Clinical History
This 65 year old man developed a cough and sore throat, which worsened over several days, bringing him initially to his primary care physician. He had a negative test for influenza, was told he had a viral illness, was given cough syrup, and was sent home. He developed fever to 104°F, weakness, and anorexia and came to the hospital. He was admitted, started on oxygen, antibiotics, and bronchodilators, and was noted to have febrile neutropenia. He was neurologically normal. However, he further deteriorated and required sedation, intubation, ICU admission, and pressors for septic shock. He developed ventricular tachycardia and then arrested after being given amiodarone. He was resuscitated, but developed acute renal failure. Six days after admission a head CT was said to show subarachnoid hemorrhage. He was weaned from sedation but remained comatose, thought secondary to hypoxic brain damage after his cardiac arrest. Given the poor prognosis the family agreed to comfort care only, and shortly thereafter he died. Permission for a full autopsy was obtained.

Additional Information
The general autopsy documented septicemia and a bilateral lower lobe pneumonia with Candida glabrata and coagulase-negative Staphylococcus; the bone marrow was hypercellular, thought consistent with sepsis. There was cardiomegaly with moderate coronary artery disease.

The brain weighed 1600 grams (fixed), was swollen with central herniation, and had small foci of fresh subarachnoid hemorrhage. Coronal sections showed no abnormalities of the cortex, but the white matter had numerous scattered round petechiae, the largest of which was 0.6 x 0.5 cm in one section. There were also petechiae in the brainstem and in the cerebellar white matter.

Material Submitted
Luxol Fast Blue/H&E combination stained section of cerebrum

Virtual Slide (click here)

Points for Discussion
1. Diagnosis
2. Pathogenesis