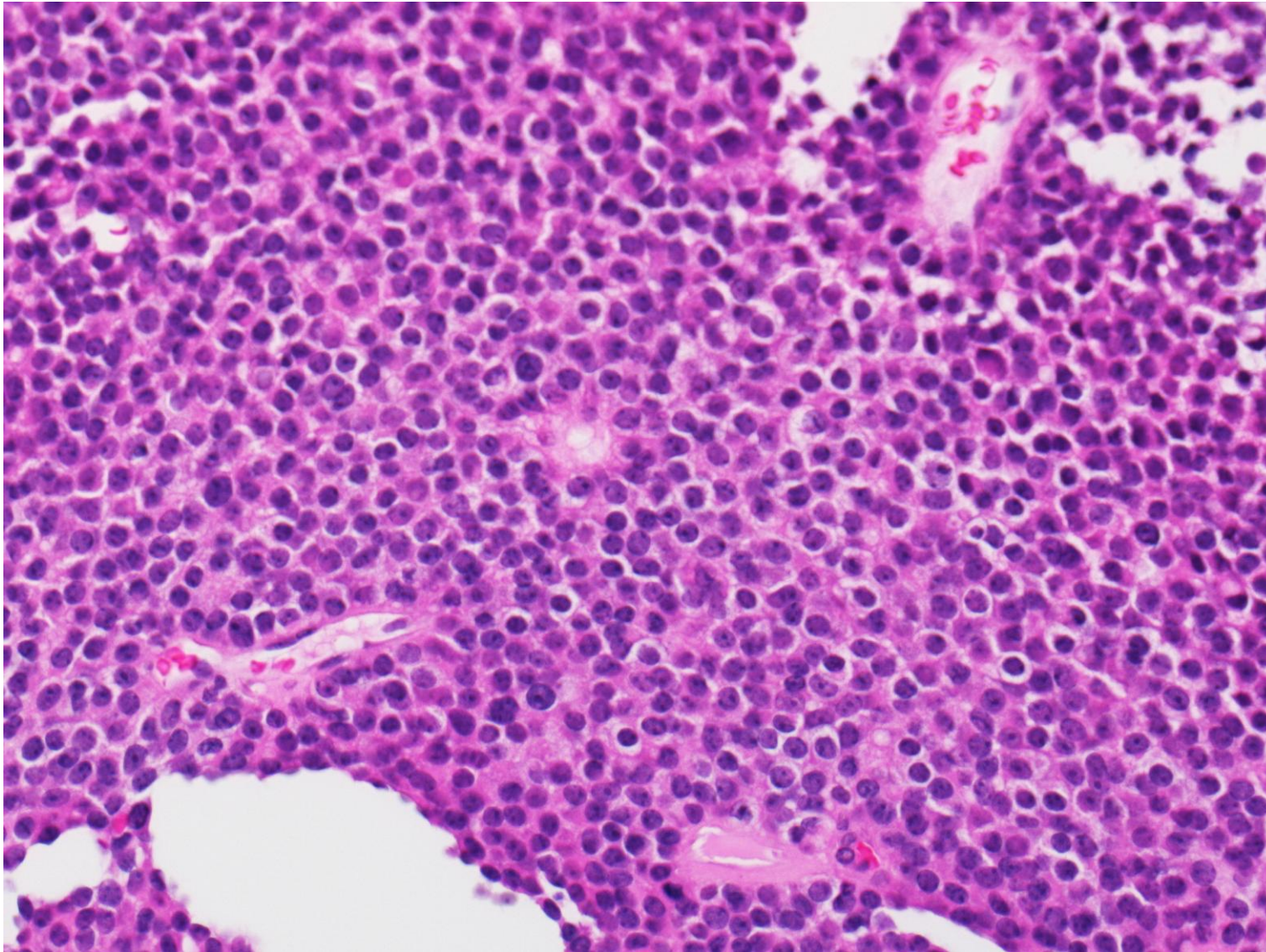
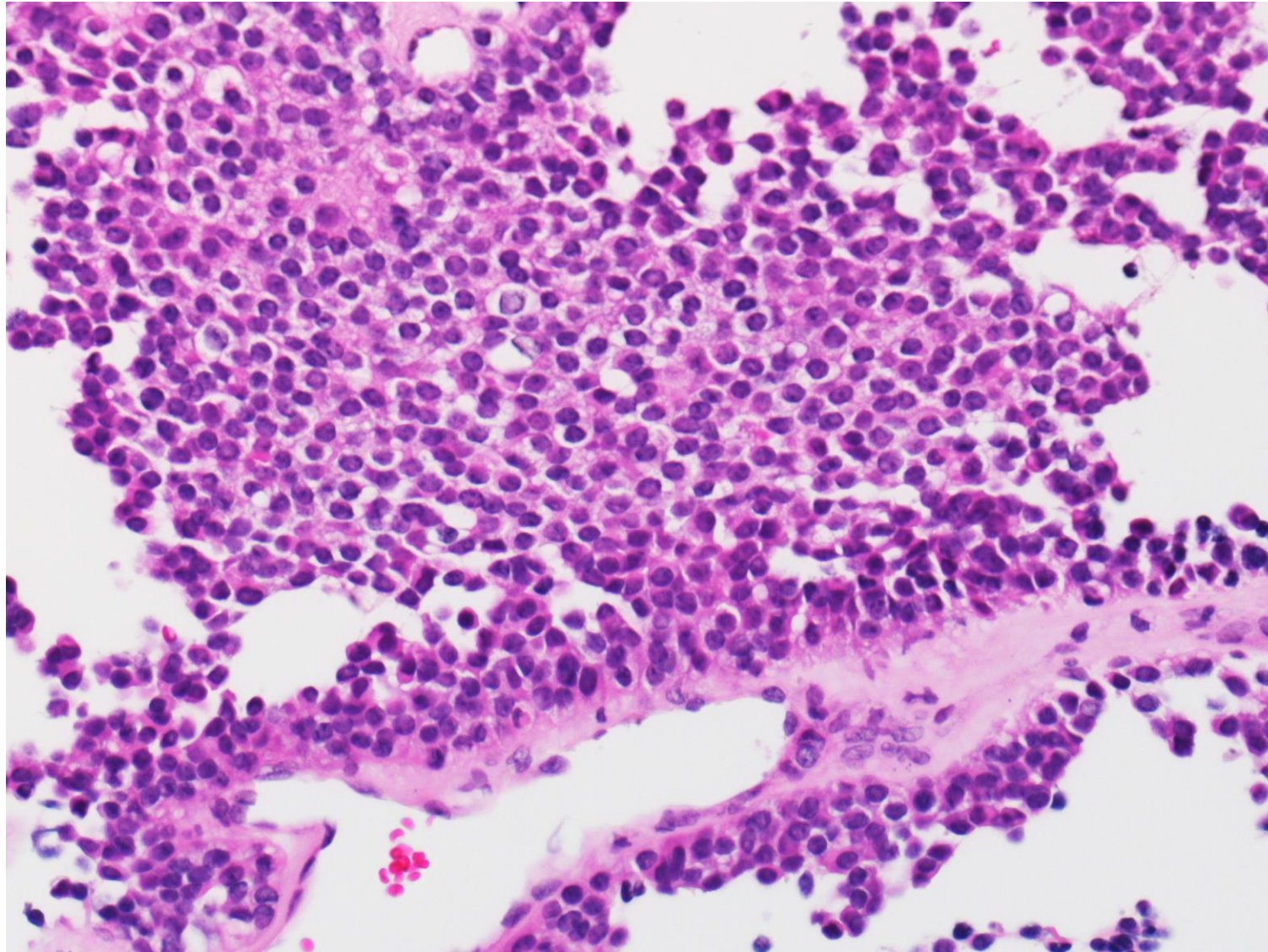


Pineal parenchymal tumor of intermediate differentiation

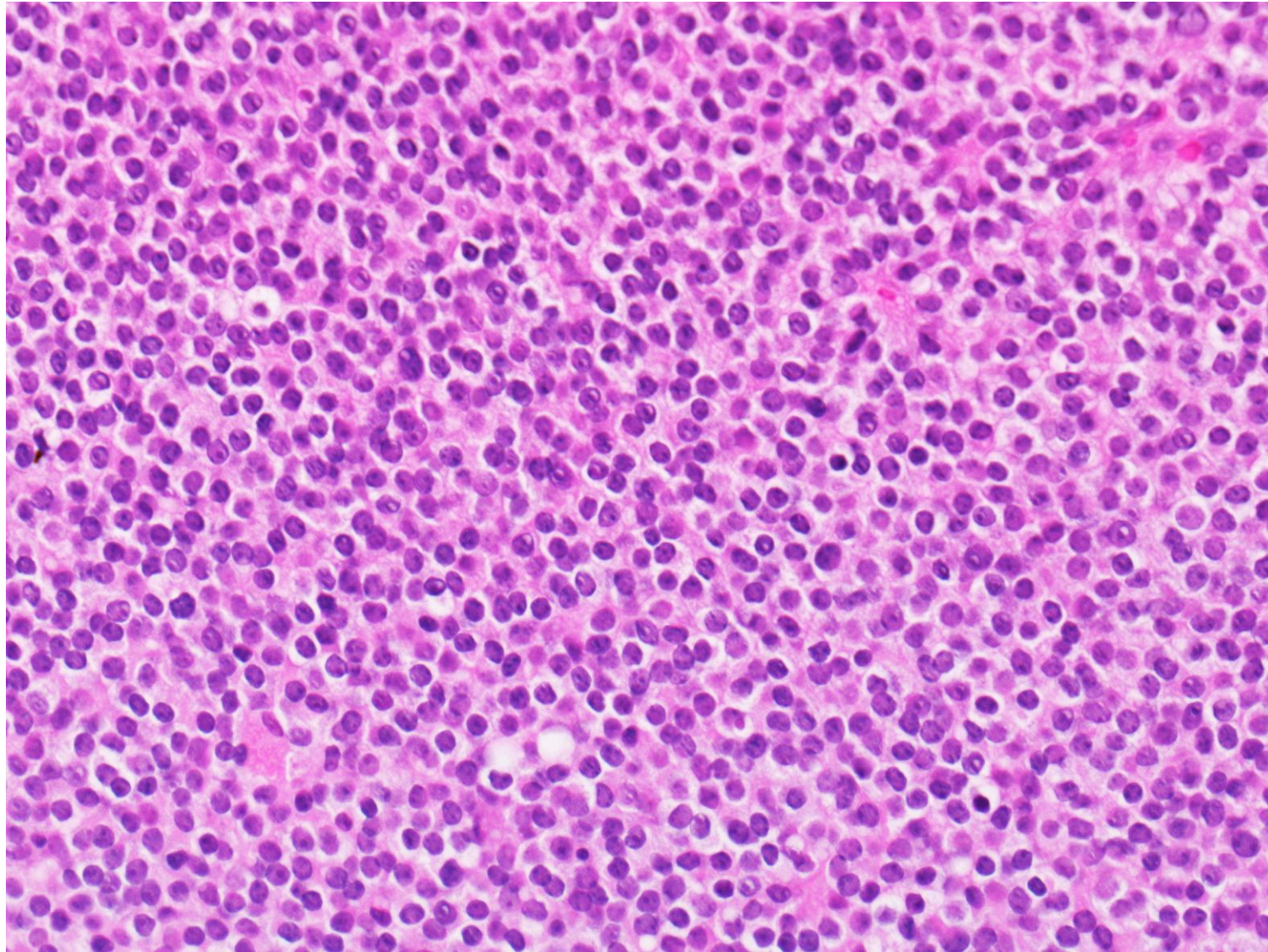
Pineal parenchymal tumor of intermediate differentiation (PPTID) is a low-grade malignancy placed between pineocytoma (benign) and pineoblastoma (malignant). PPTID is further divided into low- and high-grade lesions (WHO II and III). The tumor is hypercellular but relatively bland nuclear features (minimal nuclear pleomorphism). Mitoses and pineocytomatous rosettes are rarely encountered.



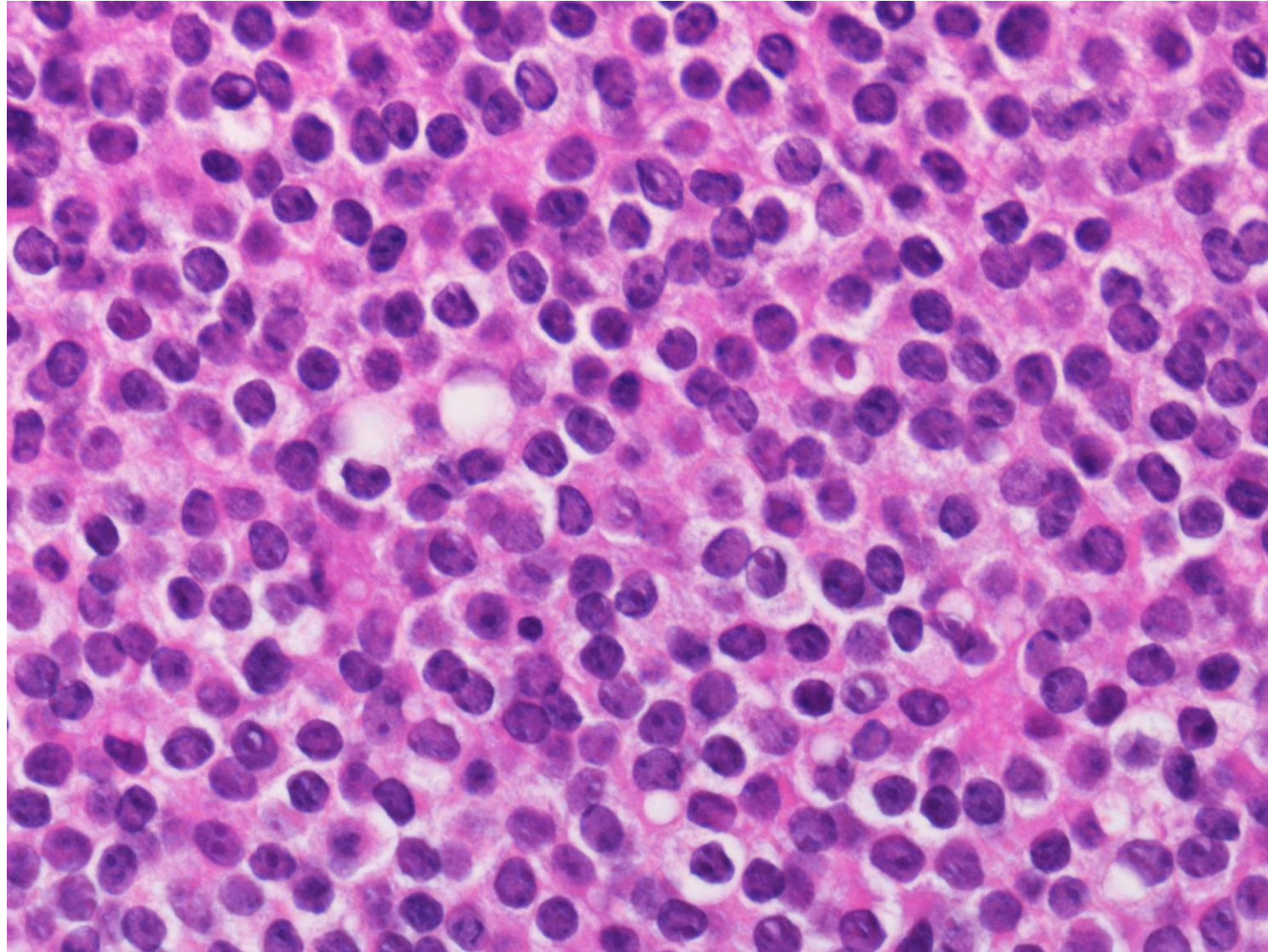
The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. Cystic change is focally associated. H&E-1



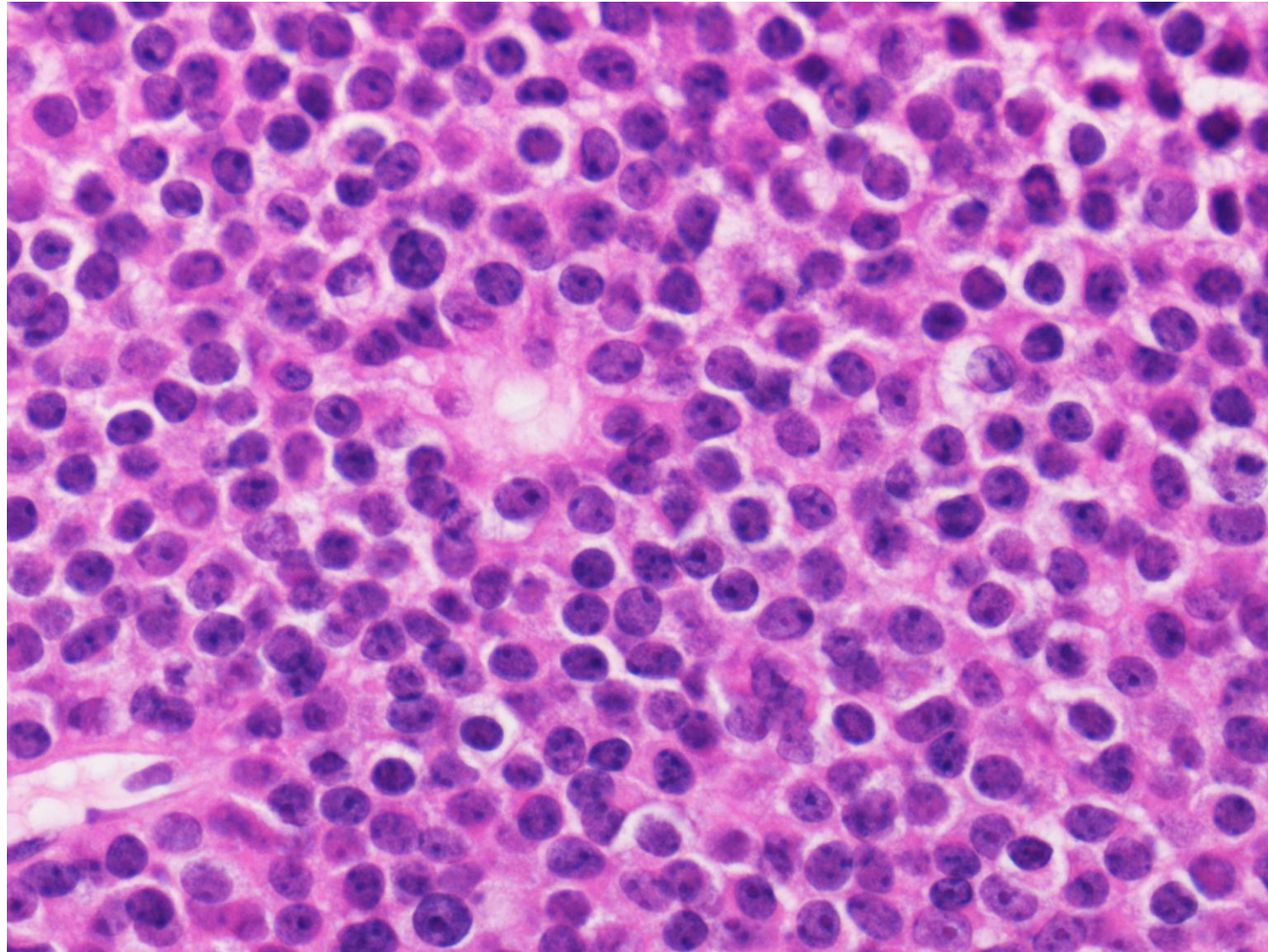
The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. Growth along the vascular structure is recognized. H&E-2



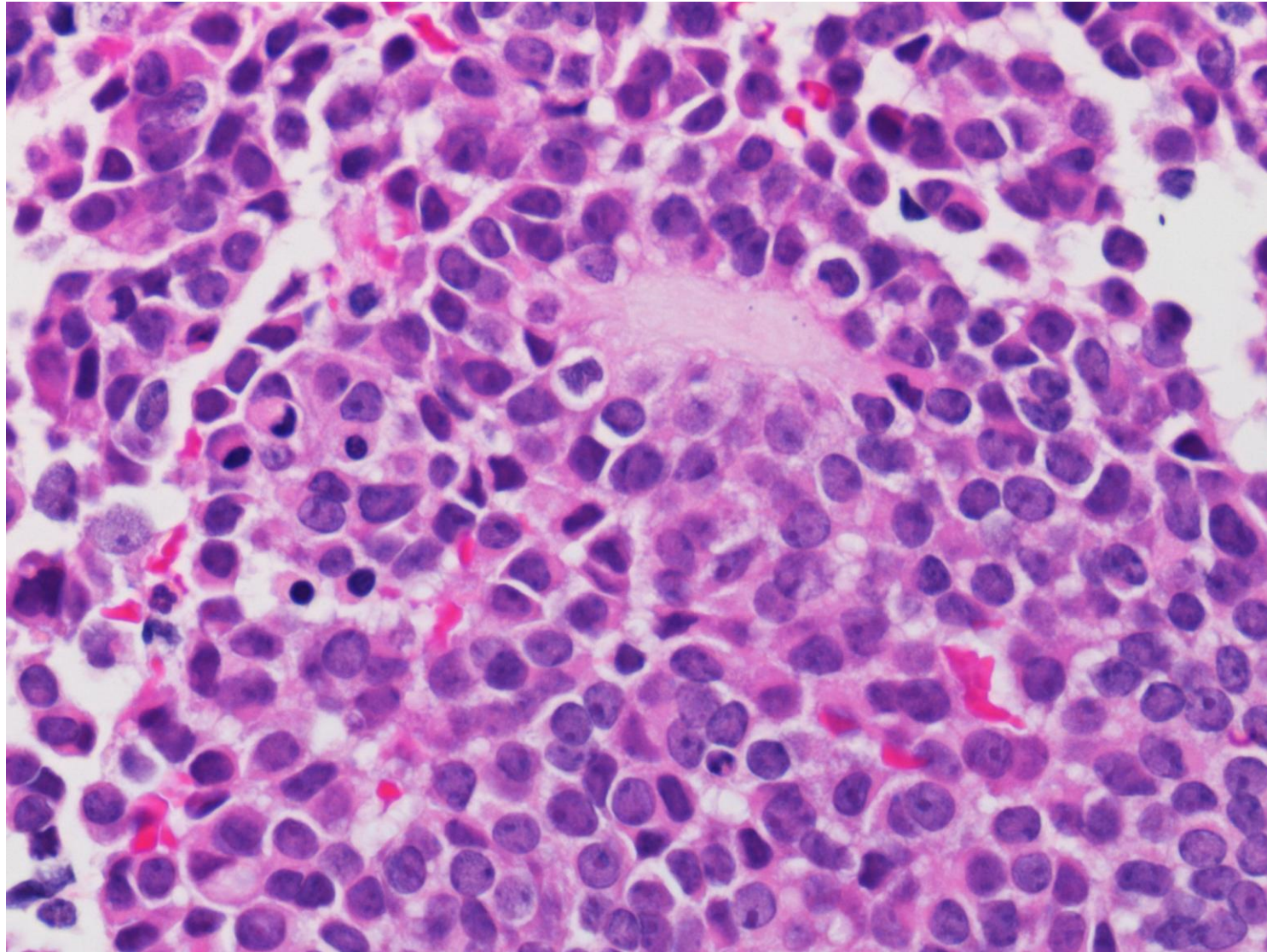
The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. H&E-3



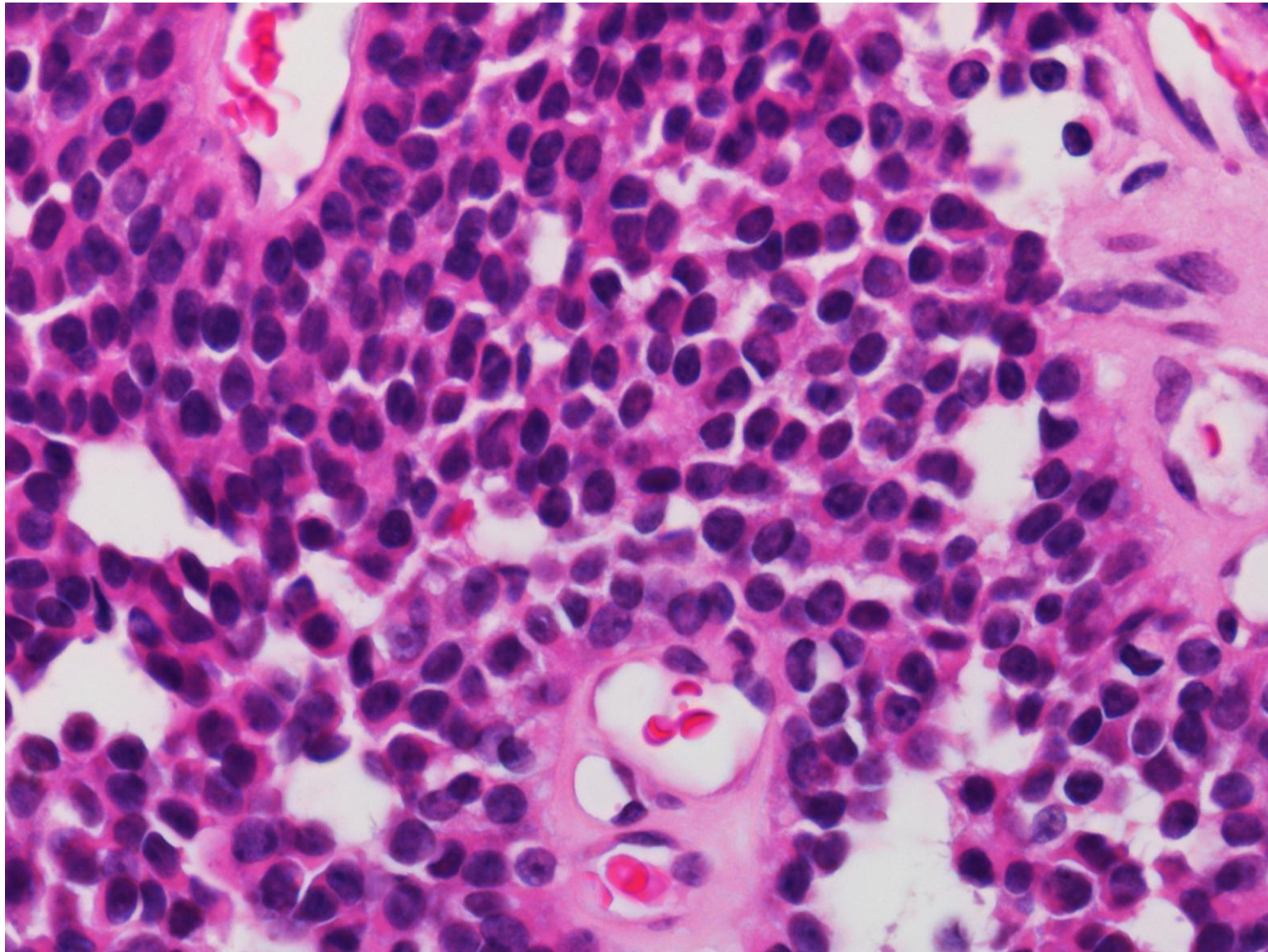
The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. Nuclear pleomorphism is minimal. H&E-4



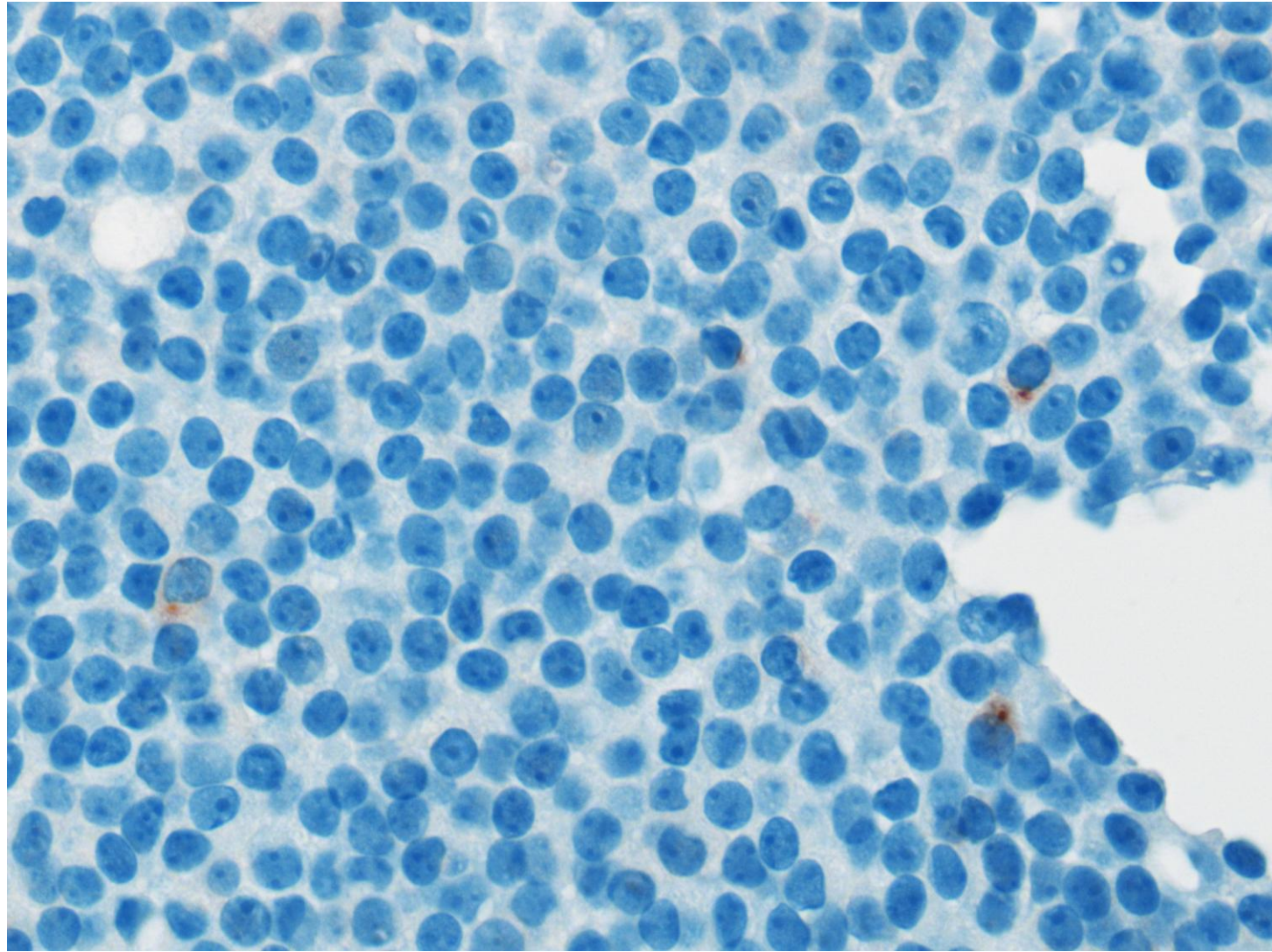
The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. Nuclear pleomorphism is minimal. H&E-5



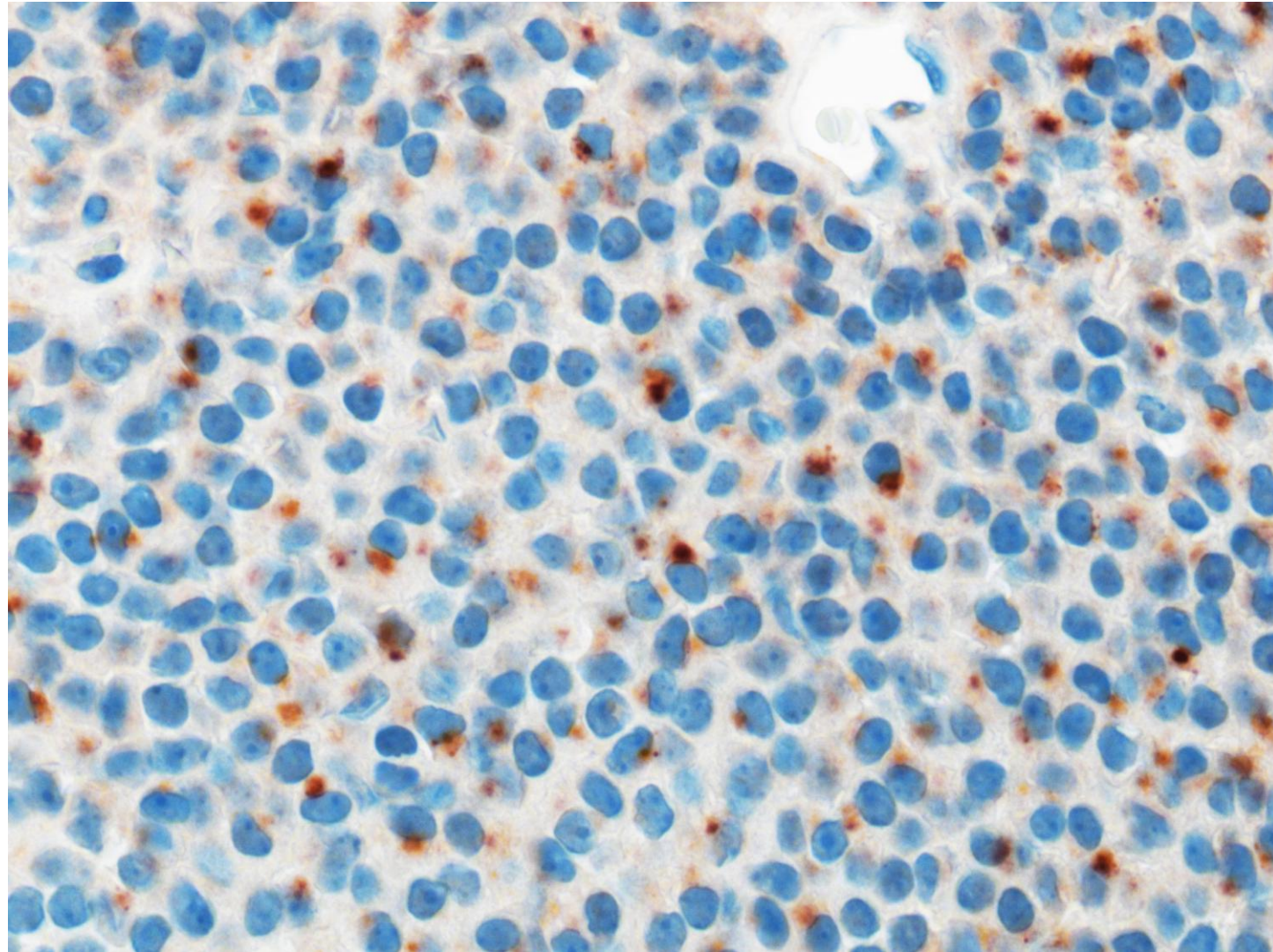
The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. Mild hyperchromasia is observed. H&E-6



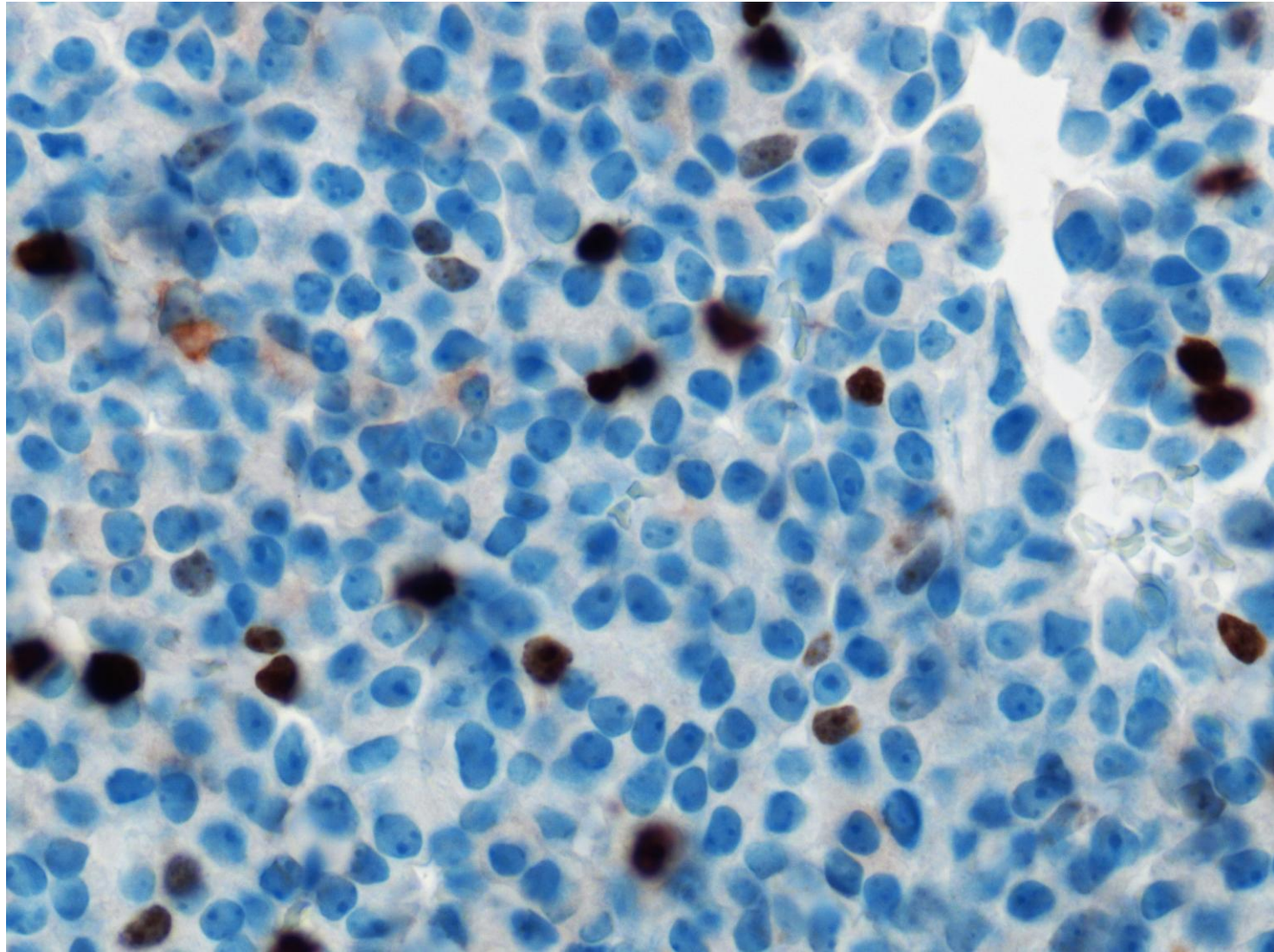
The third ventricular tumor seen in an 18-year-old male patient microscopically shows monomorphous solid growth of small round cells. Mild hyperchromasia is observed. H&E-7



The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient is focally immunoreactive for synaptophysin. Immunostaining for synaptophysin



The third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient is immunoreactive for chromogranin A. Immunostaining for chromogranin A



In the third ventricular tumor (pineal parenchymal tumor of intermediate differentiation) seen in an 18-year-old male patient, Ki-67-immunoreactive proliferative cells are scattered (labeling index around 5-10%). Immunostaining for Ki-67 (MIB-1)