurologic deficits.
CT - typical hypodense unilateral lesions, no mass-effect

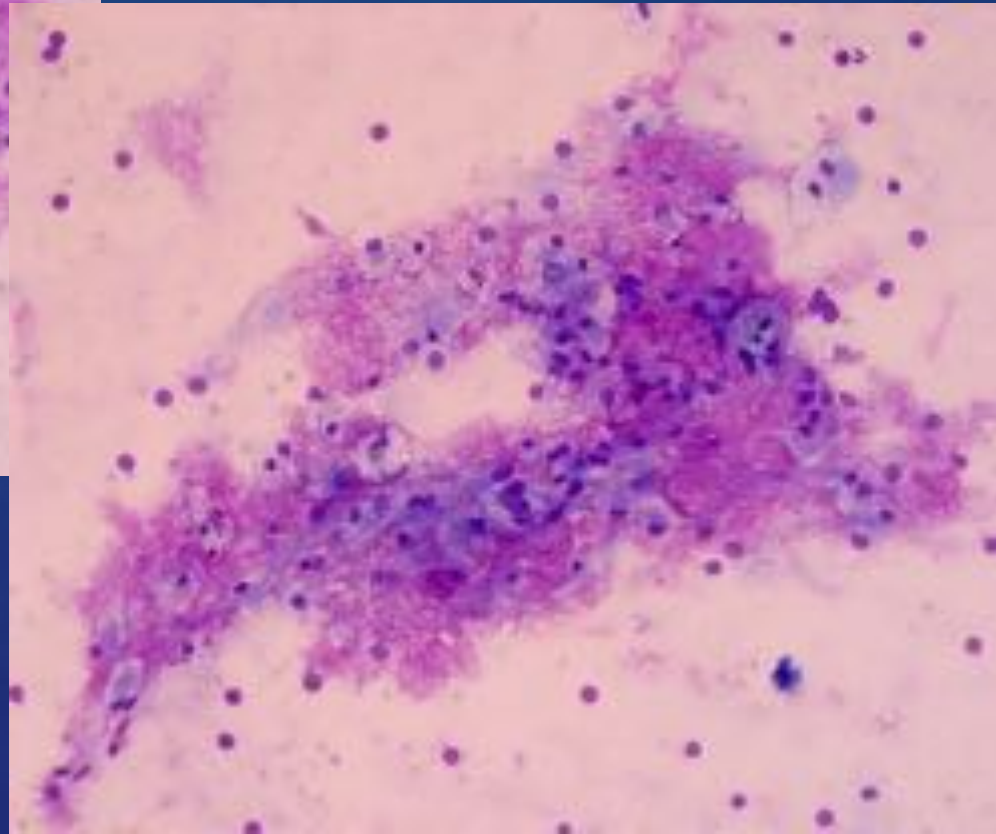
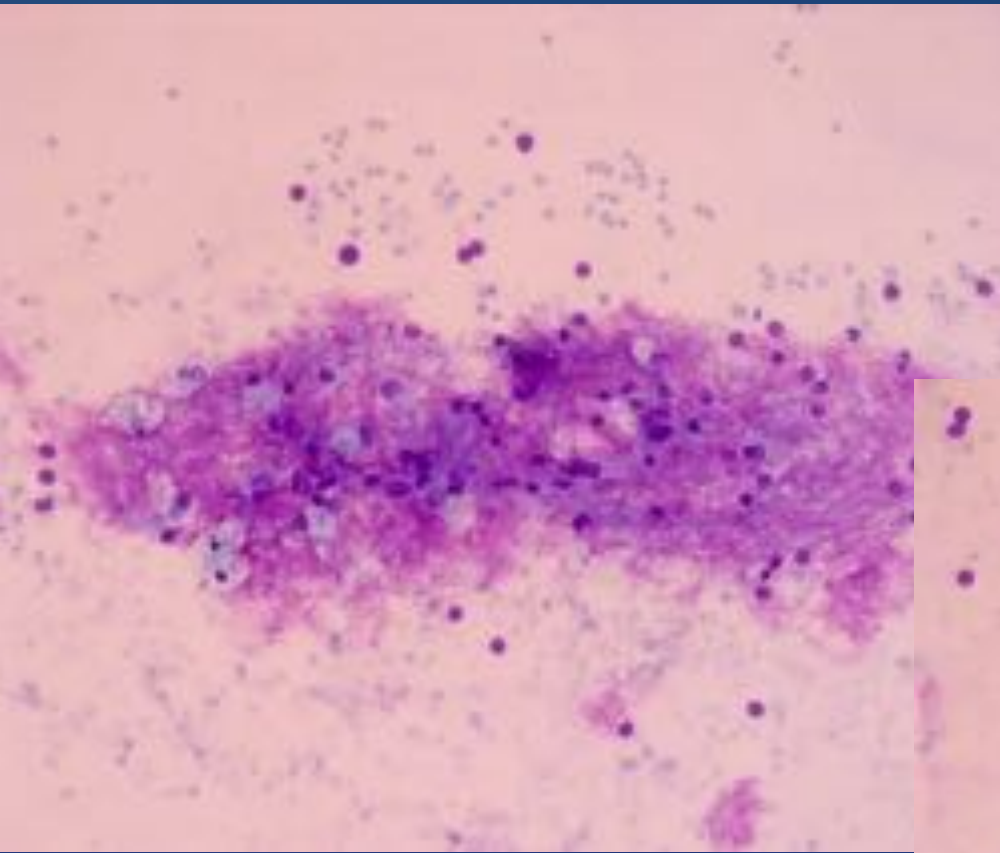


After coagulopathy correction was performed CT-guided stereotactic needle biopsy.

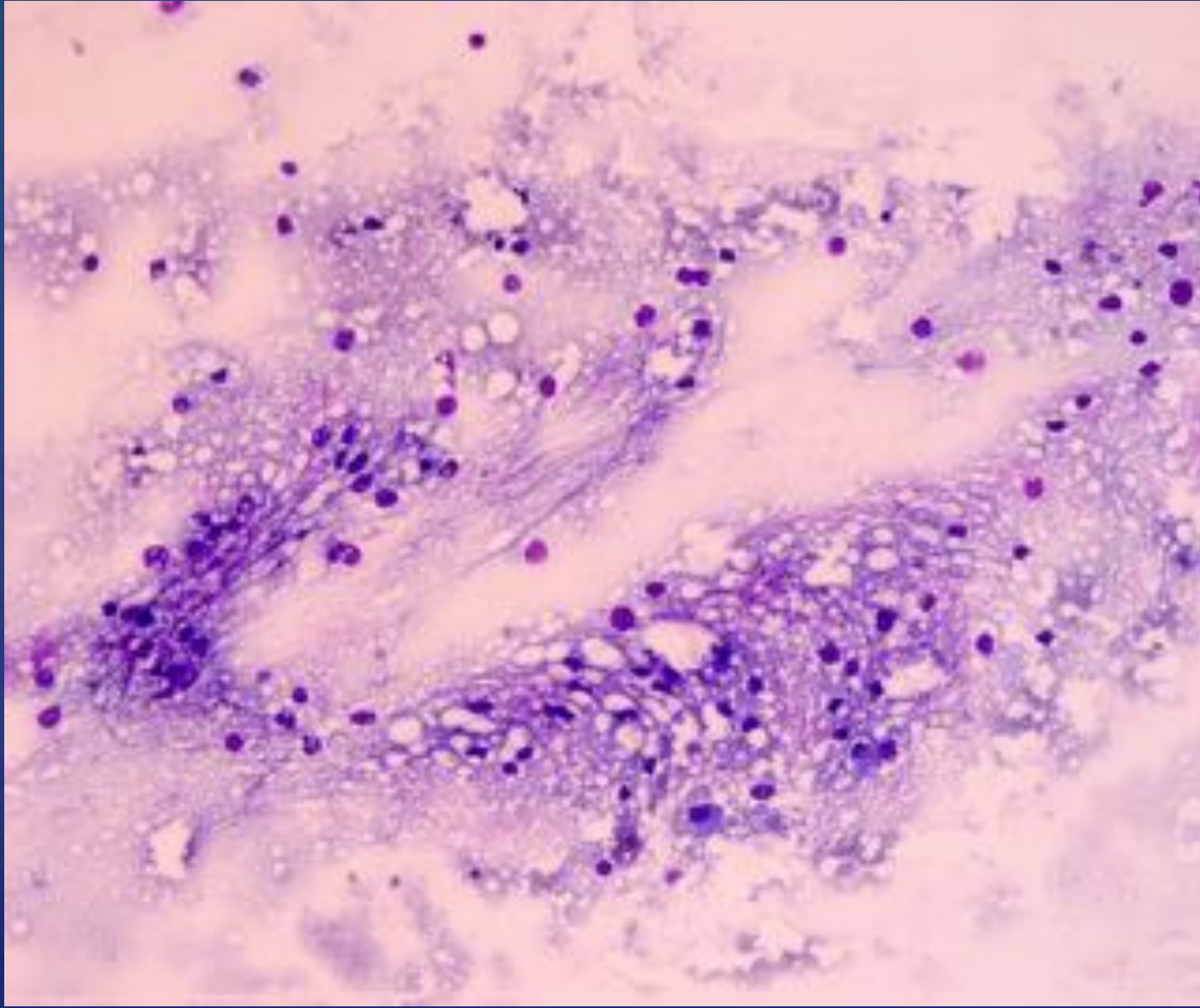
Crush preparations prepared from each sample, stained with Diff-Quik.

Tissue fragments fixed, paraffin embedded, H&E stained

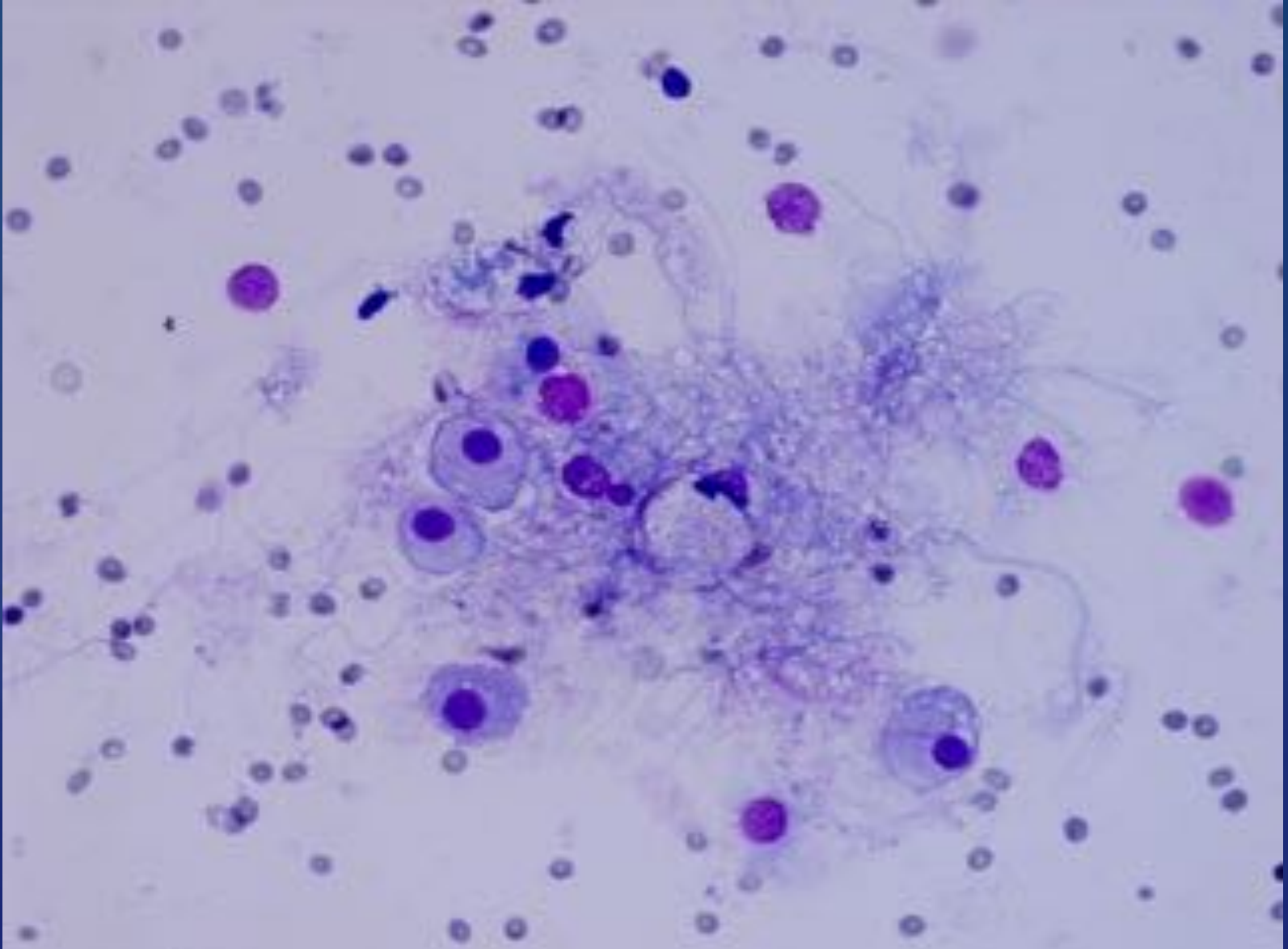
Diff-Quik, foam macrophags, reactive astrocytes



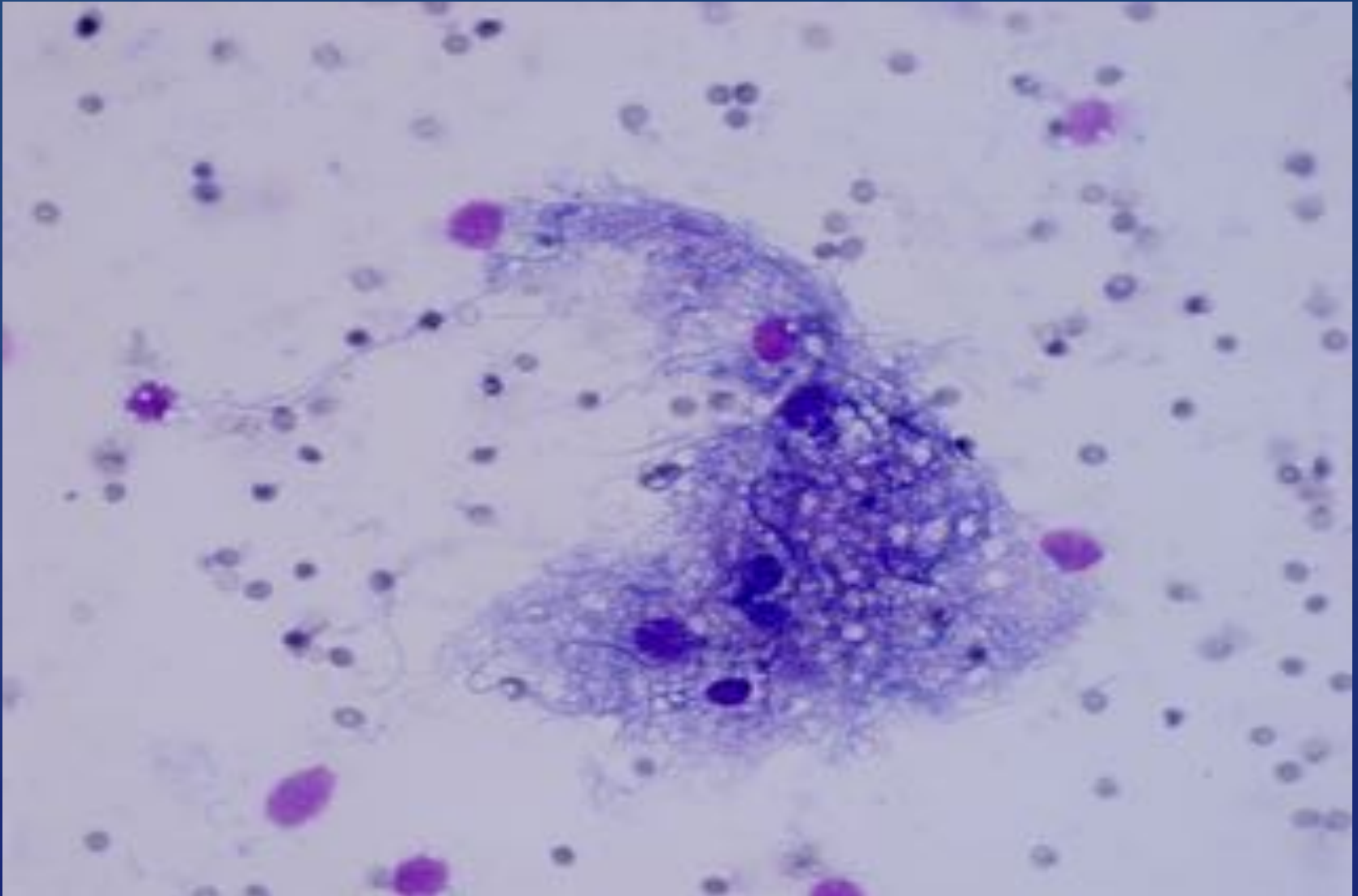
Reactive astrocytes, macrophages with
abundant, foamy cytoplasm



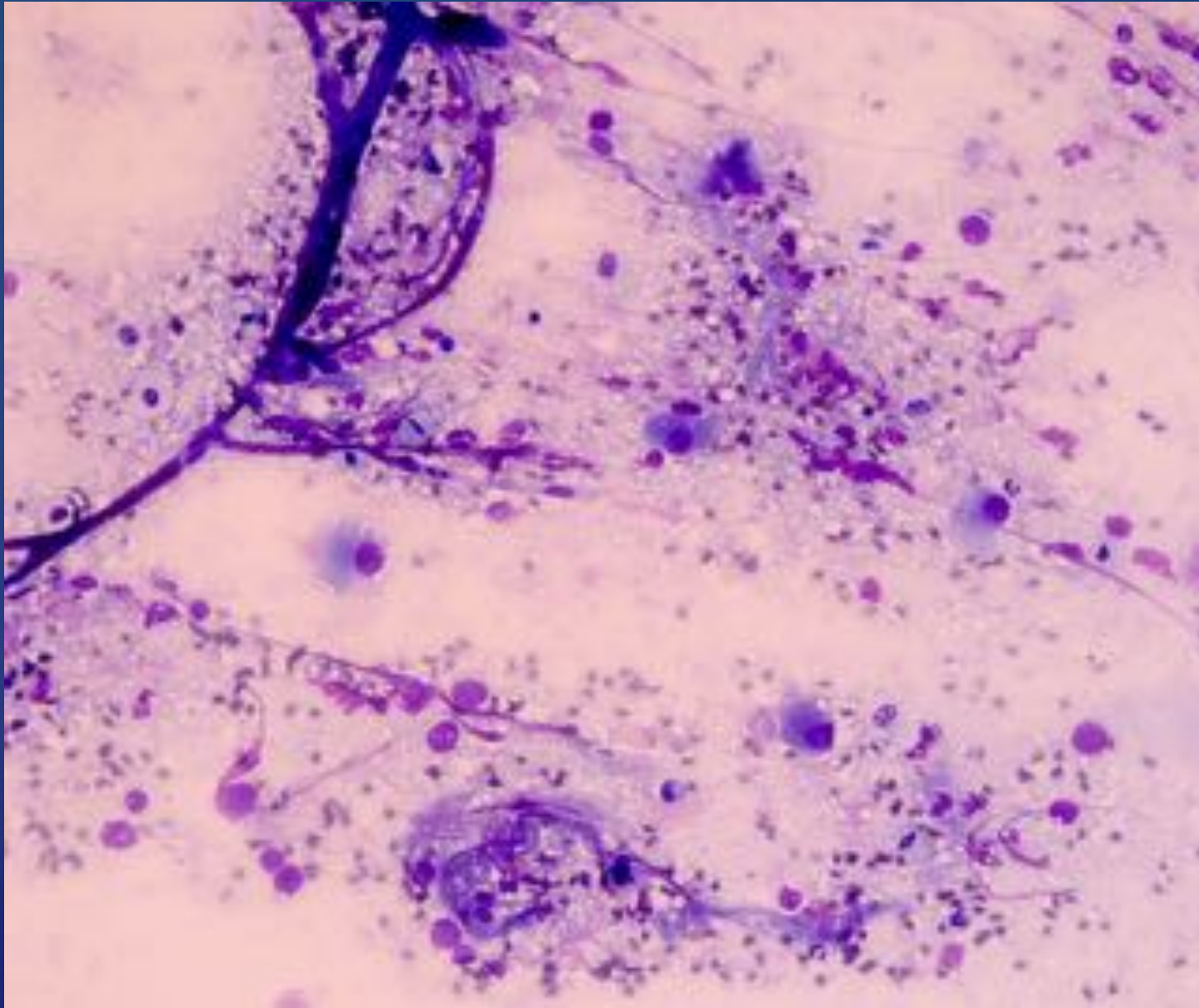
Macrophages with abundant, foamy cytoplasm



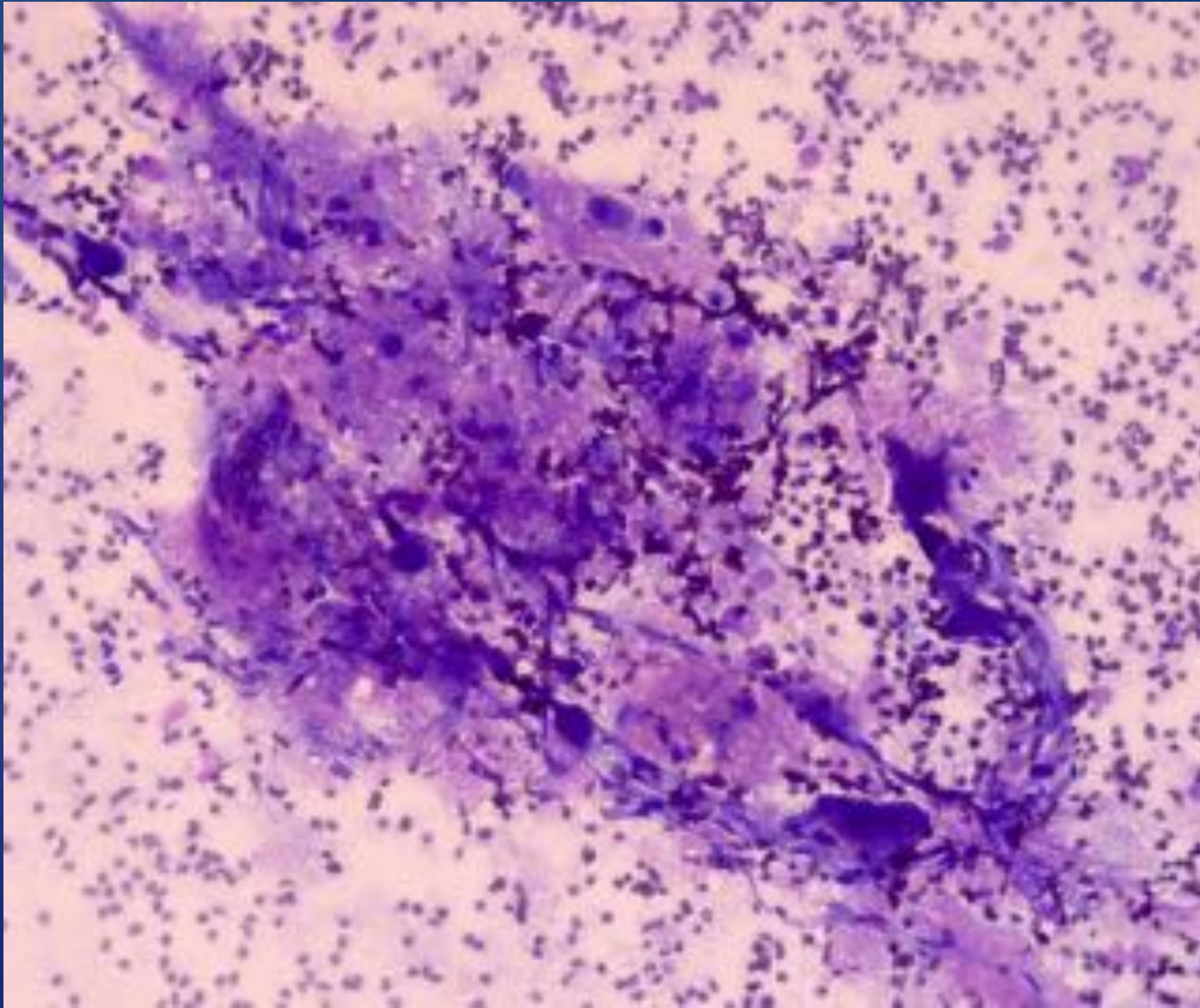
Reactive astrocytes, macrophages with abundant, foamy cytoplasm



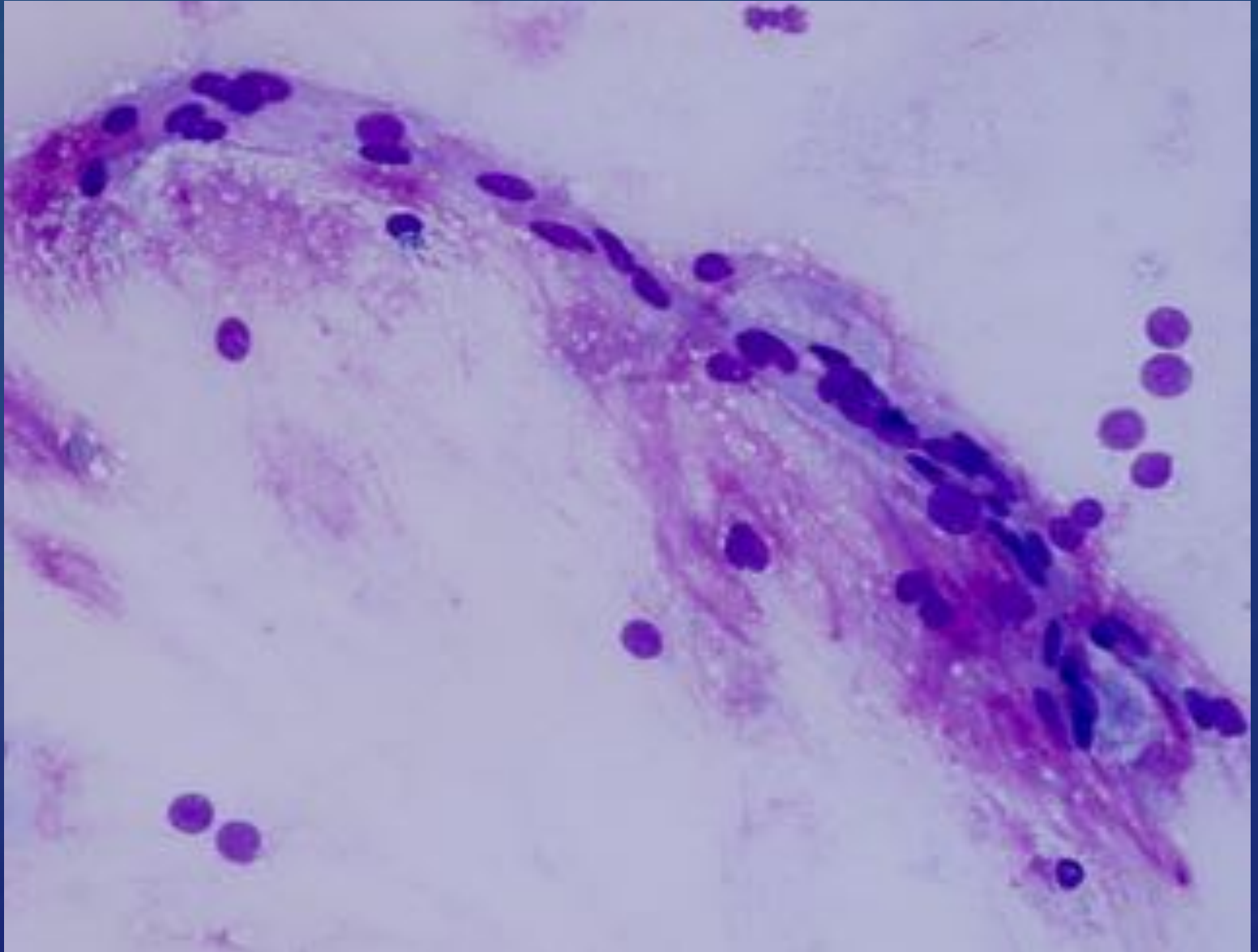
Blood vessels, reactive astrocytes, macrophages
with abundant, foamy cytoplasm



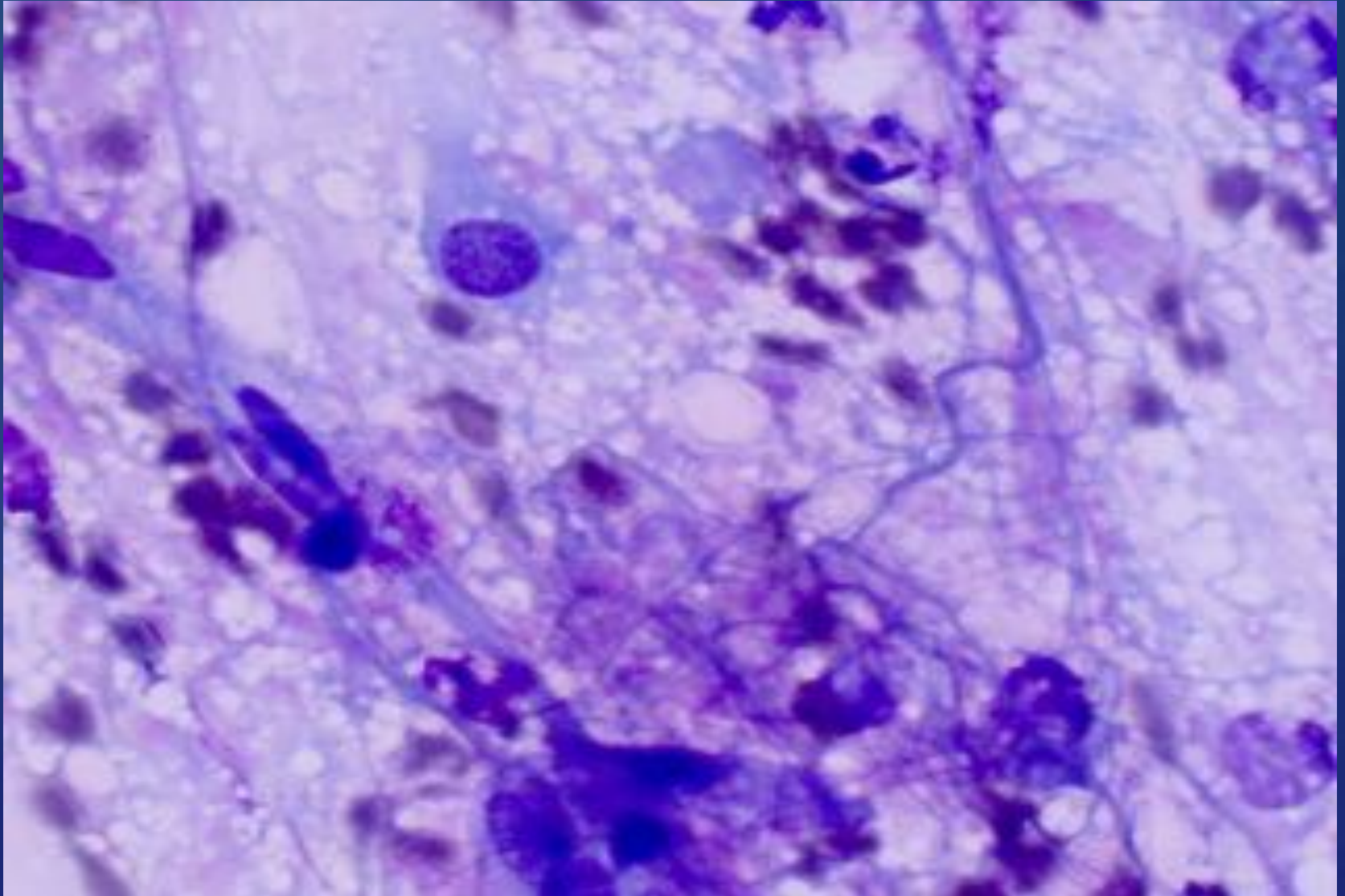
Reactive astrocytes, vascular proliferation



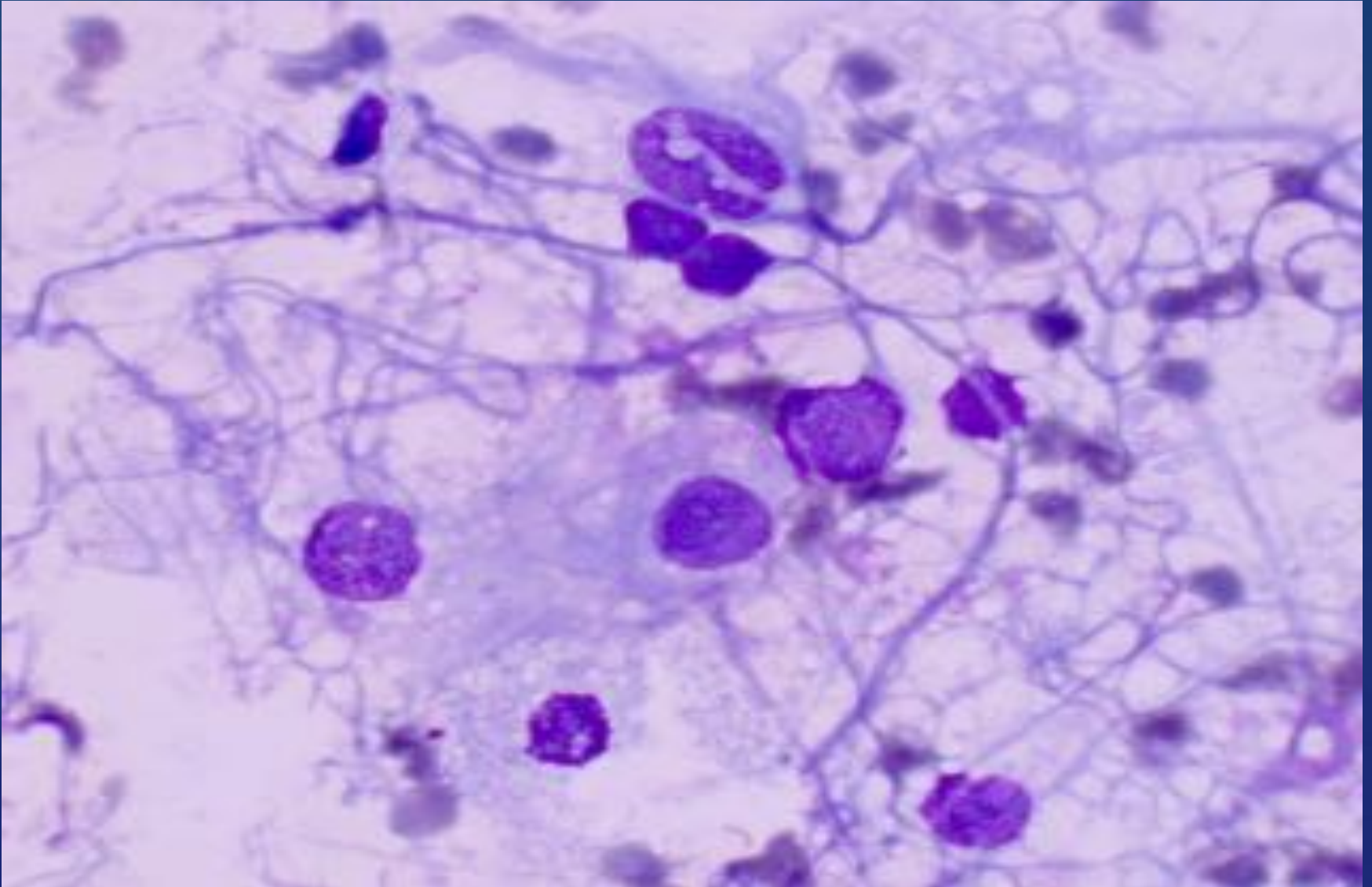
Blood vessels, with microglia



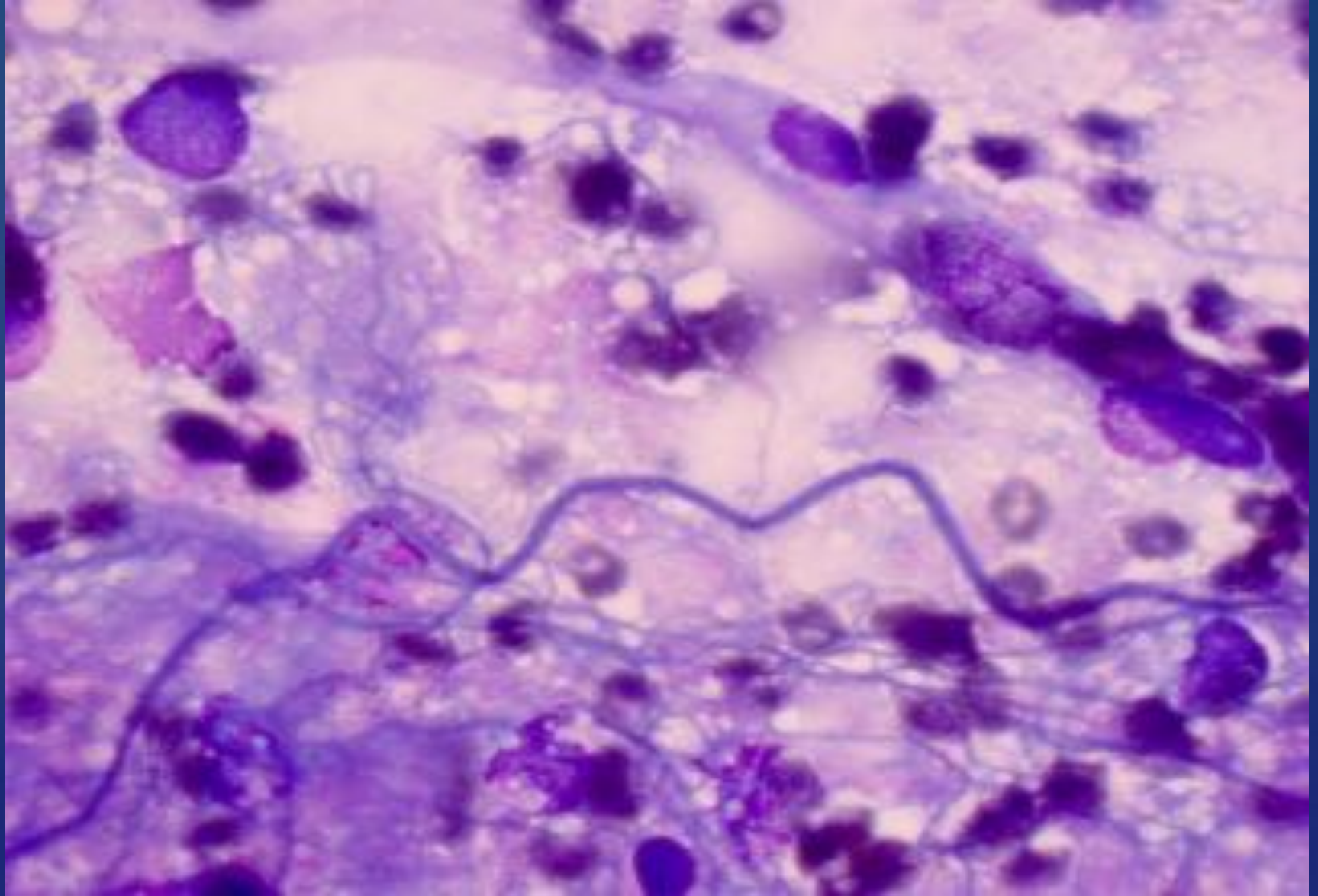
Bizarre astrocytes with abundant cytoplasm,
dystrophic myelin processes



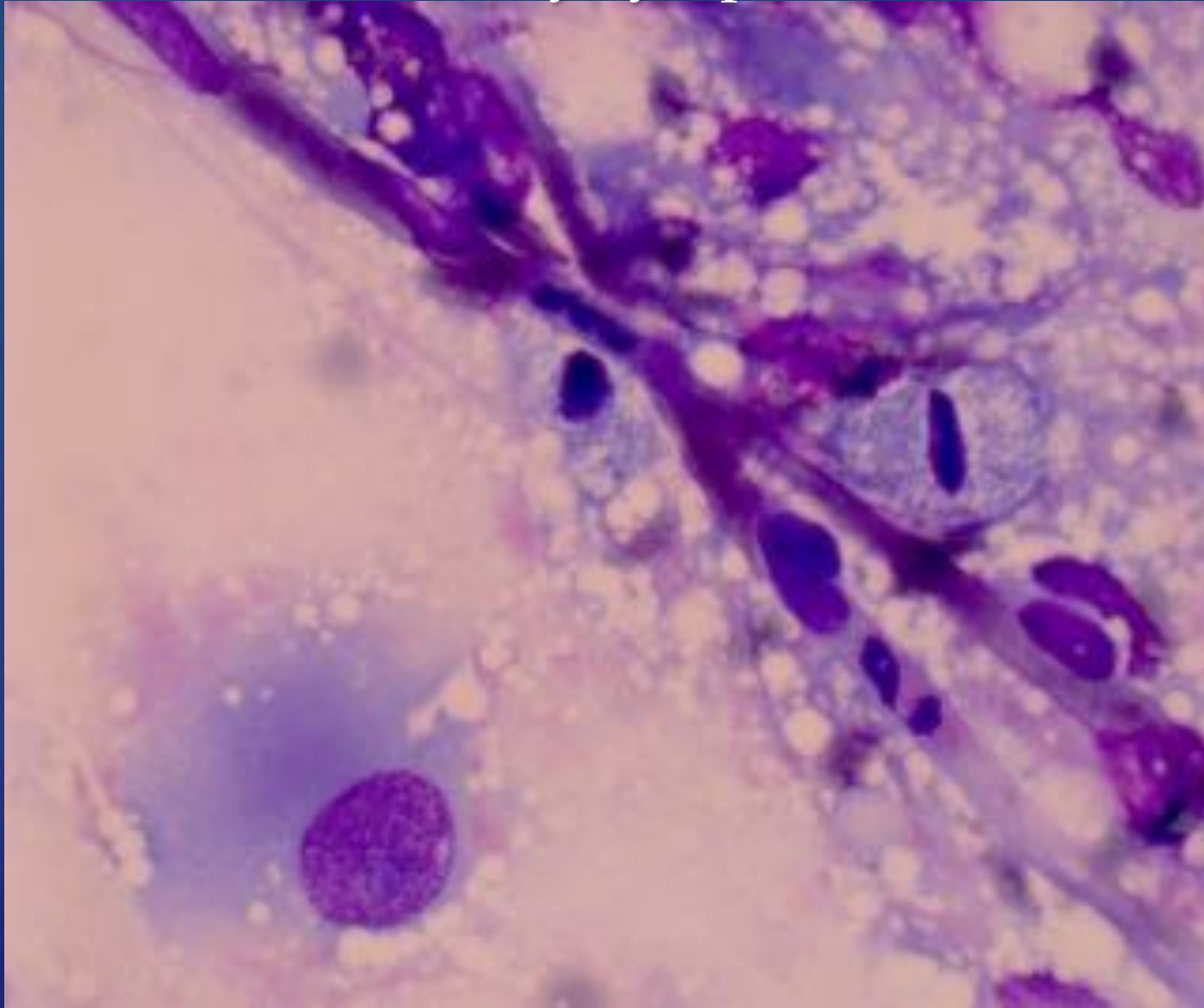
Bizarre astrocytes with abundant cytoplasm;
dystrophic myelin processes



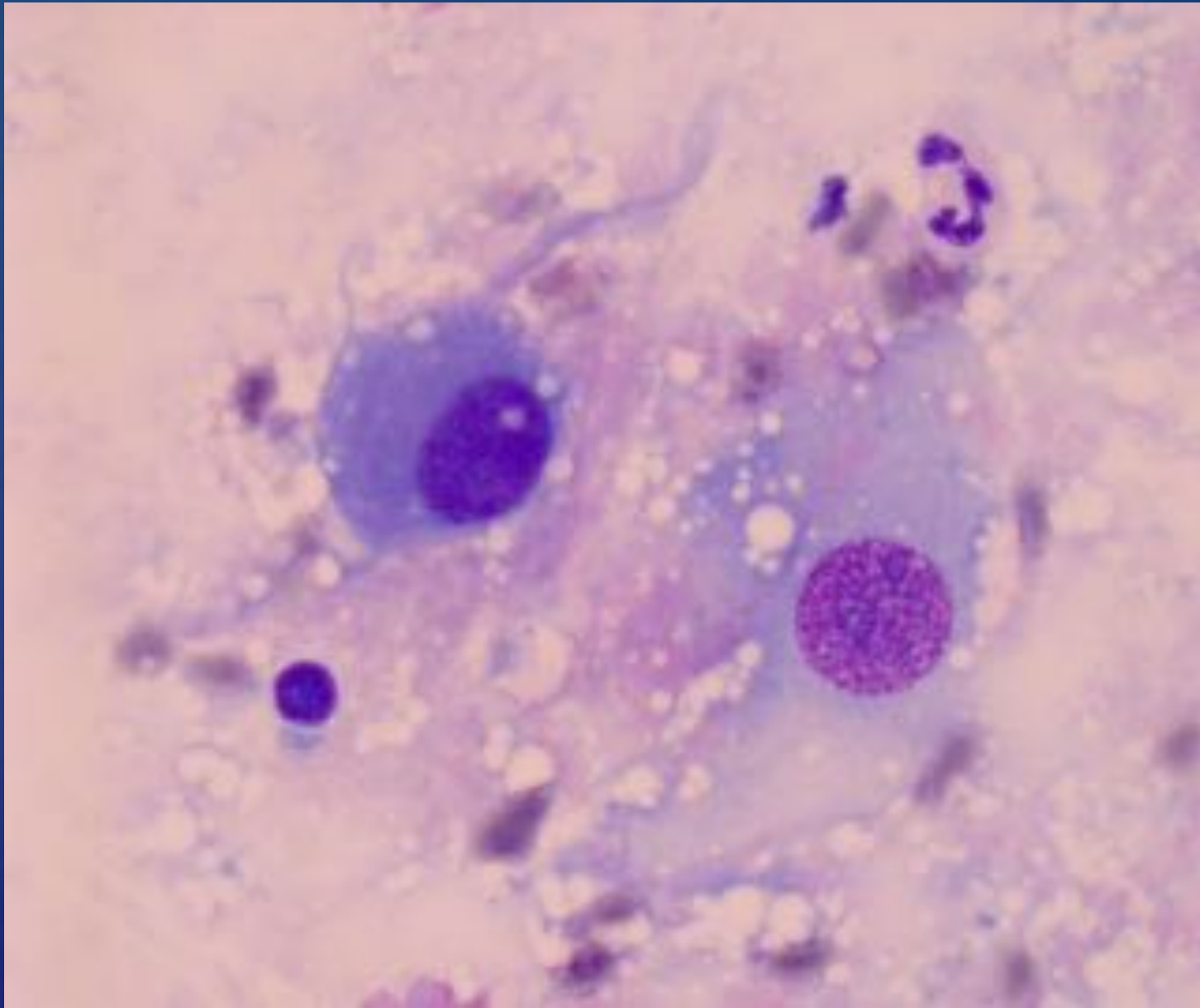
Bizarre astrocytes with abundant cytoplasm,
dystrophic myelin processes



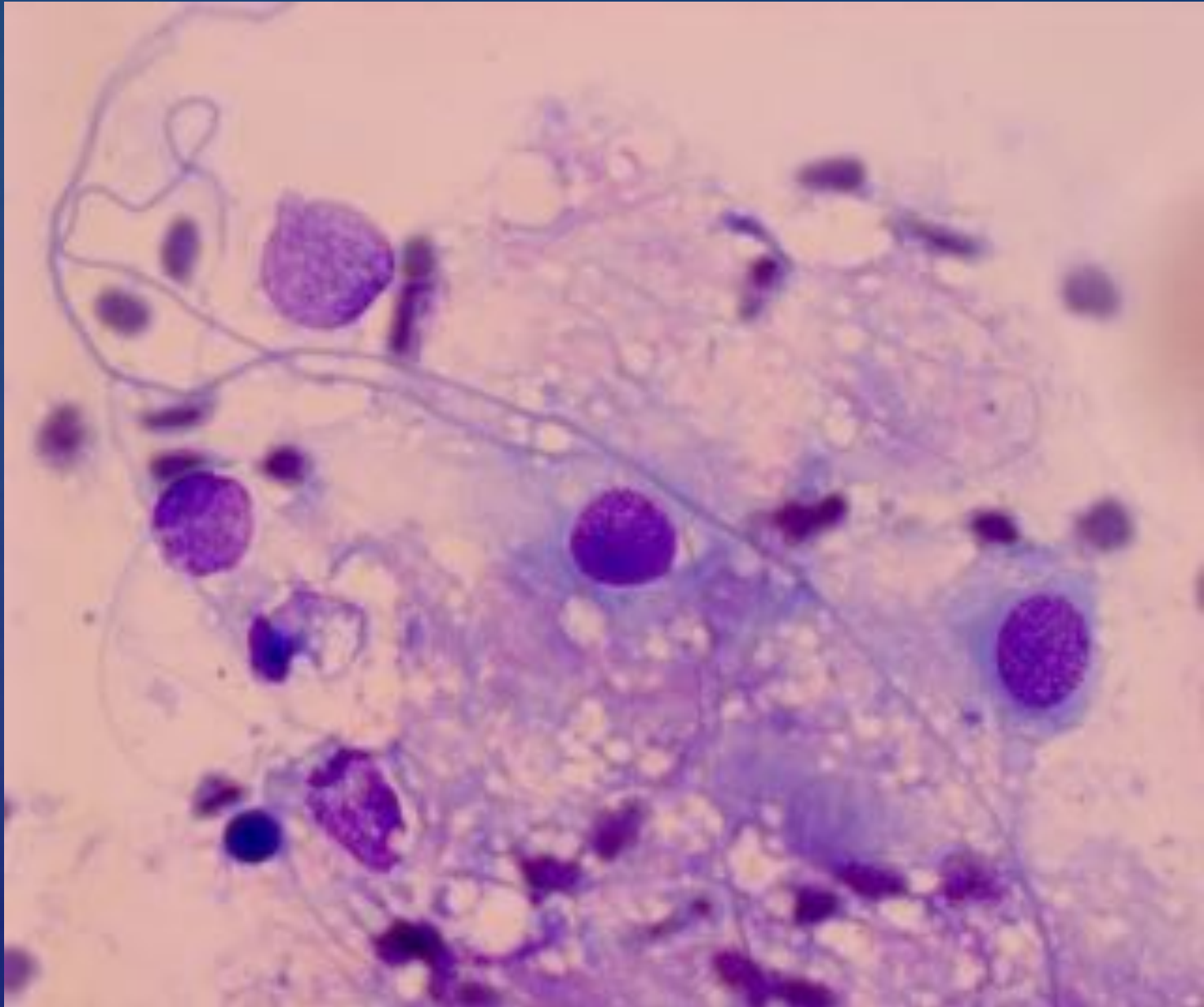
Bizarre astrocytes with abundant cytoplasm,
dystrophic myelin processes, macrophages with
foamy cytoplasm



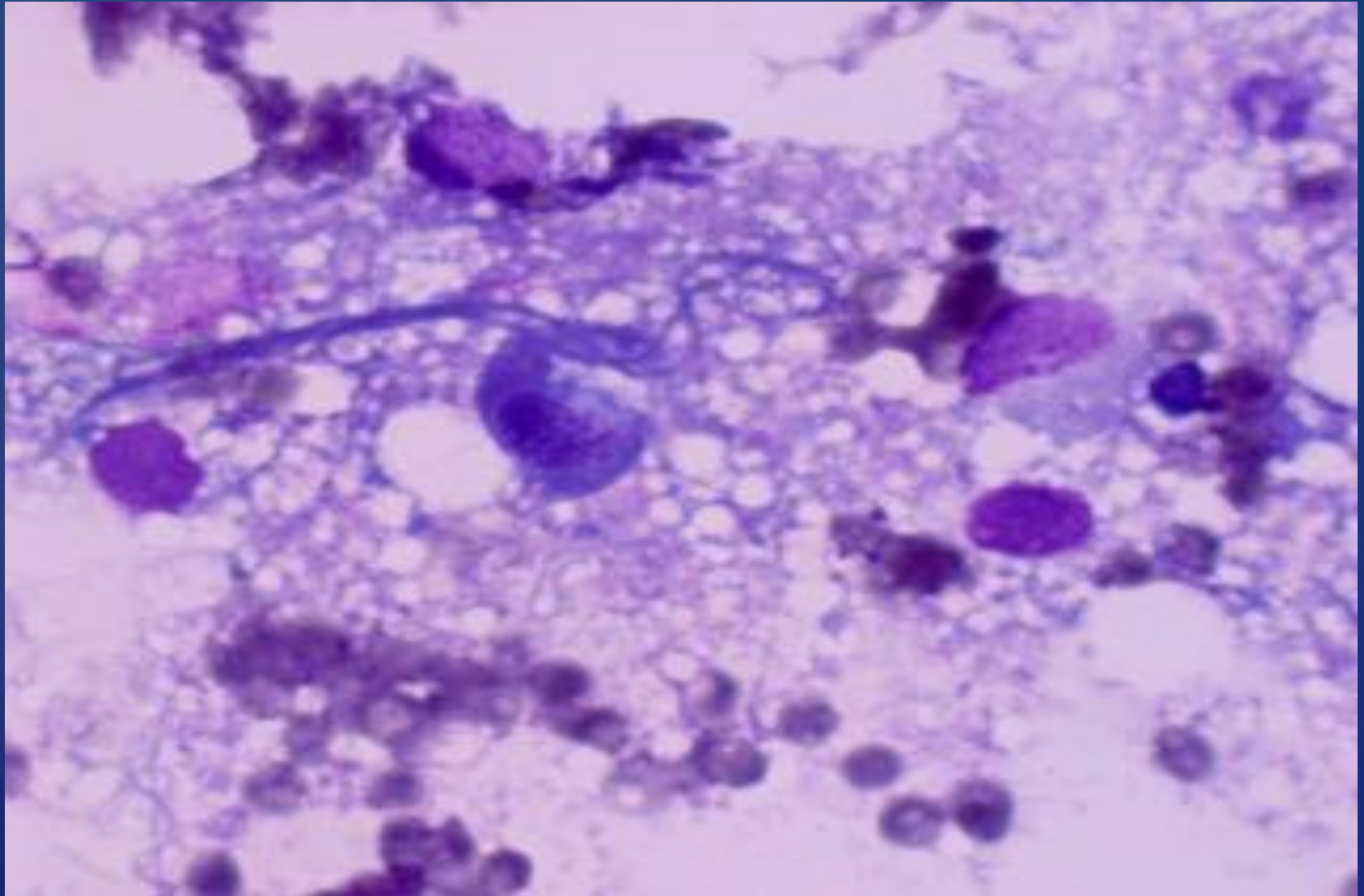
Bizarre reactive astrocytes with abundant cytoplasm



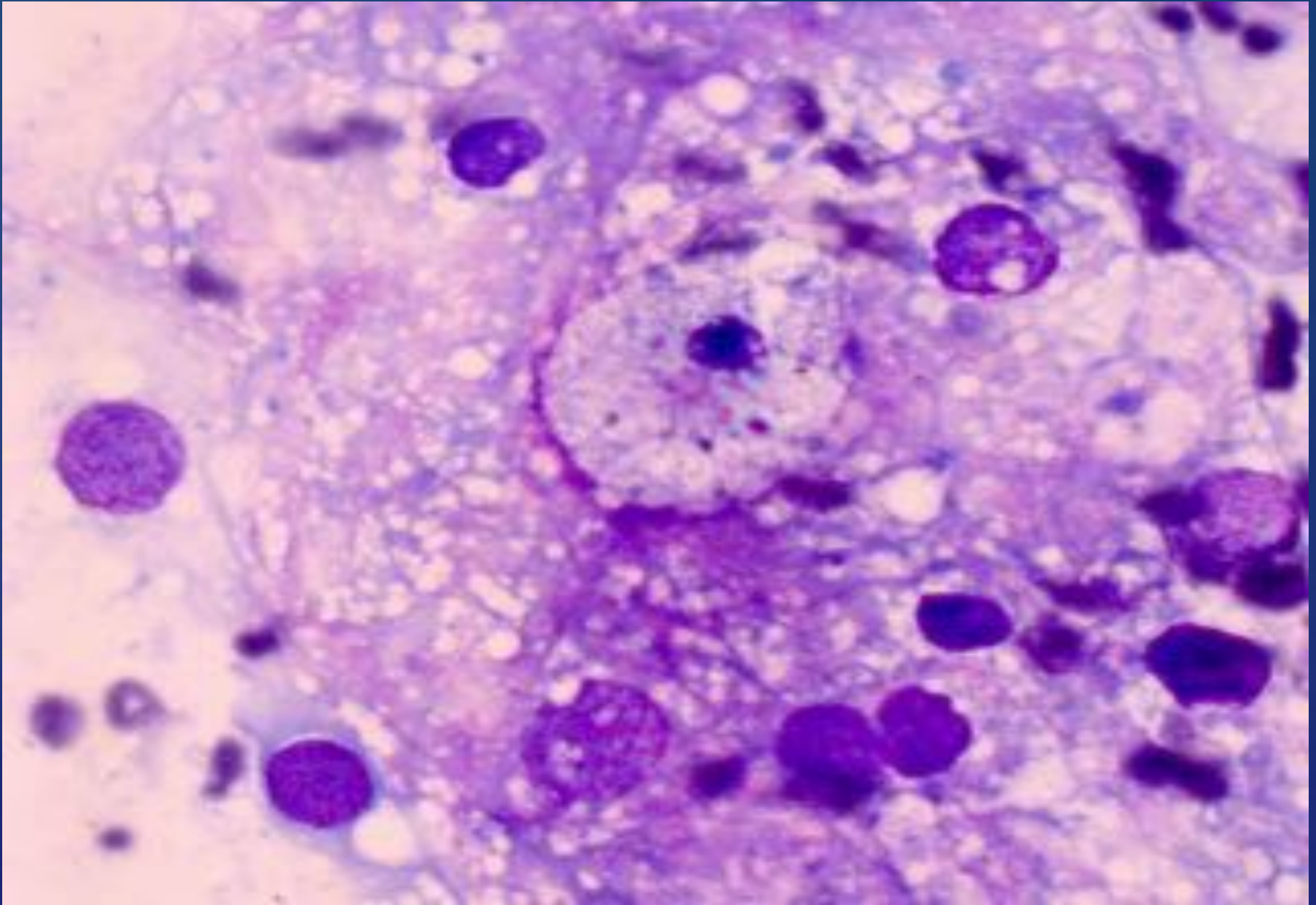
Bizarre astrocytes with abundant cytoplasm,
dystrophic myelin processes



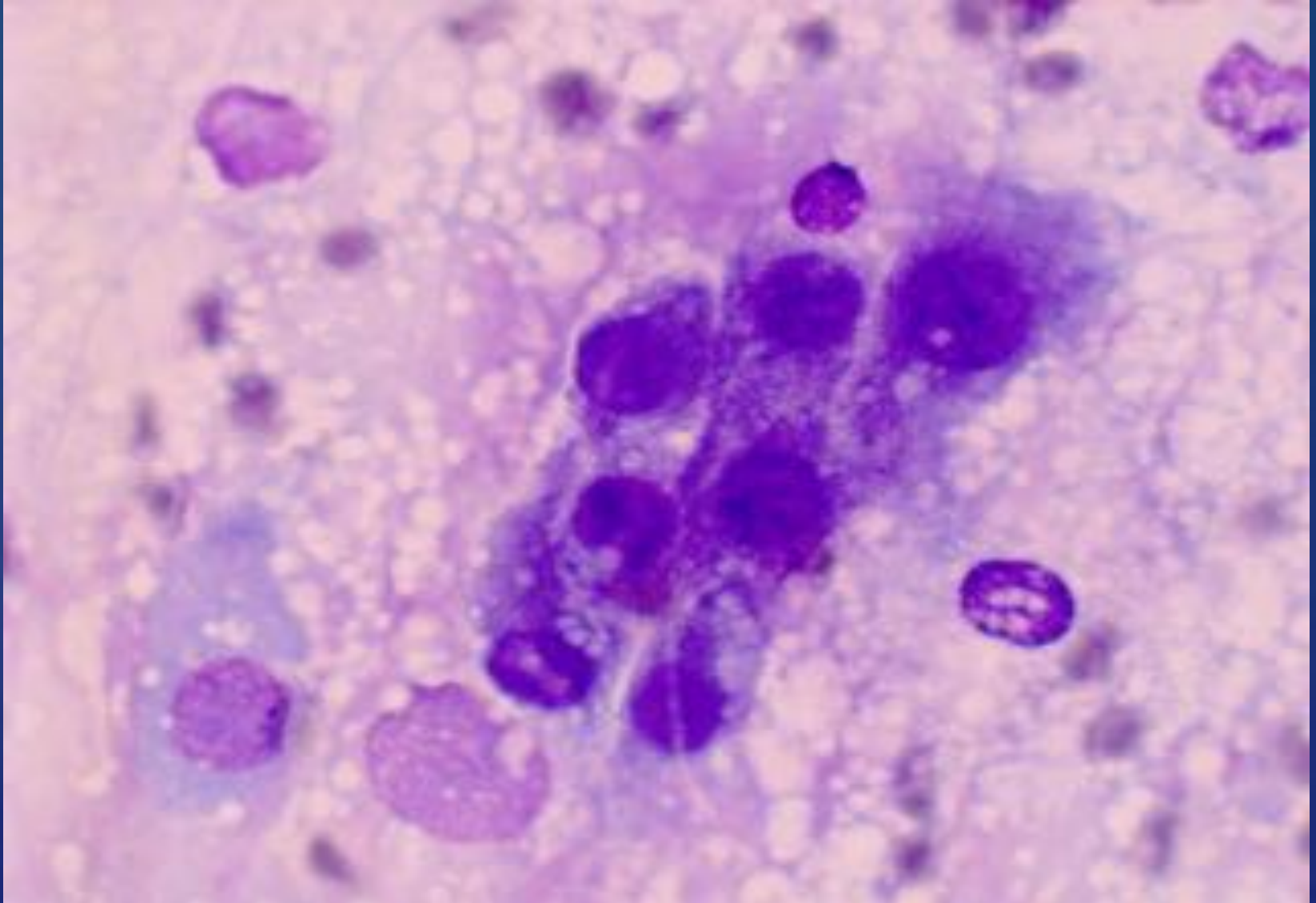
Demyelination brain matter



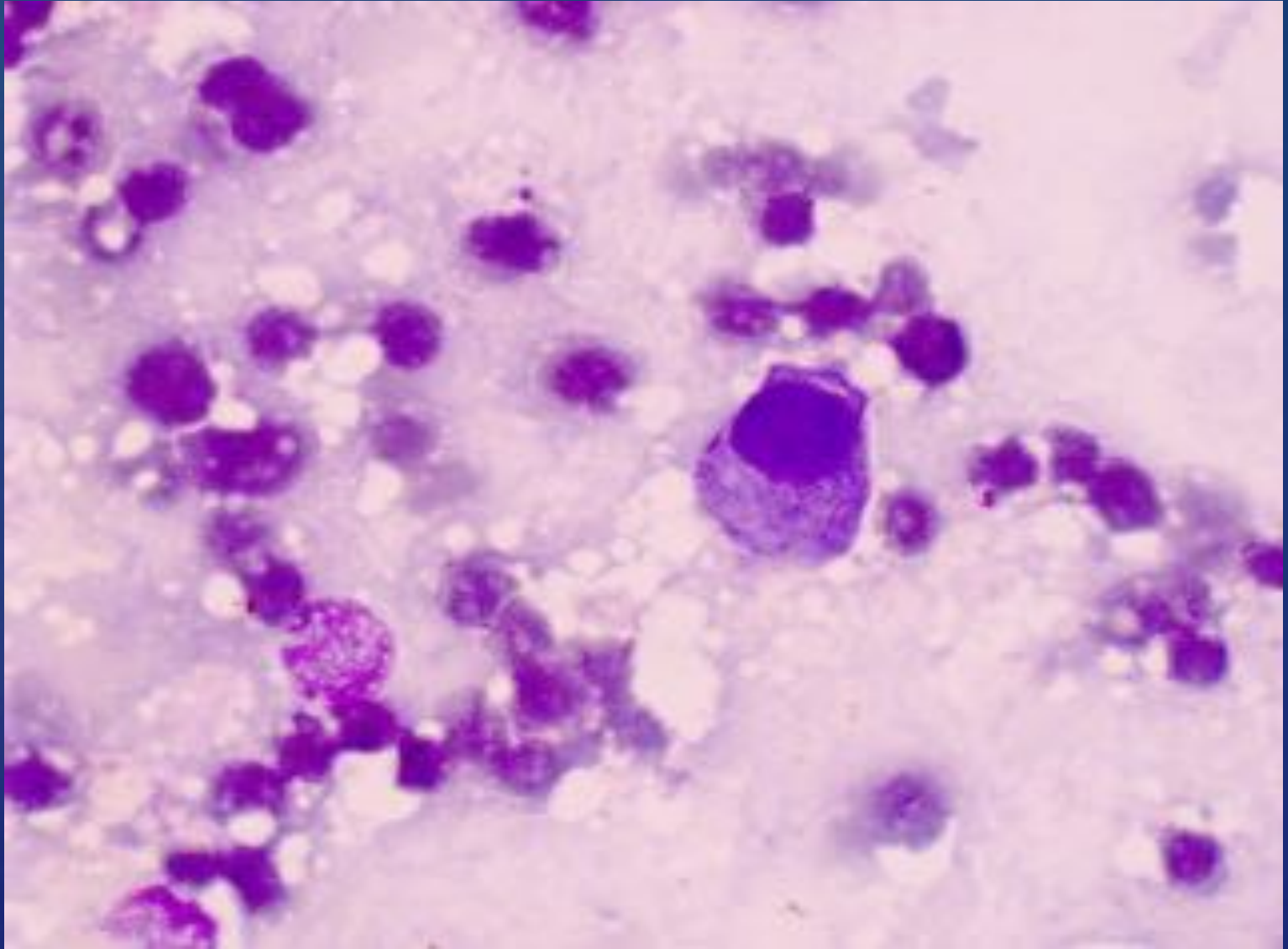
Many macrophages



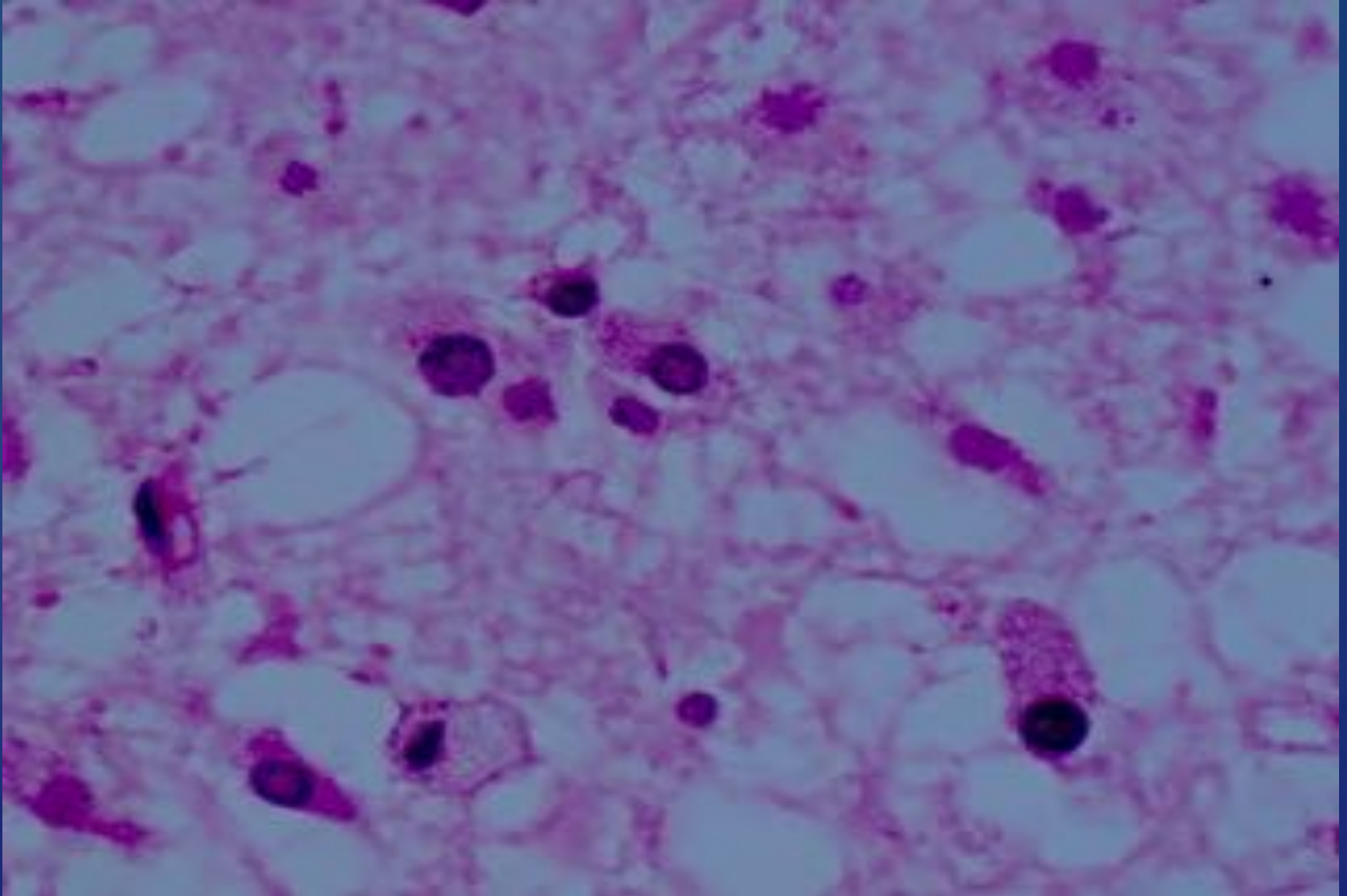
Hyperchromatic nuclears with chromatin effacement



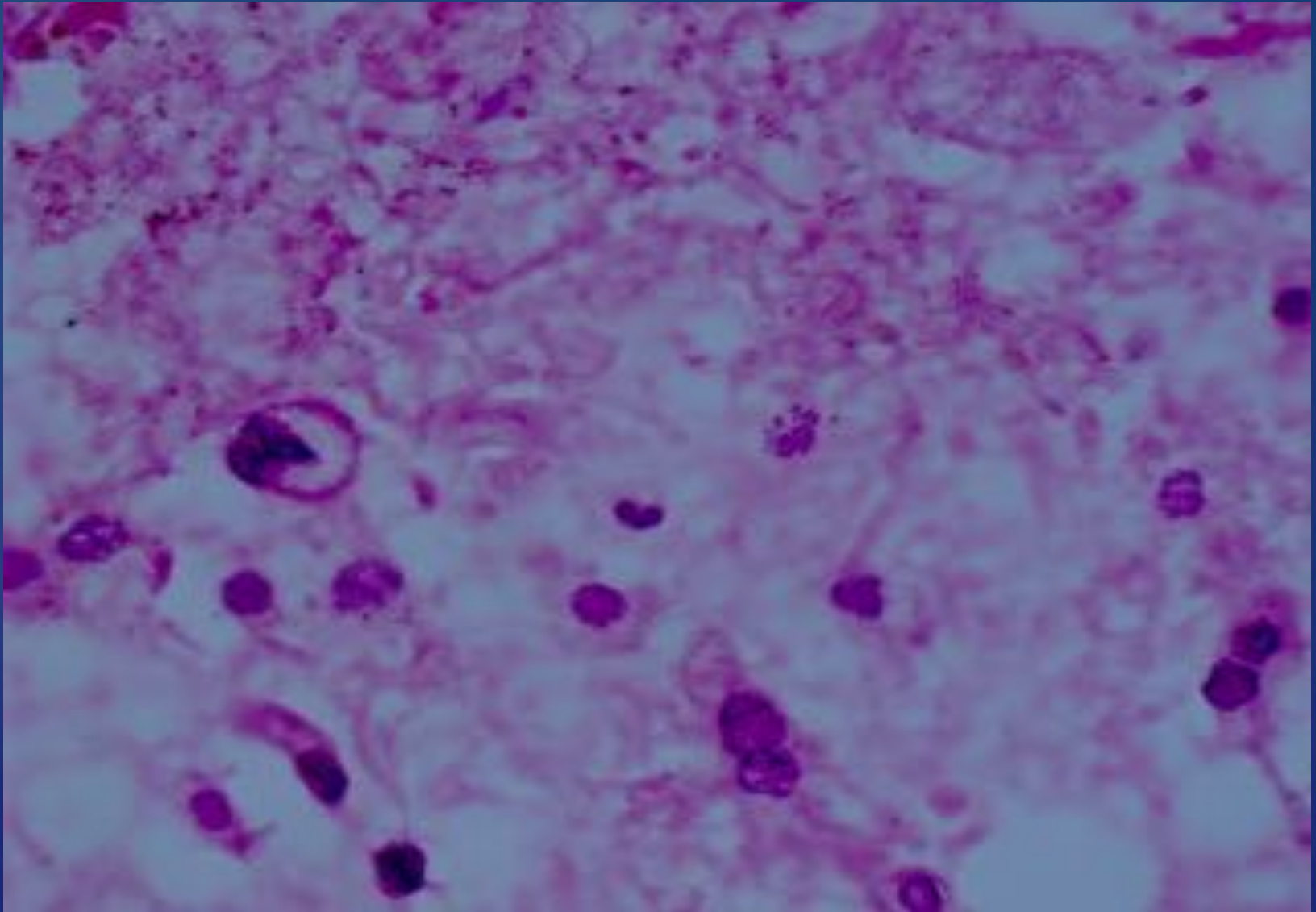
Hyperchromatic nuclears with chromatin effacement



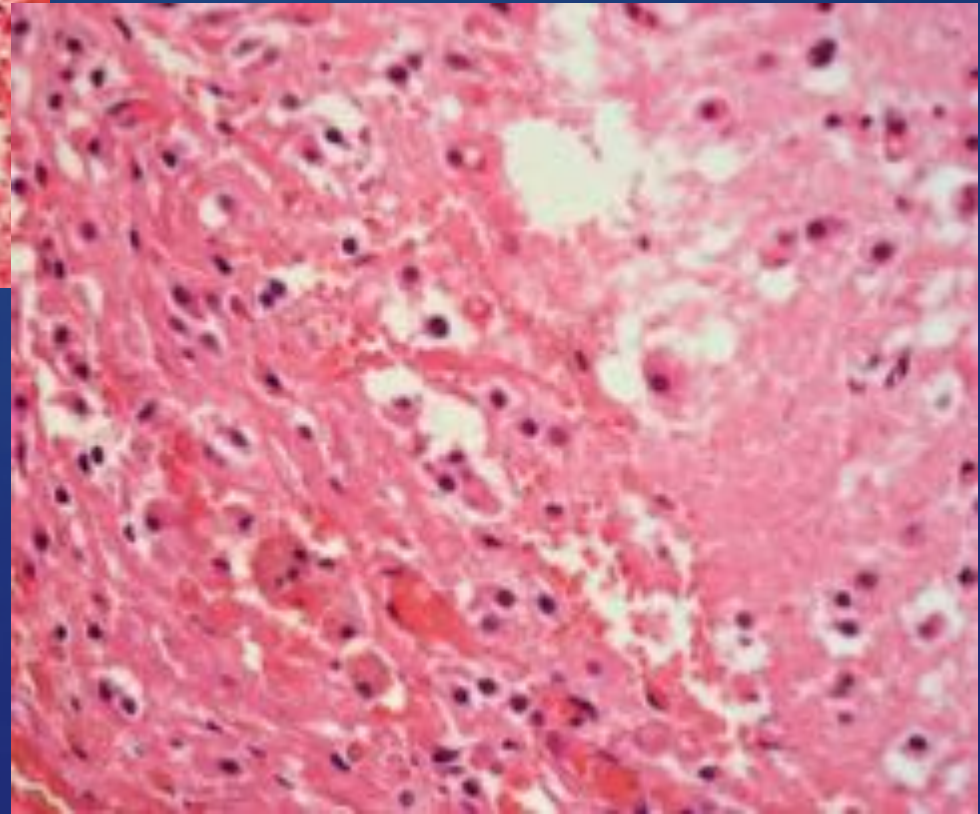
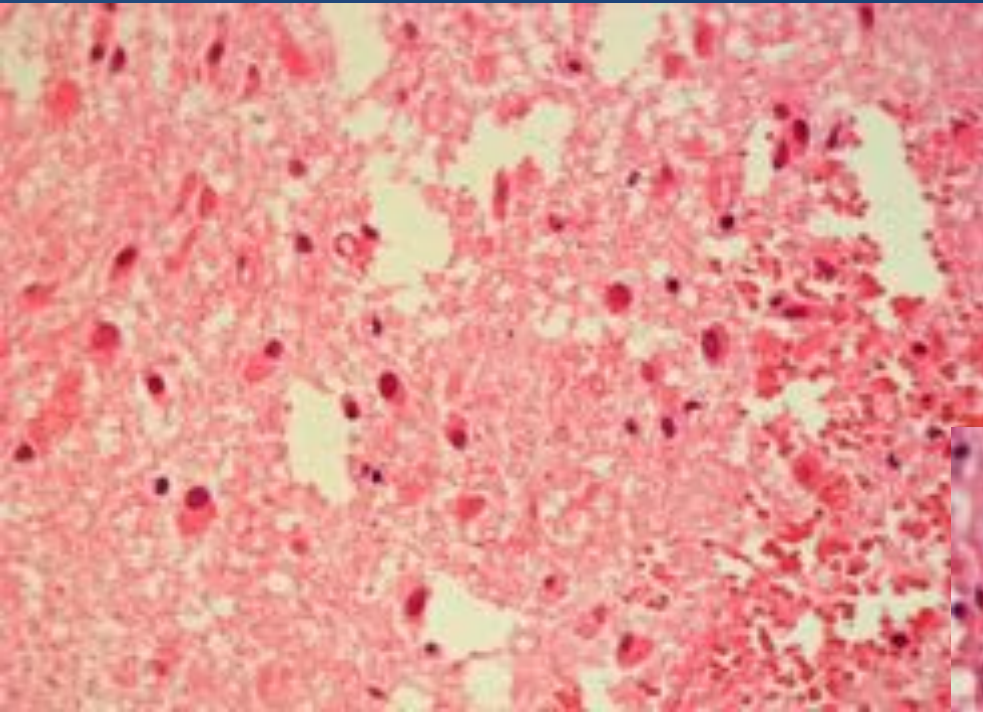
Some oligodendrocytes with hyperchromatic nuclears,
chromatin effacement



Hyperchromatic nuclears with chromatin effacement

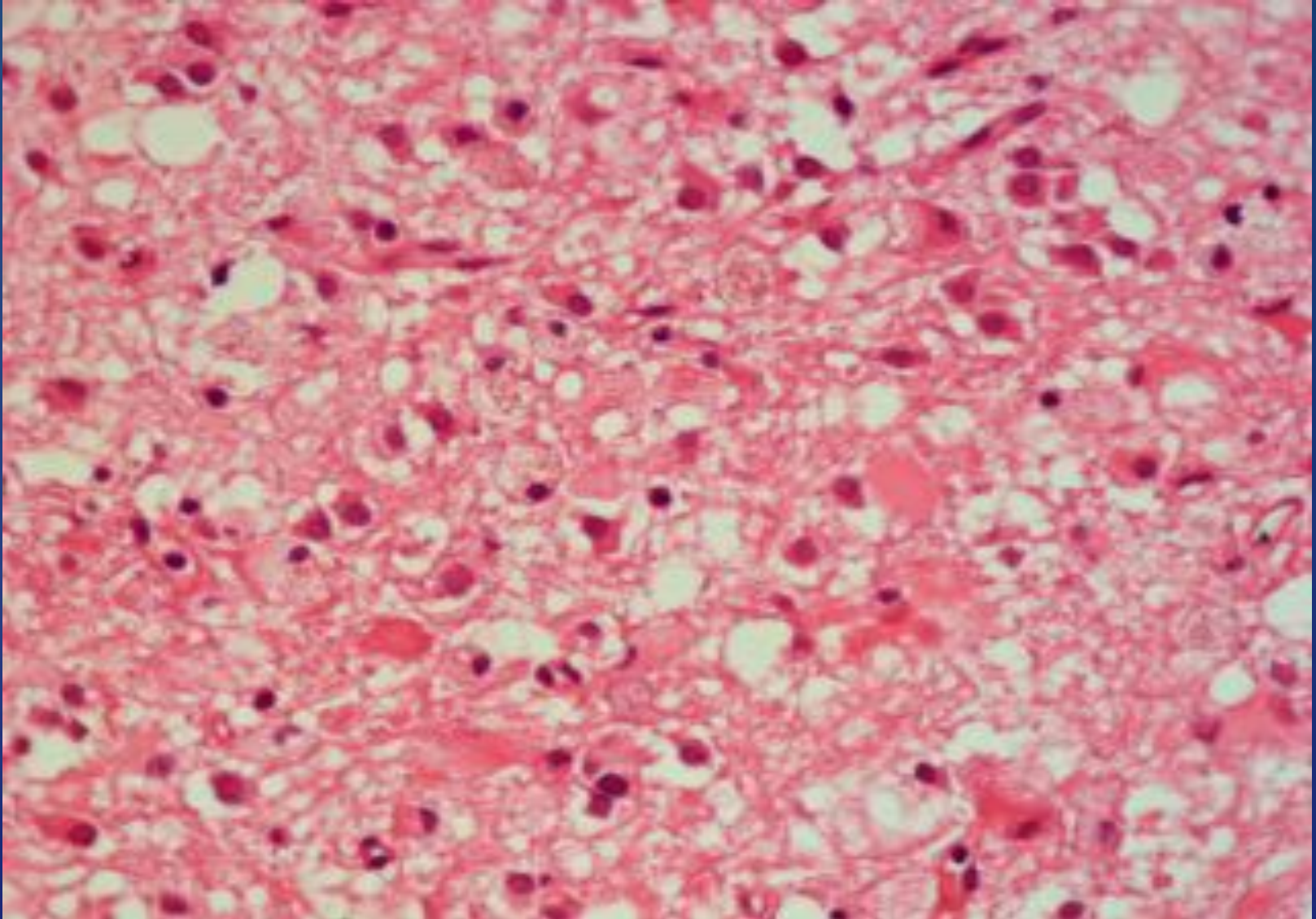


Histology, focal hemorrhage

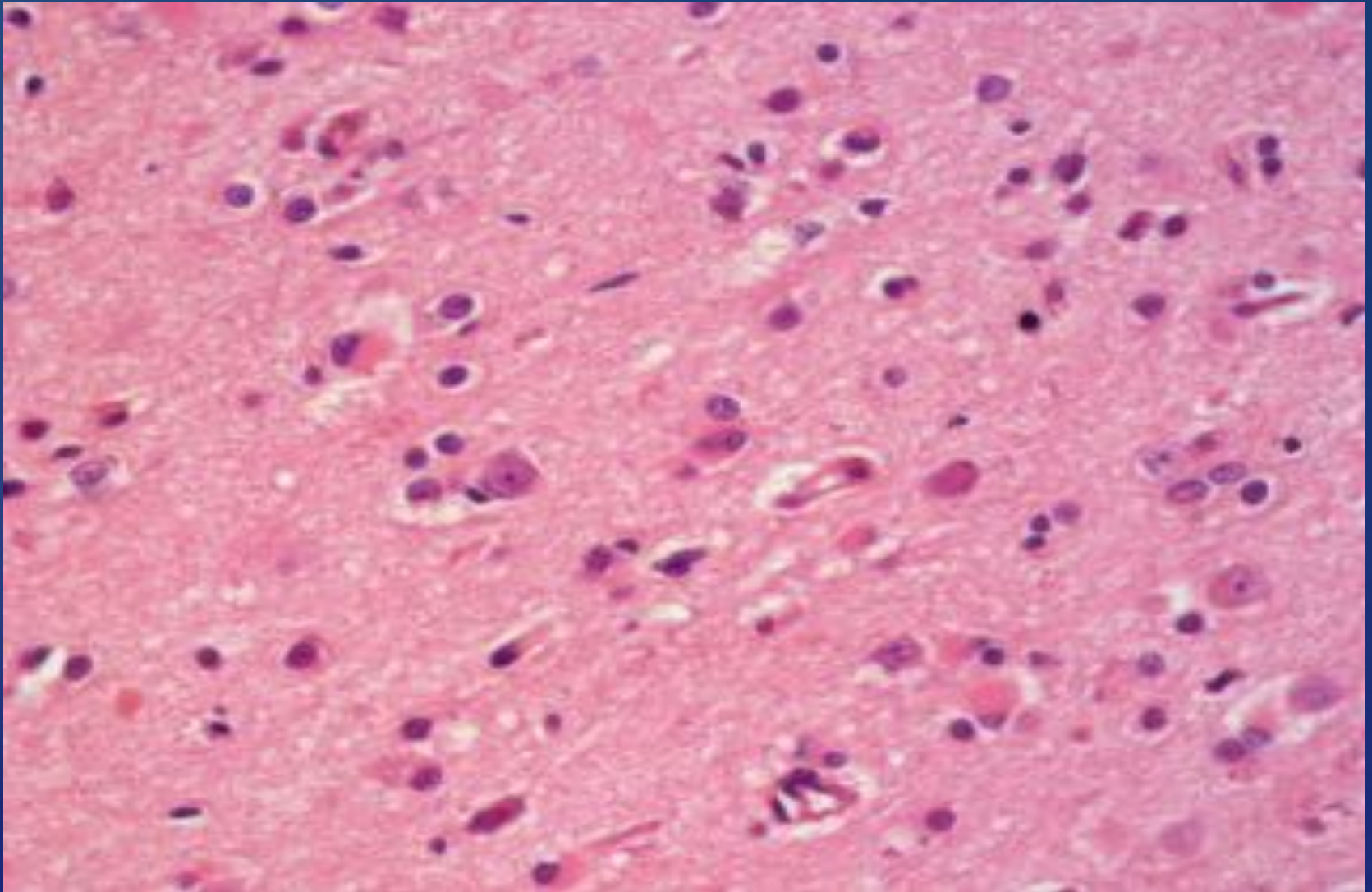


Histology, H&E

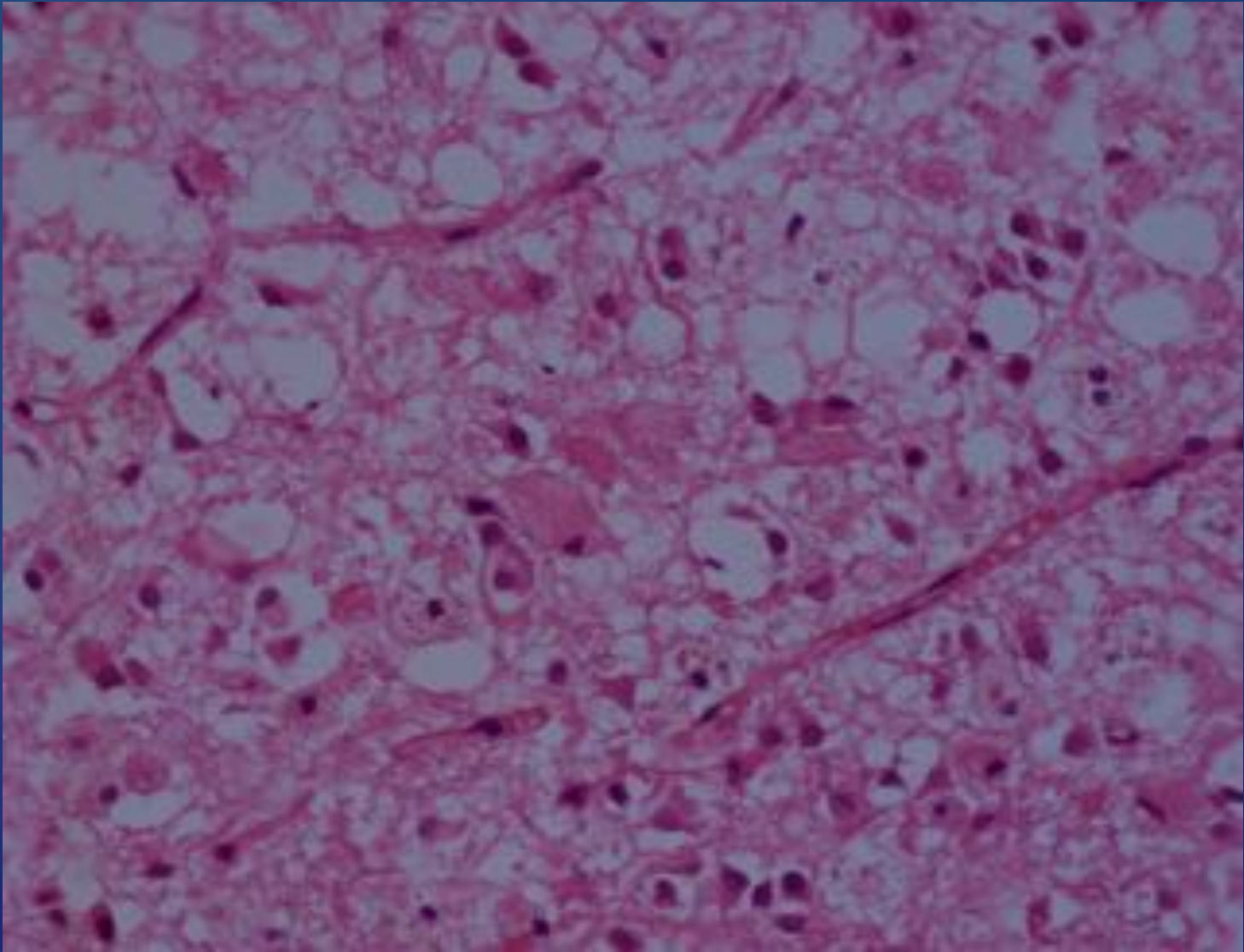
Bizarre reactive astrocytes with abundant cytoplasm



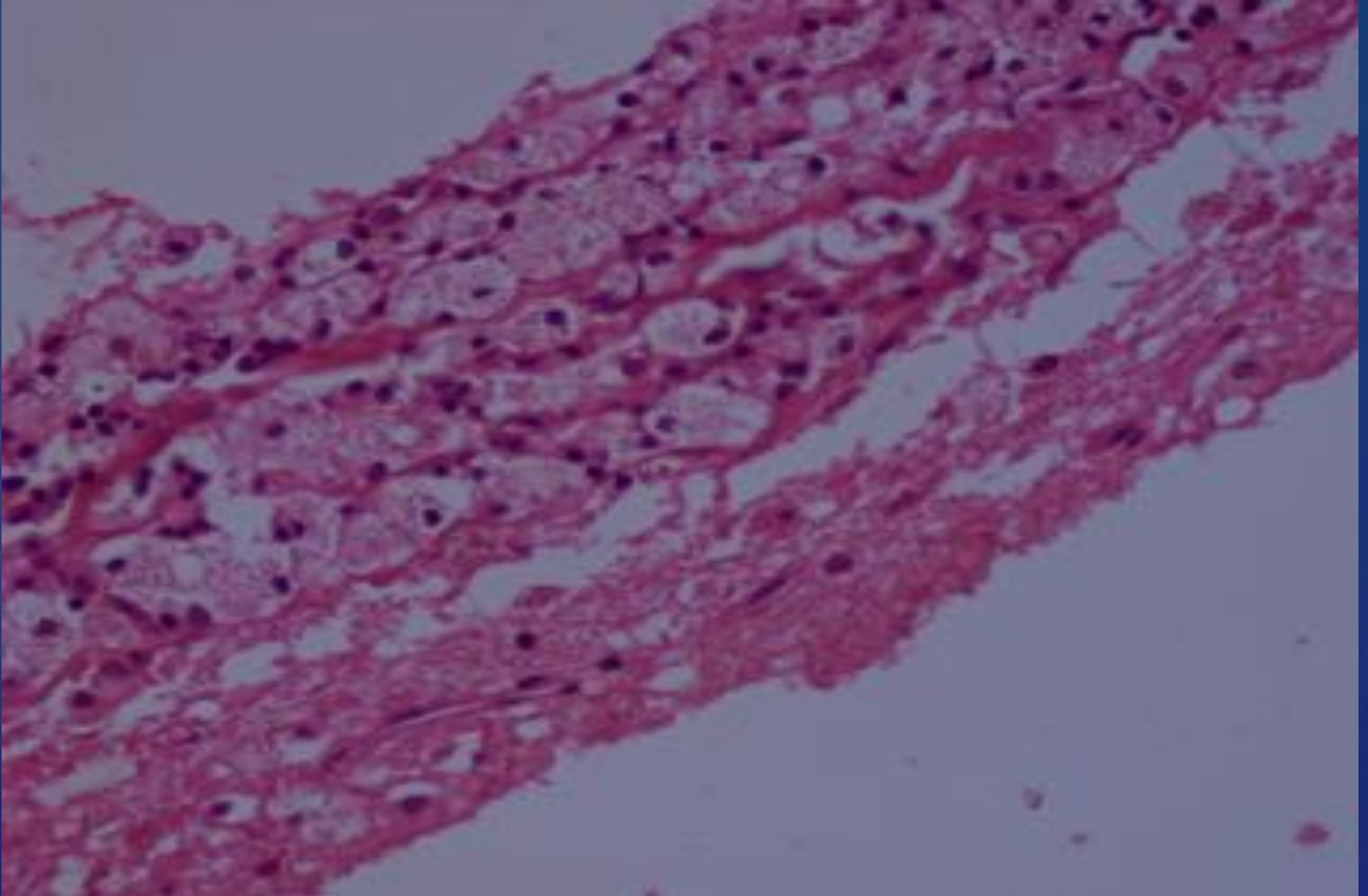
Histology, H&E, reactive astrocytes



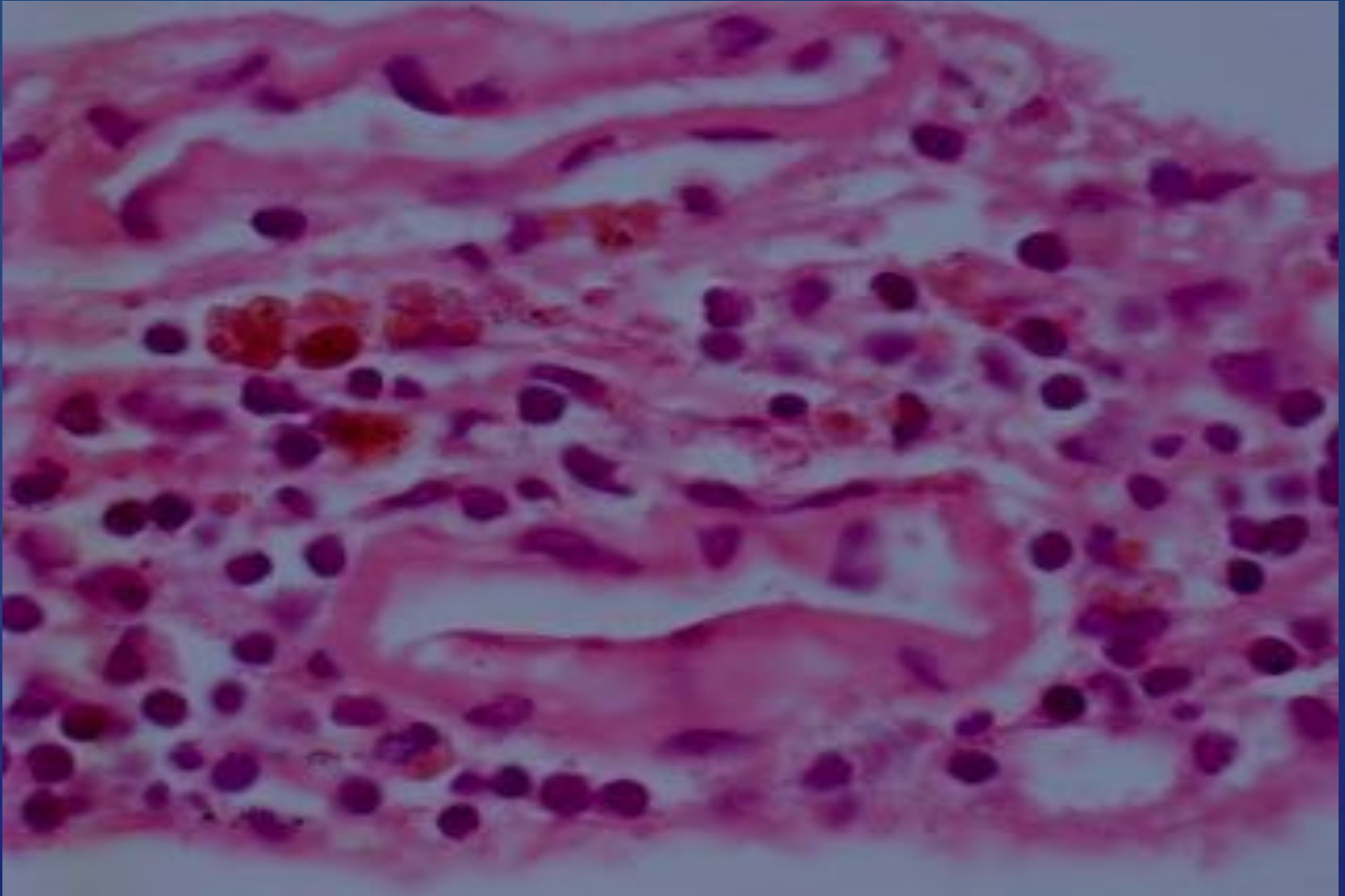
Histology, H&E, vascular proliferation,
macrophages, reactive astrocytes



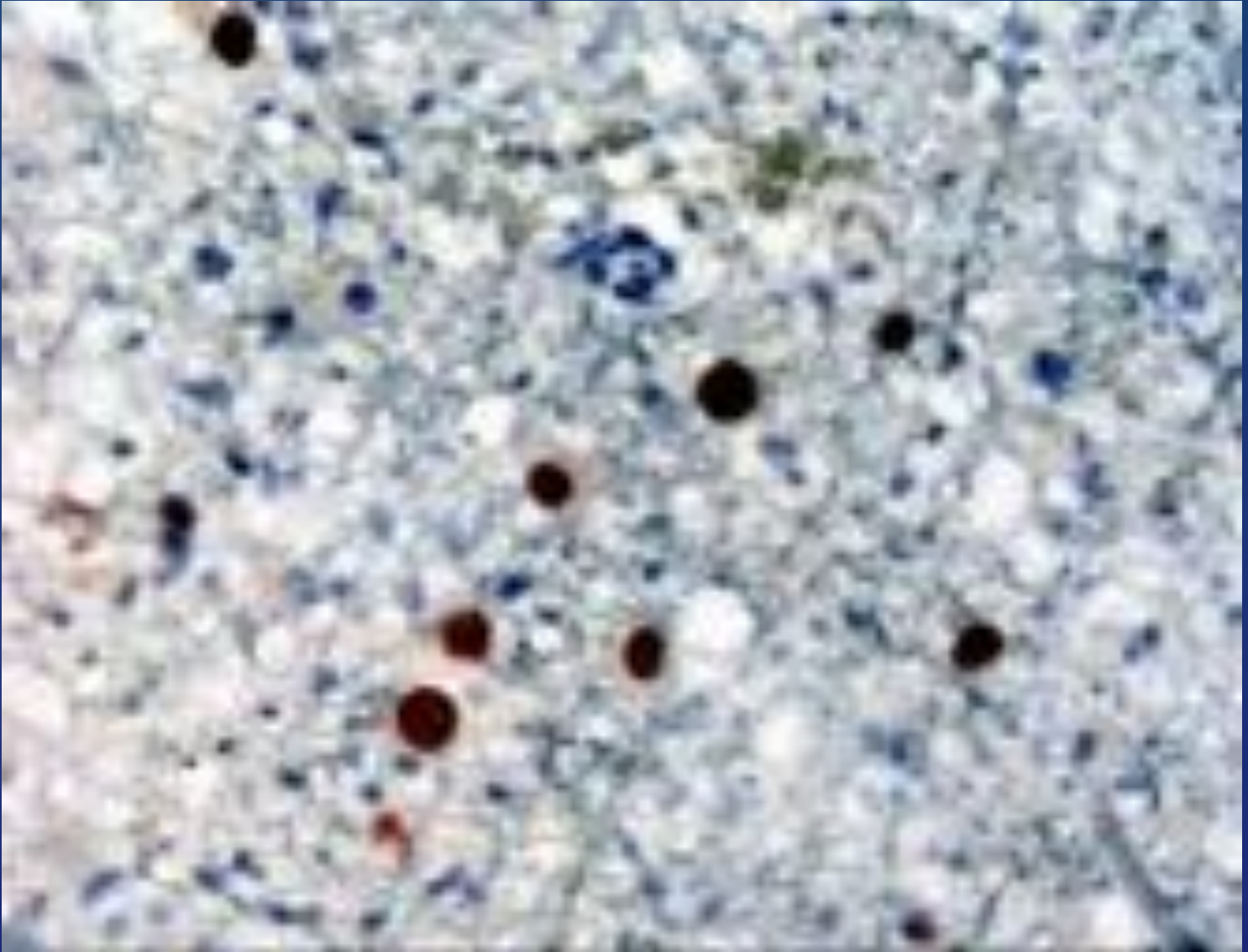
Histology, H&E, macrophages, vascular proliferation



Perivascular lymphocyte infiltration



ICC nuclear stain with anti SV-40



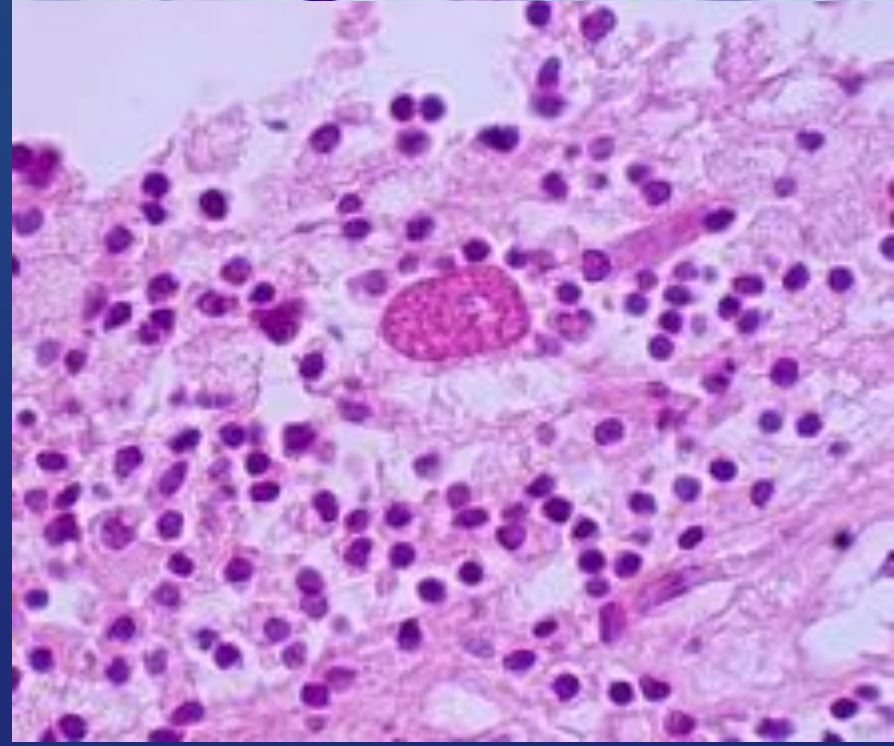
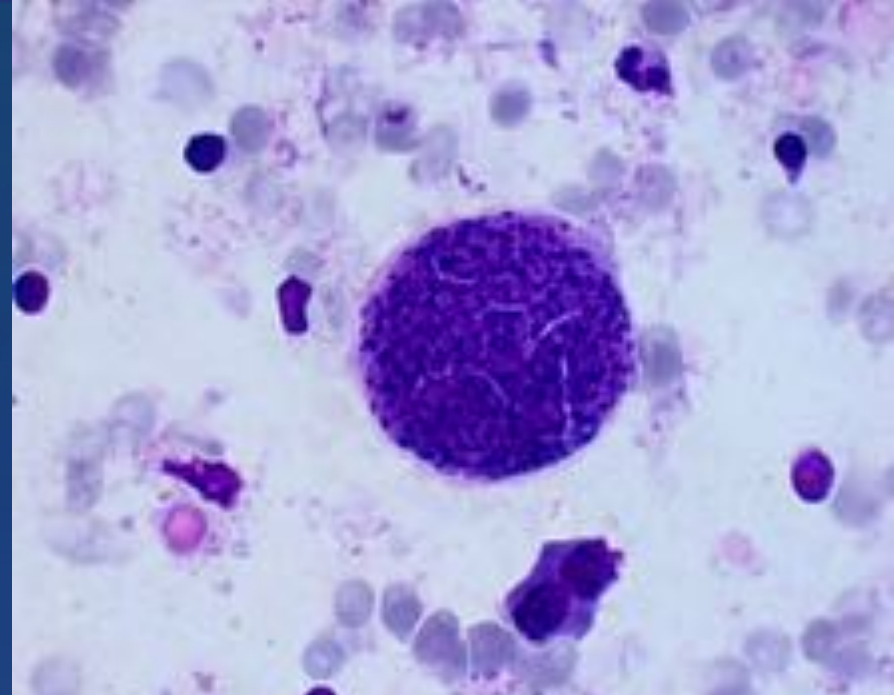
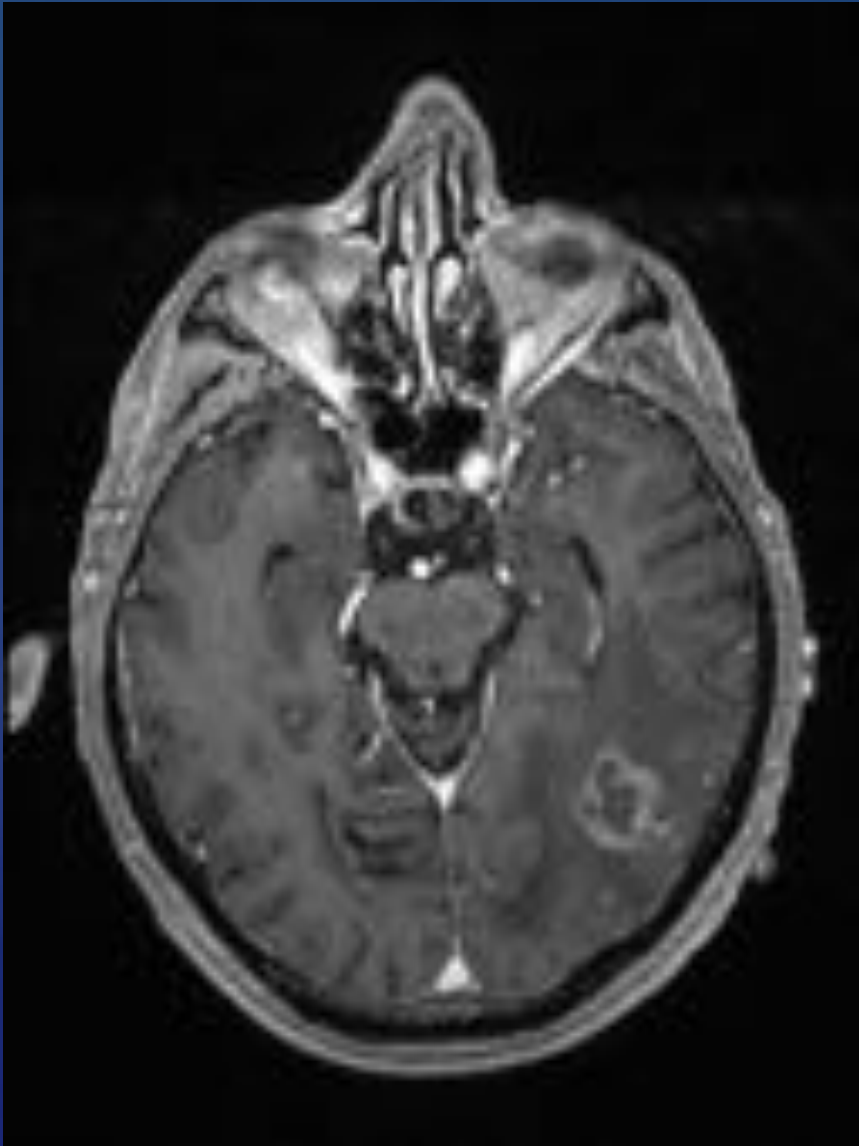
PML differentiated:

Glial neoplasm

HSV encephalitis

CNS toxoplasmosis

Differentiated: CNS toxoplasmosis



**Thank you for your
attention!**