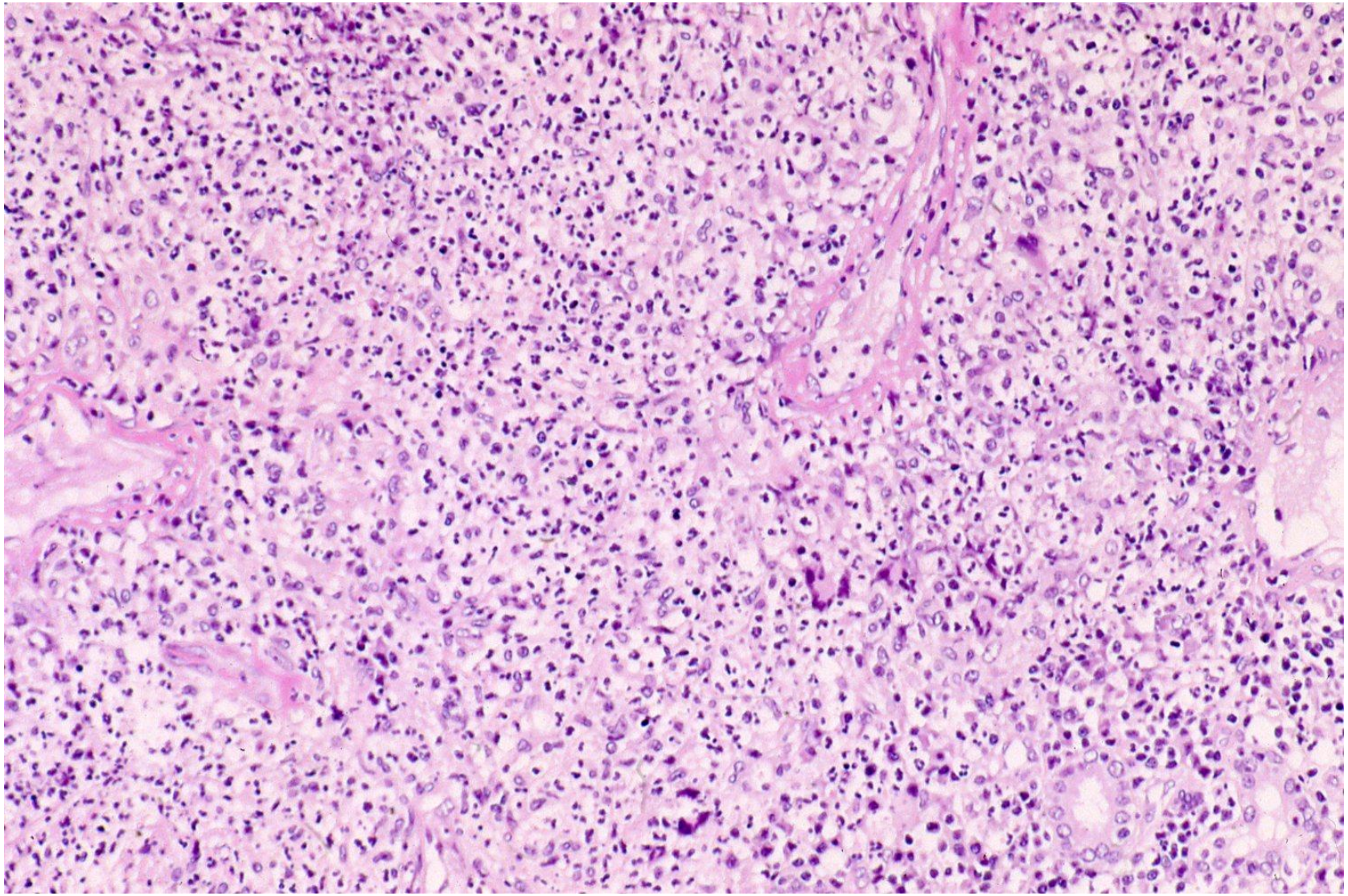
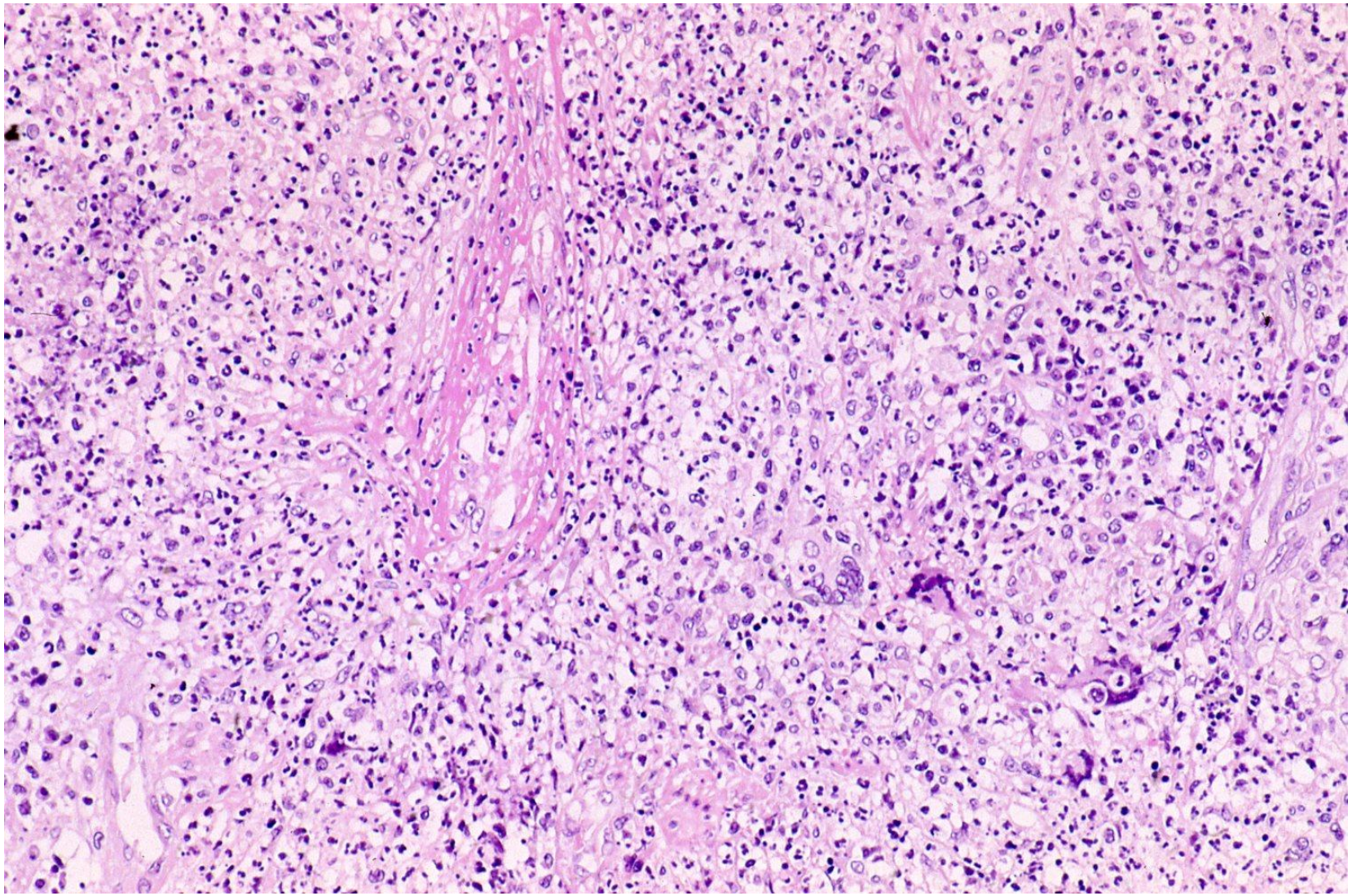
# Wegener's granulomatosis: an autopsy case

Wegener's granulomatosis is now called as granulomatosis with polyangiitis (GPA). GPA is a systemic autoimmune vasculitis syndrome involving the upper and lower respiratory tracts and the kidney. Clinically, signs and symptoms of necrotizing rhinitis and multiple lung nodules are presented. Microscopically, GPA is featured by necrotizing angiitis and a systemic granulomatous inflammatory process. Small to medium sized arteries and veins are involved. Glomerulonephritis is often associated. Cytoplasmic ANCA (c-ANCA or PR3-ANCA) is specific for GPA. Middle-aged individuals are mainly affected.

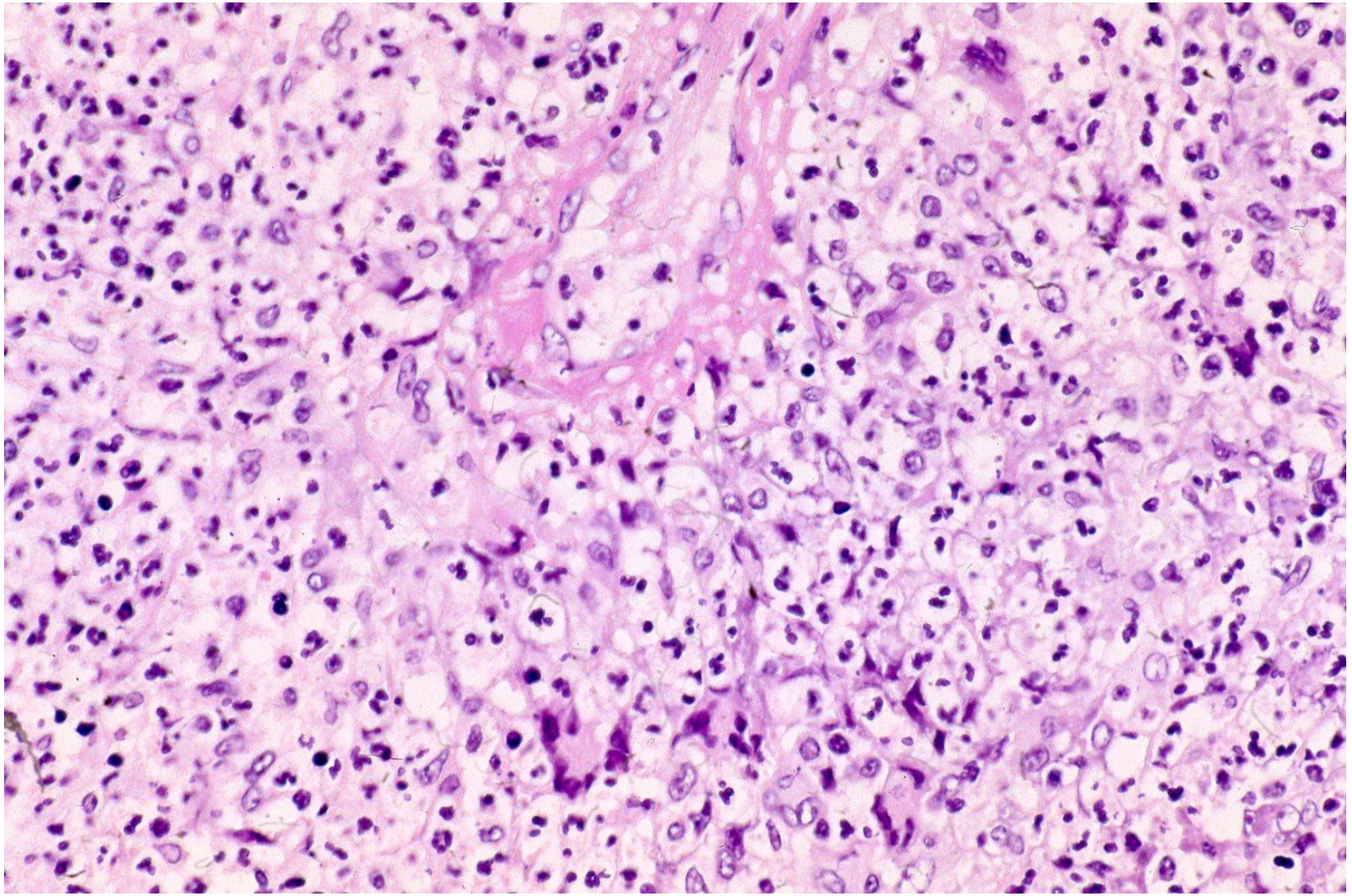
Ref.: Cima L, et al. Granulomatosis with polyangiitis (GPA). PathologyOutlines.com website. 2025. https://www.pathologyoutlines.com/topic/lungnontumorgranulomatosiswithpolyangiitis.html



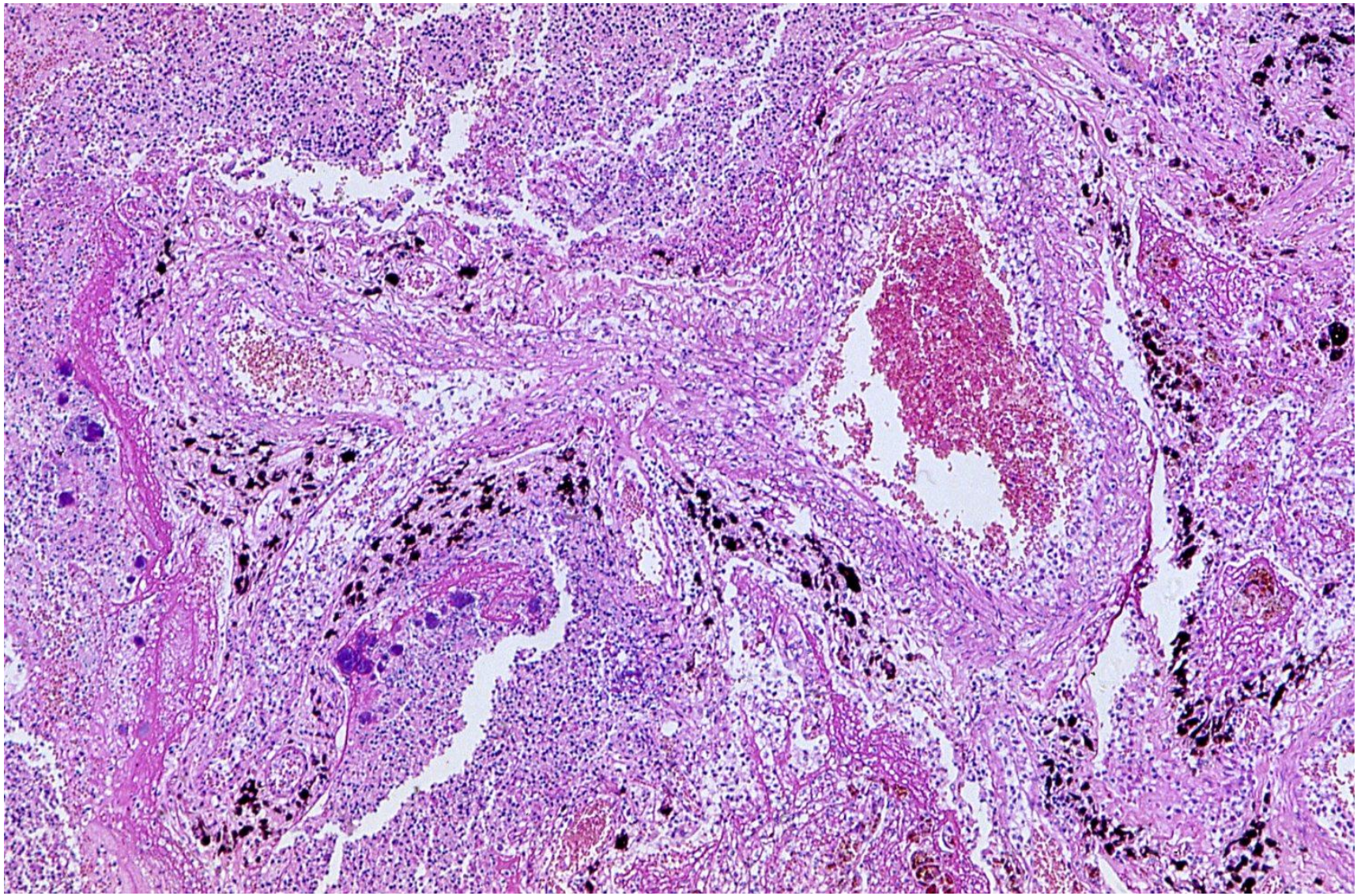
Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s. Nasal biopsy reveals necrotizing angiitis and perivascular granulomatous reaction with multinucleated giant cells and neutrophils (H&E-1). The patient initially complained of purulent rhinorrhea and bloody nasal discharge.



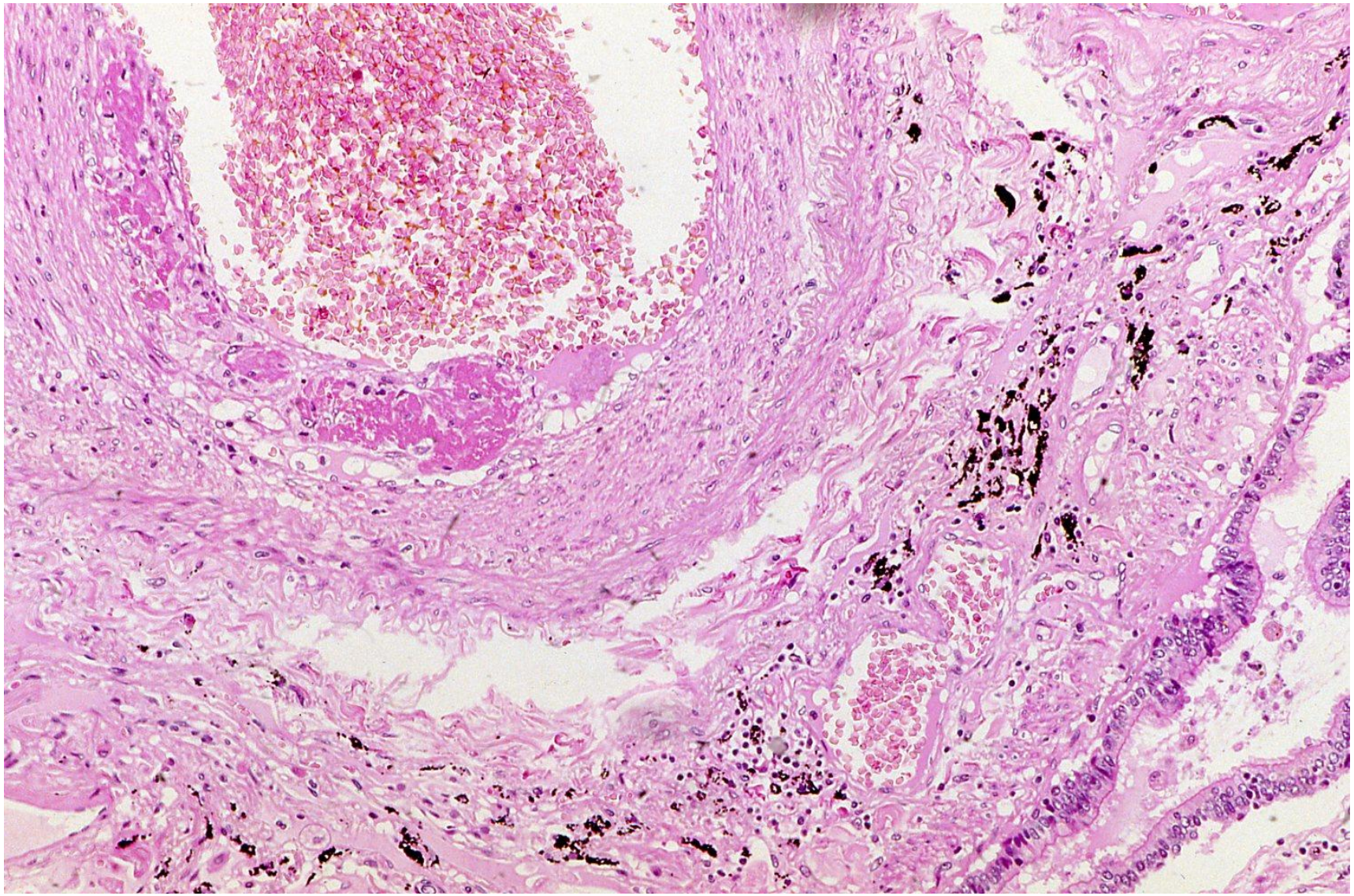
Wegener's granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50's. Nasal biopsy reveals necrotizing angiitis and perivascular granulomatous reaction with multinucleated giant cells and neutrophils (H&E-2). The patient initially complained of purulent rhinorrhea and bloody nasal discharge.



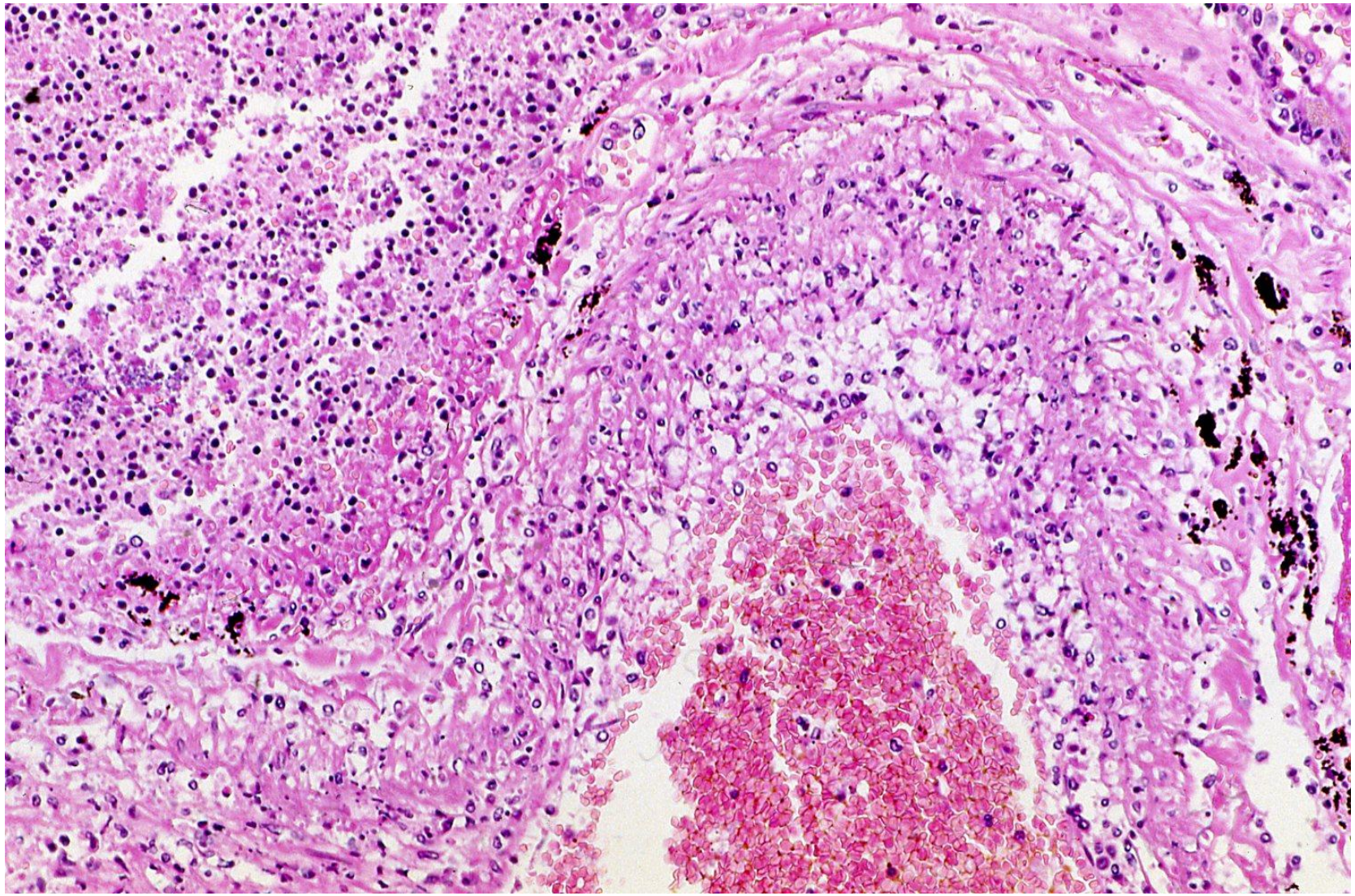
Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s.  Nasal biopsy reveals necrotizing angiitis and perivascular granulomatous reaction with multinucleated giant cells and neutrophils (H&E-3). The patient initially complained of purulent rhinorrhea and bloody nasal discharge.



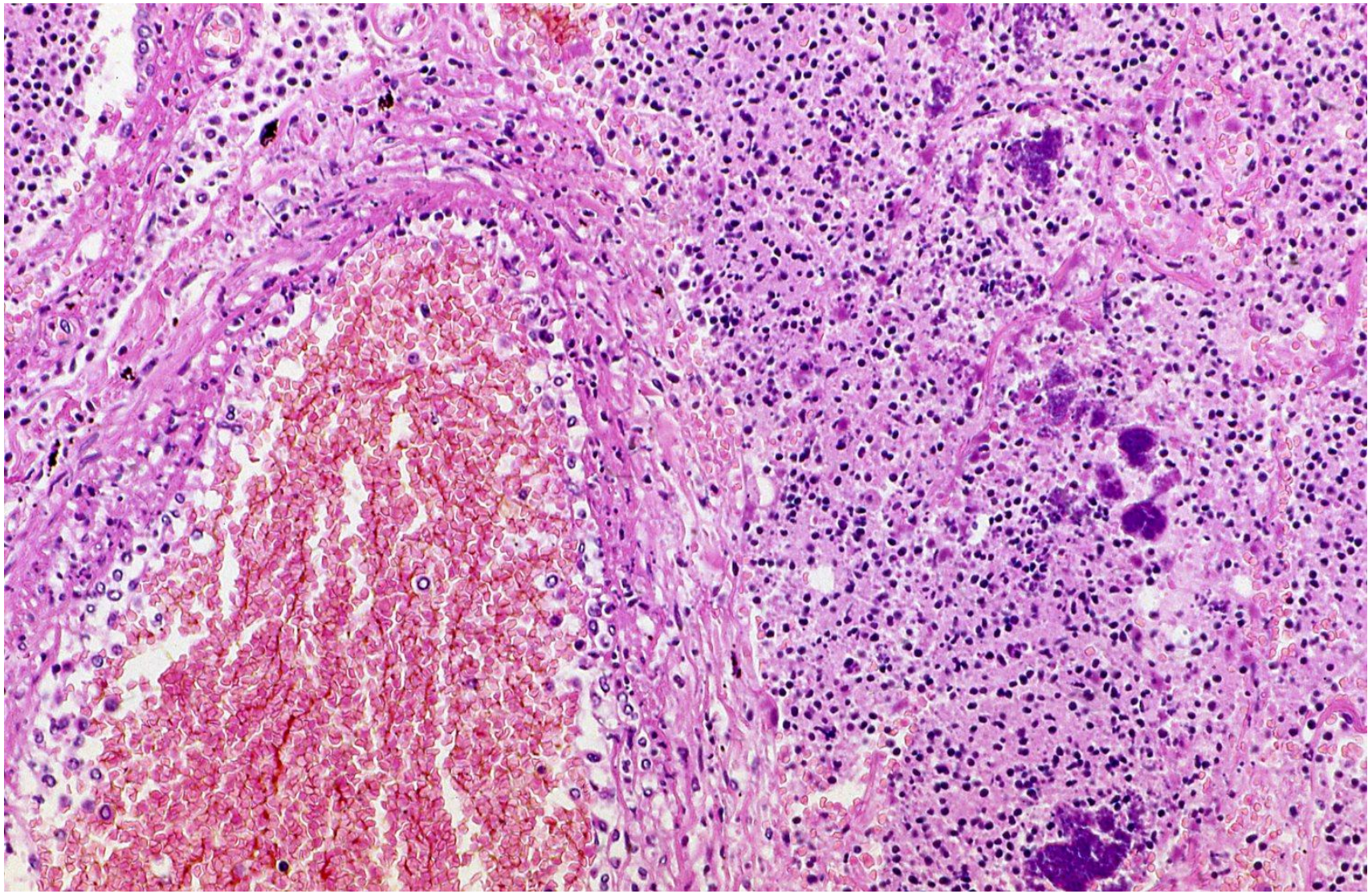
Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s. At autopsy, the inflammatory nodule in the lung shows active angiitis involving the pulmonary artery branch. The intima is infiltrated by neutrophils (H&E-4).



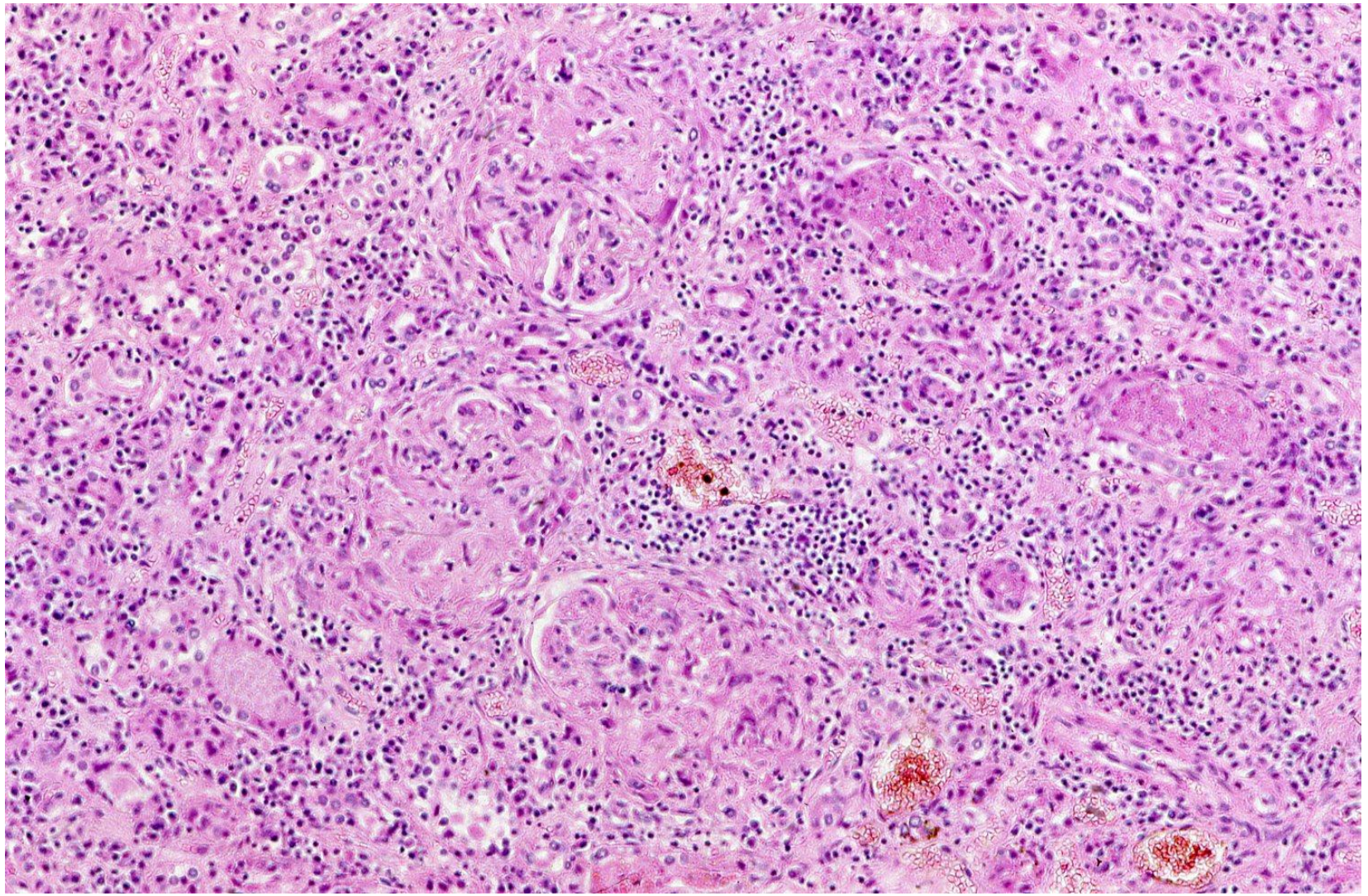
Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s.  At autopsy, the inflammatory nodule in the lung shows fresh angiitis of the pulmonary artery branch.  Fibrinoid necrosis is seen in the intima (H&E-5).



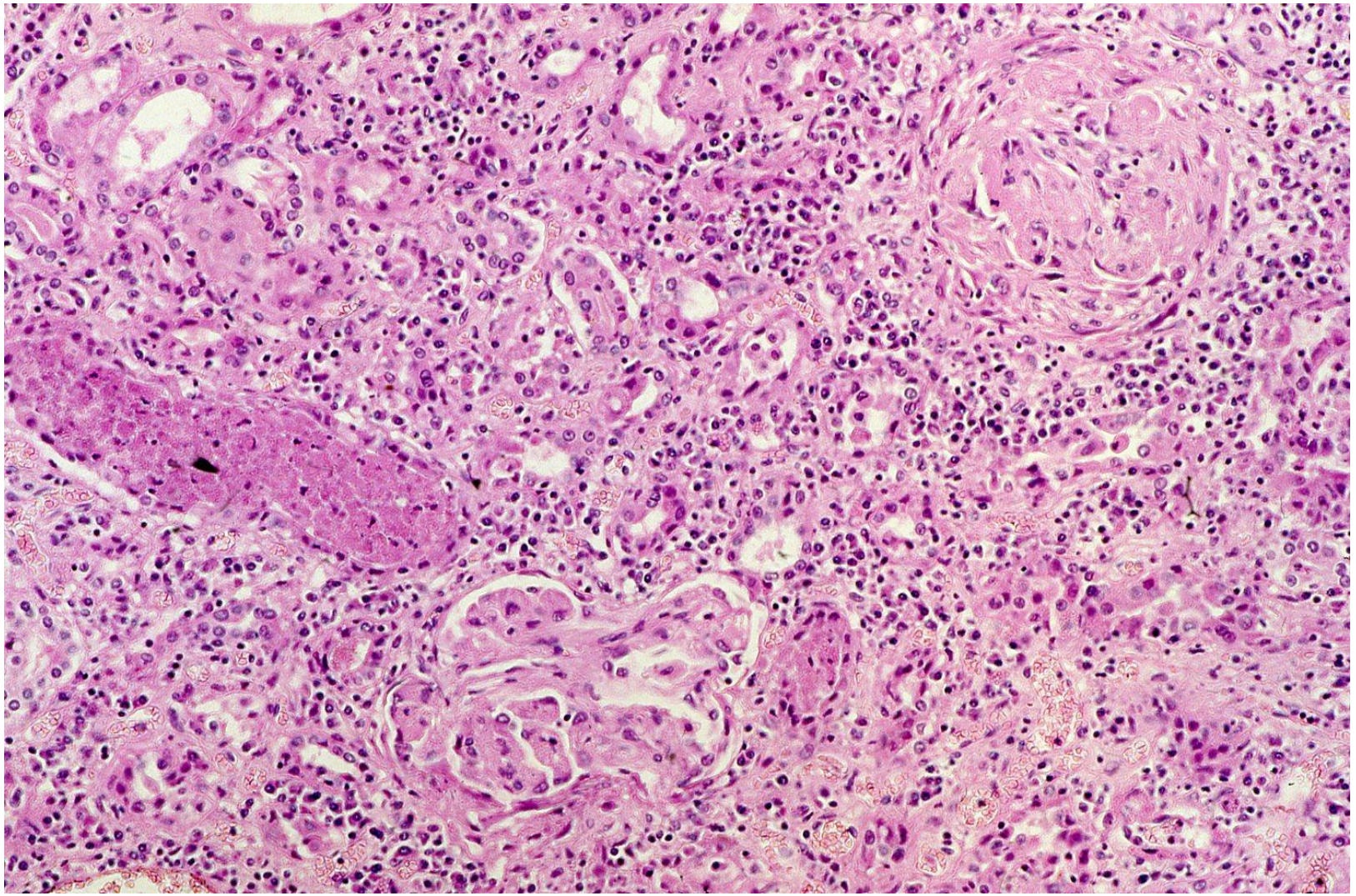
Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s.  At autopsy, the inflammatory nodule in the lung shows active angiitis involving the pulmonary artery branches.  Neutrophils infiltrate throughout the arterial wall, and fibrinoid necrosis is seen in the adventitia (H&E-6).



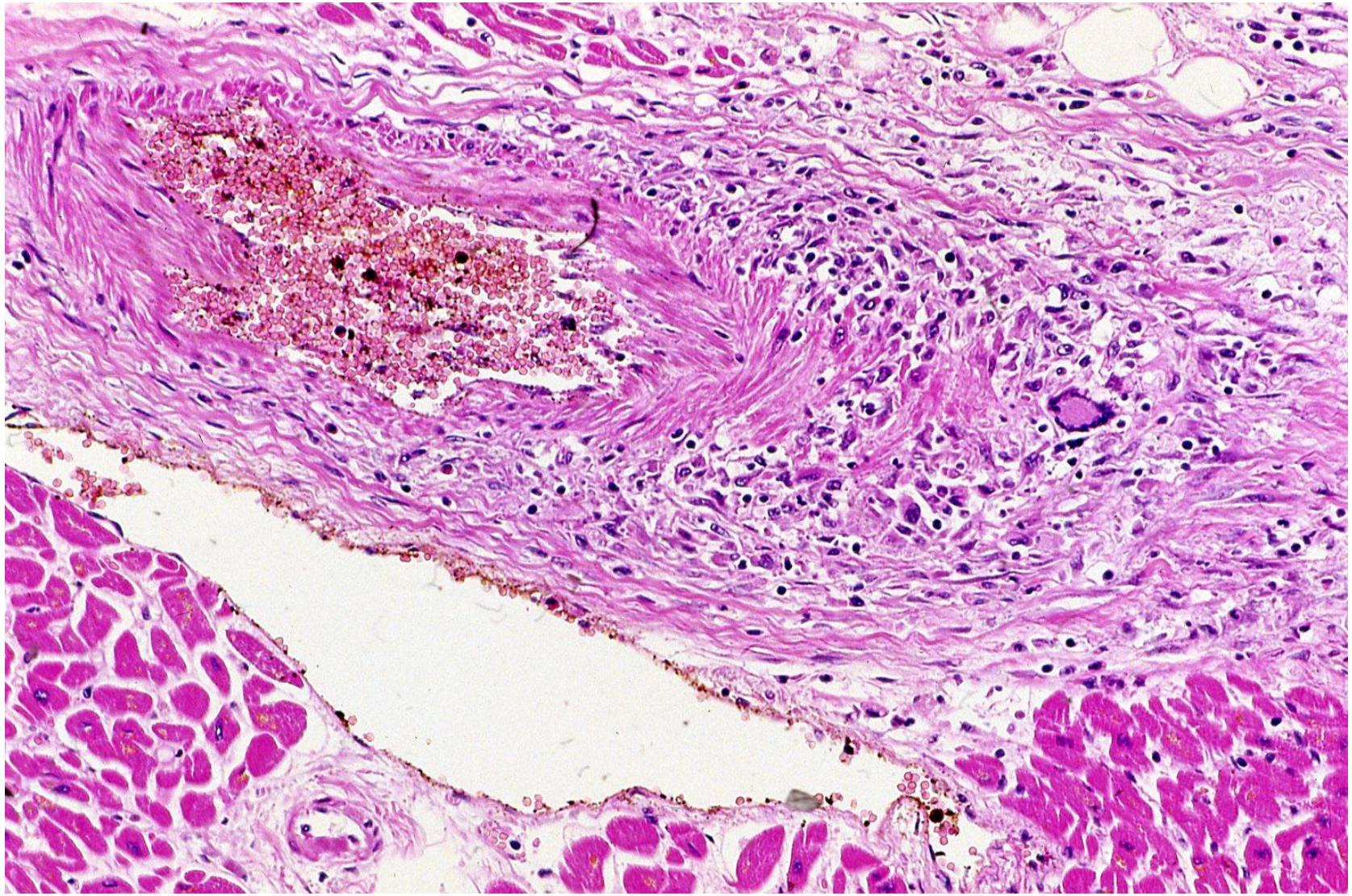
Wegener's granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50's. At autopsy, the inflammatory nodule in the lung shows active angiitis involving the pulmonary artery branches. Neutrophils infiltrate throughout the arterial wall, and fibrinoid necrosis and multinucleated cell reactions are seen in the adventitia (H&E-7).



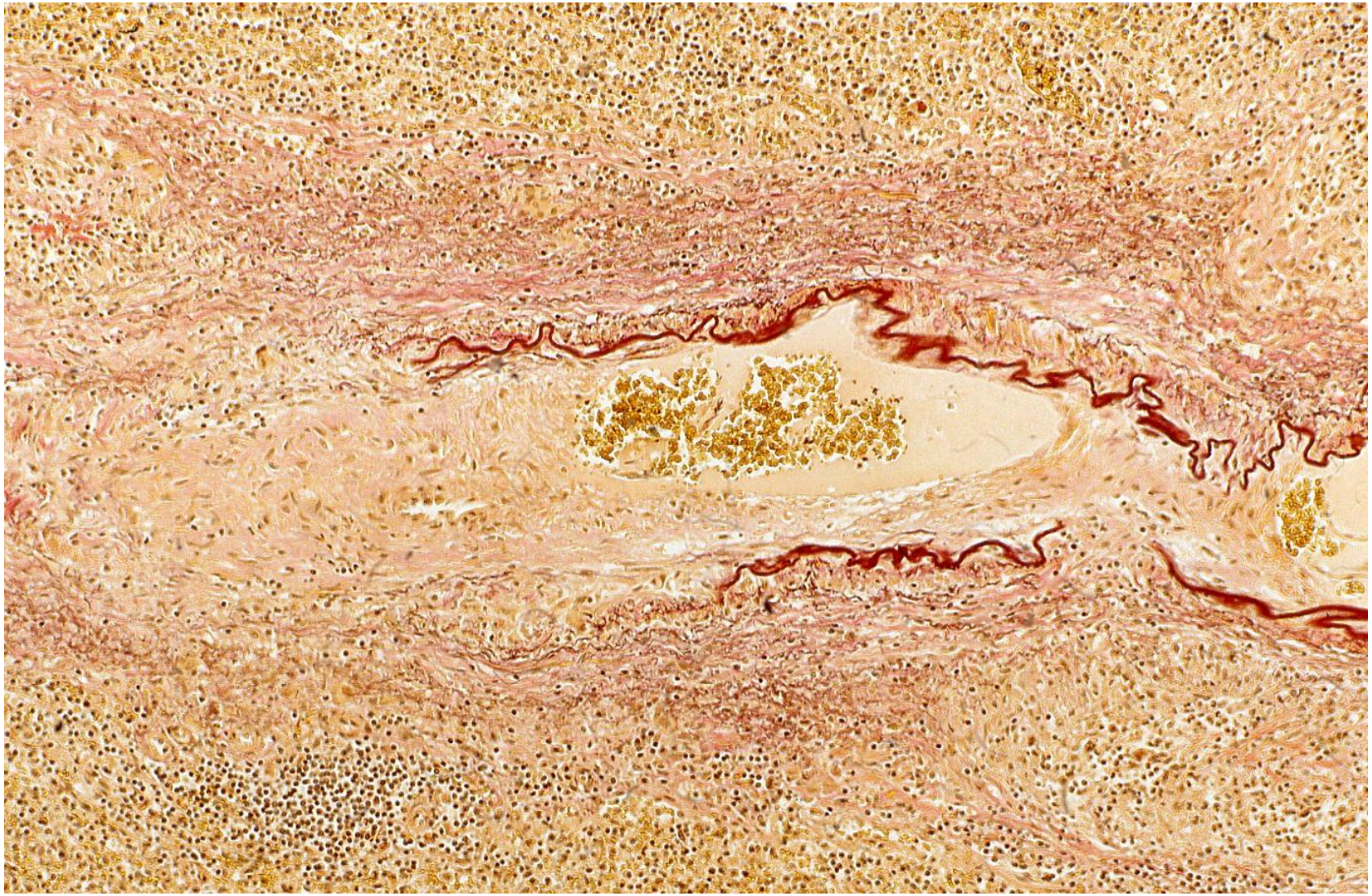
Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s. At autopsy, the kidney reveals granulomatous glomerulitis with marked tubuleinterstitial changes. Diffuse infiltration of lymphocytes is seen in the renal parenchyma (H&E-8).



Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s.  At autopsy, the kidney reveals proliferative glomerulitis with crescent formation.  The tubuleinterstitial changes are evident.  Necrotic debris is seen in the renal tubules (H&E-9).



Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s.  At autopsy, granulomatous angiitis is observed in the pericardial artery.  Systemic vasculitis is seen not only in the lung and kidney, but also in the heart, adrenal and spleen (H&E-10).



Wegener’s granulomatosis (granulomatosis with polyangiitis) seen in a male patient aged 50’s.  At autopsy, granulomatous angiitis is observed in the pericardial artery.  EVG staining discloses loss and disruption of the elastic lamina in the arterial wall (EVG).