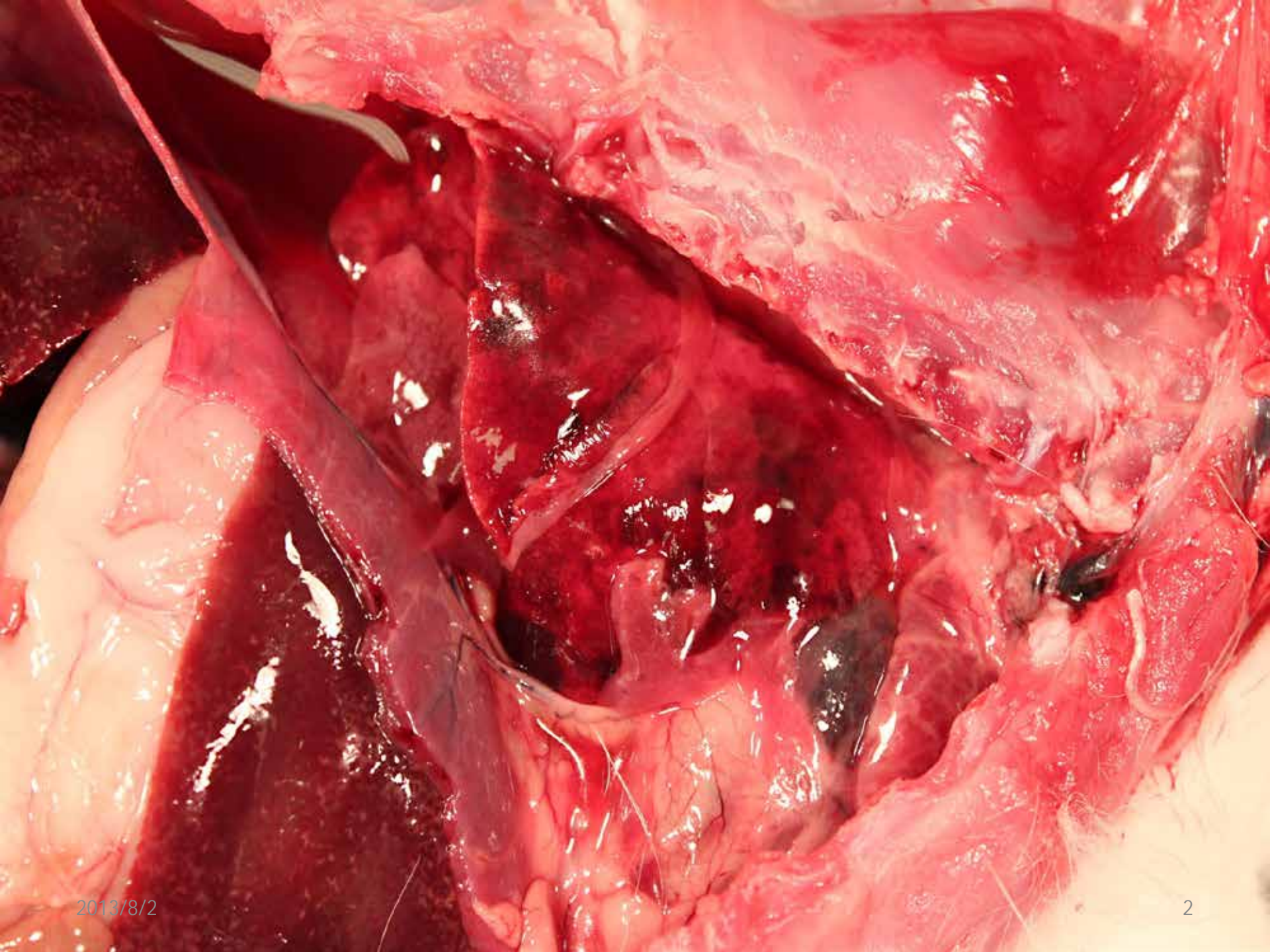


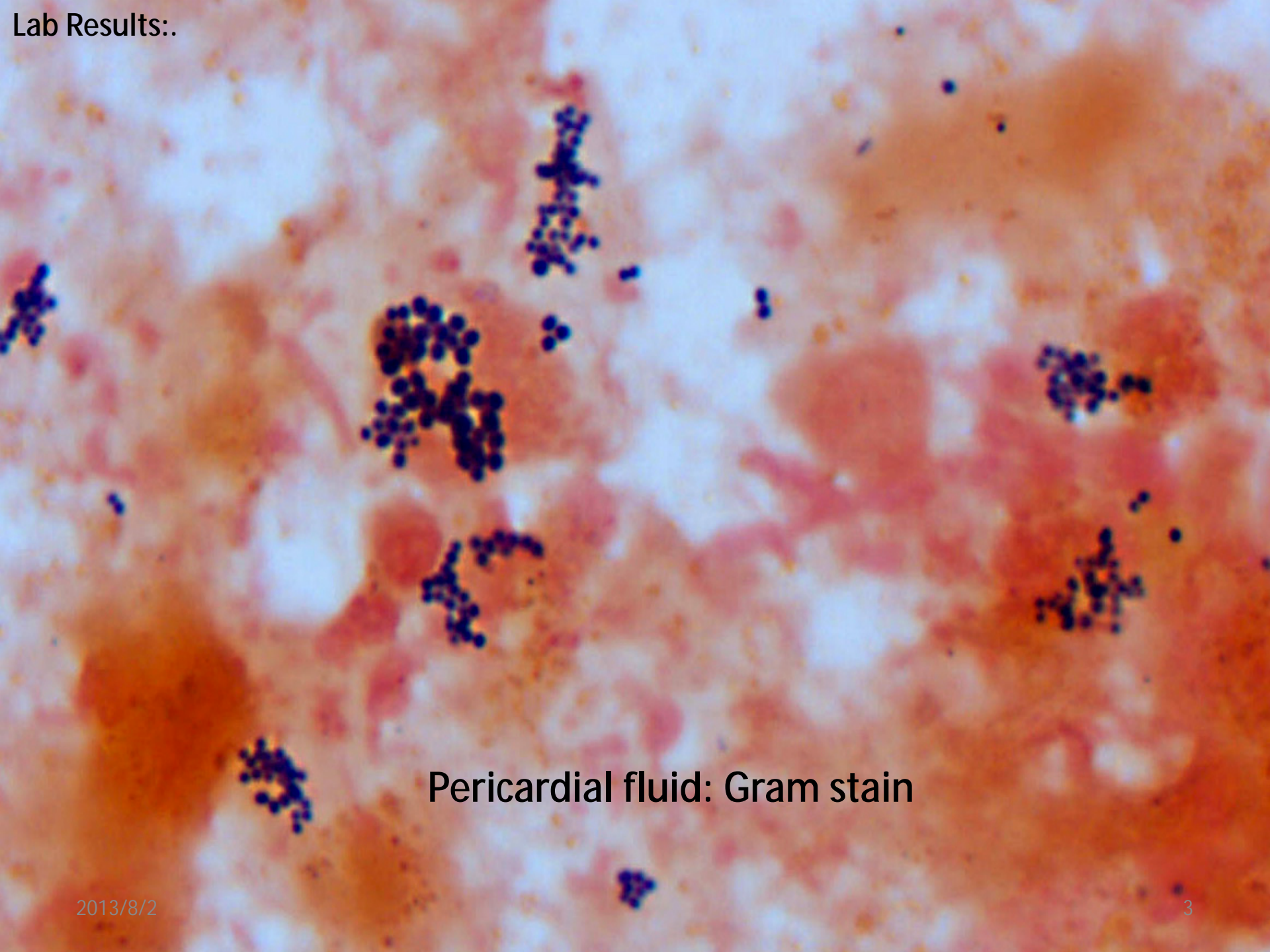
Lung - Rabbit

Submission Agency : Memorial Sloan-Kettering Cancer Center

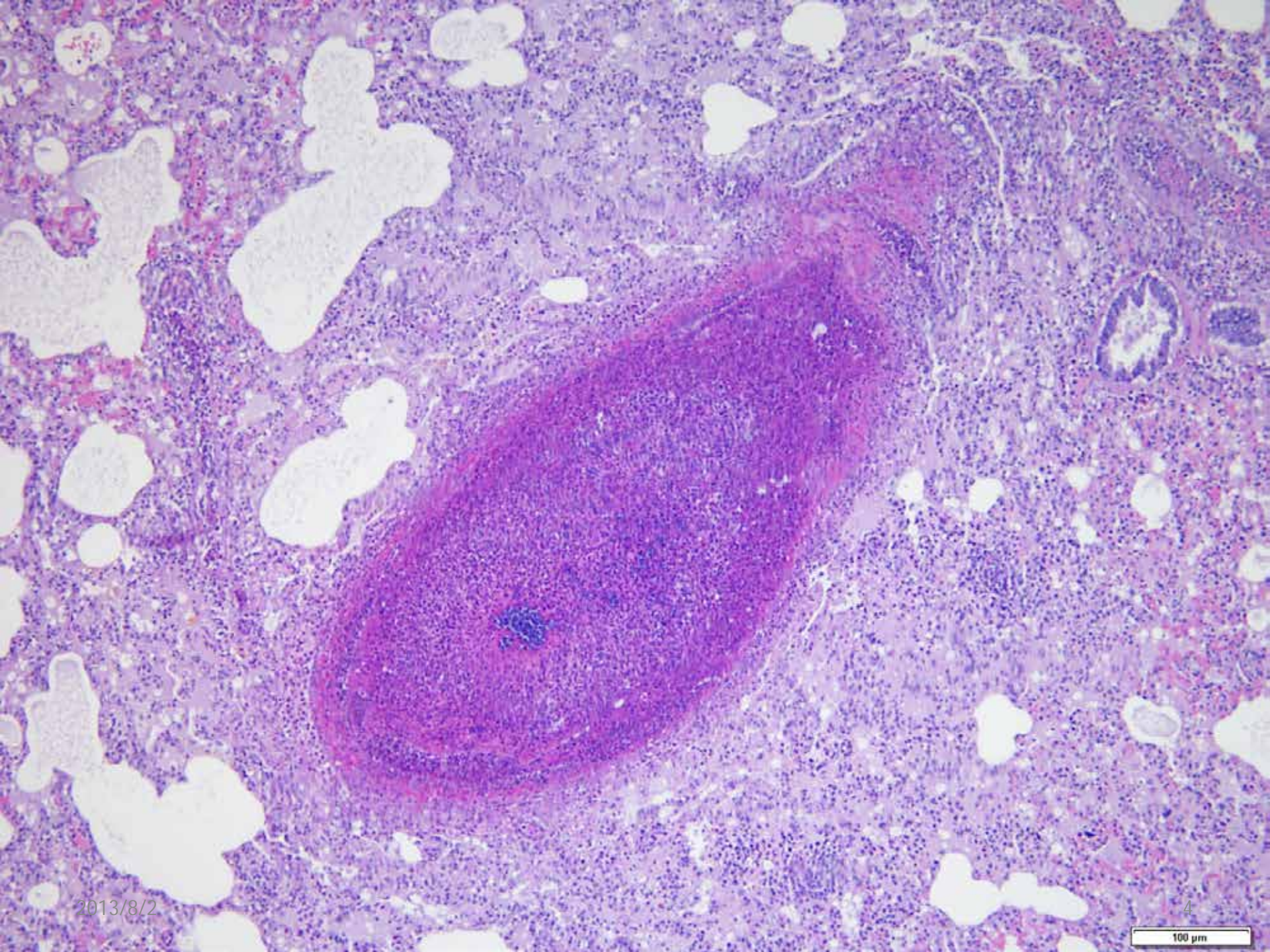
Case: Young adult, intact female New Zealand White (NZW) rabbit (*Orytolagus cuniculus*)

History: Death 3 day after arrival, present of feces and urine, not eating since yesterday, a jugular catheter had been placed 1 week prior to arrival. No subsequent experimental manipulation





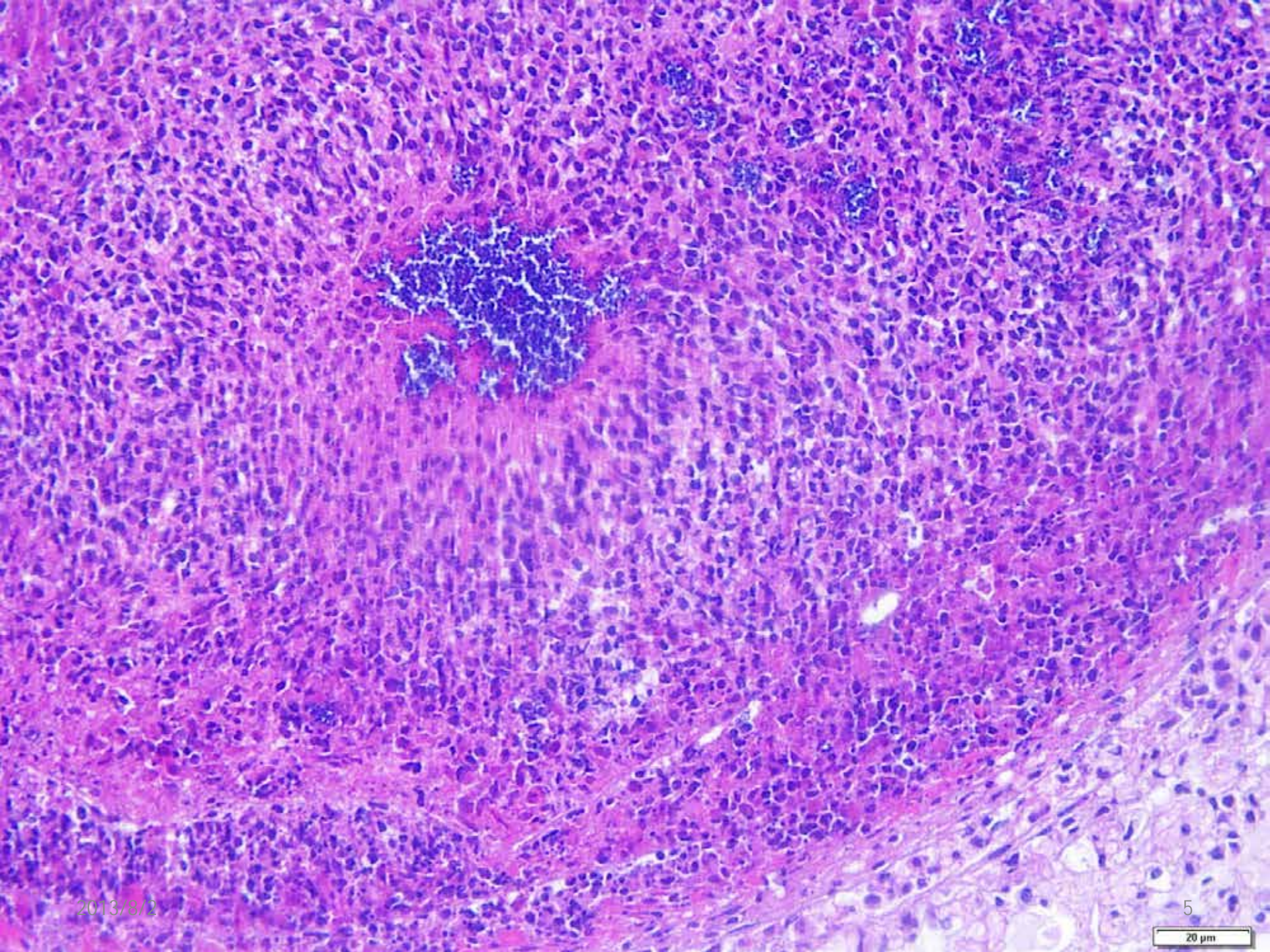
Pericardial fluid: Gram stain

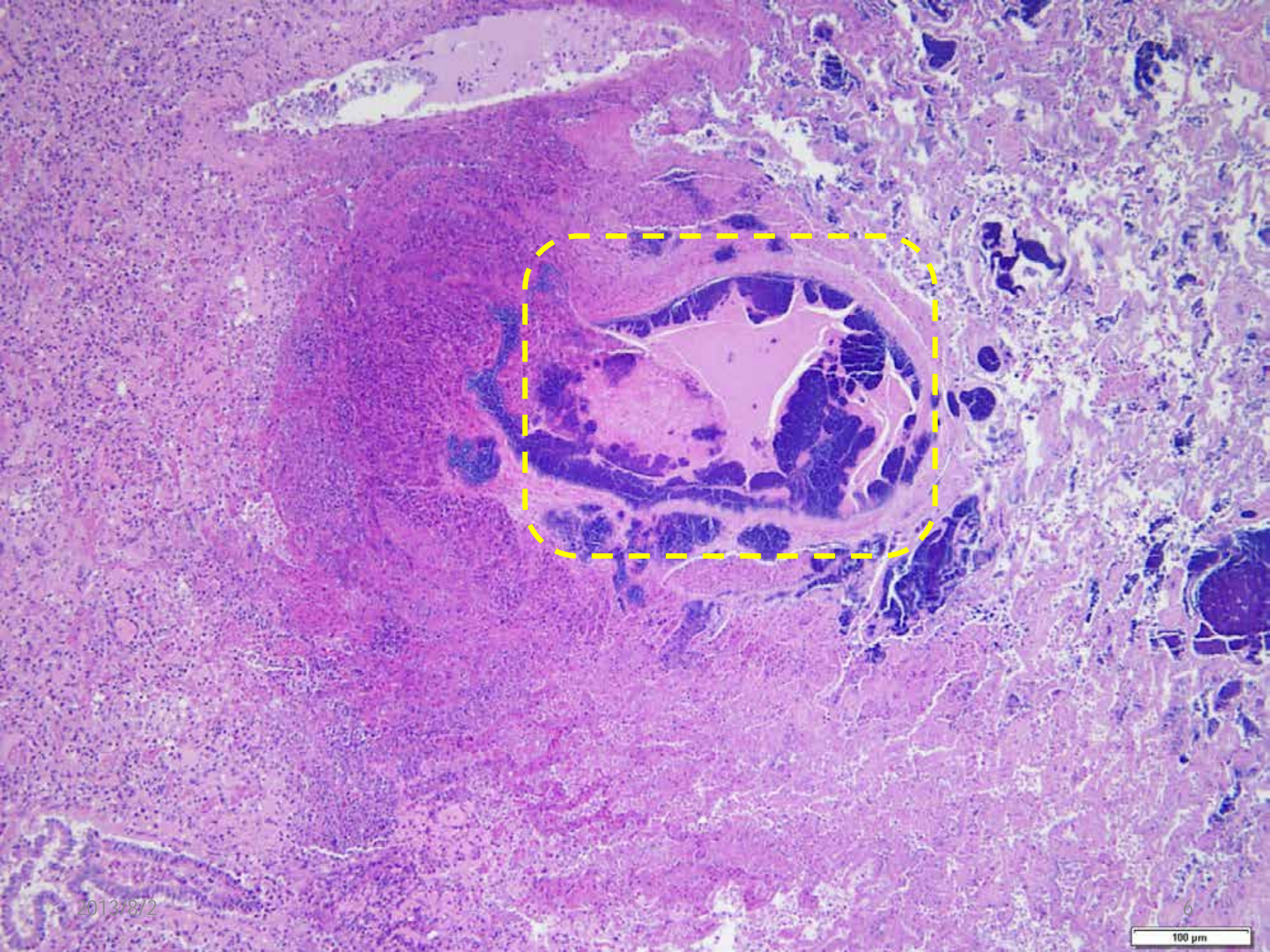


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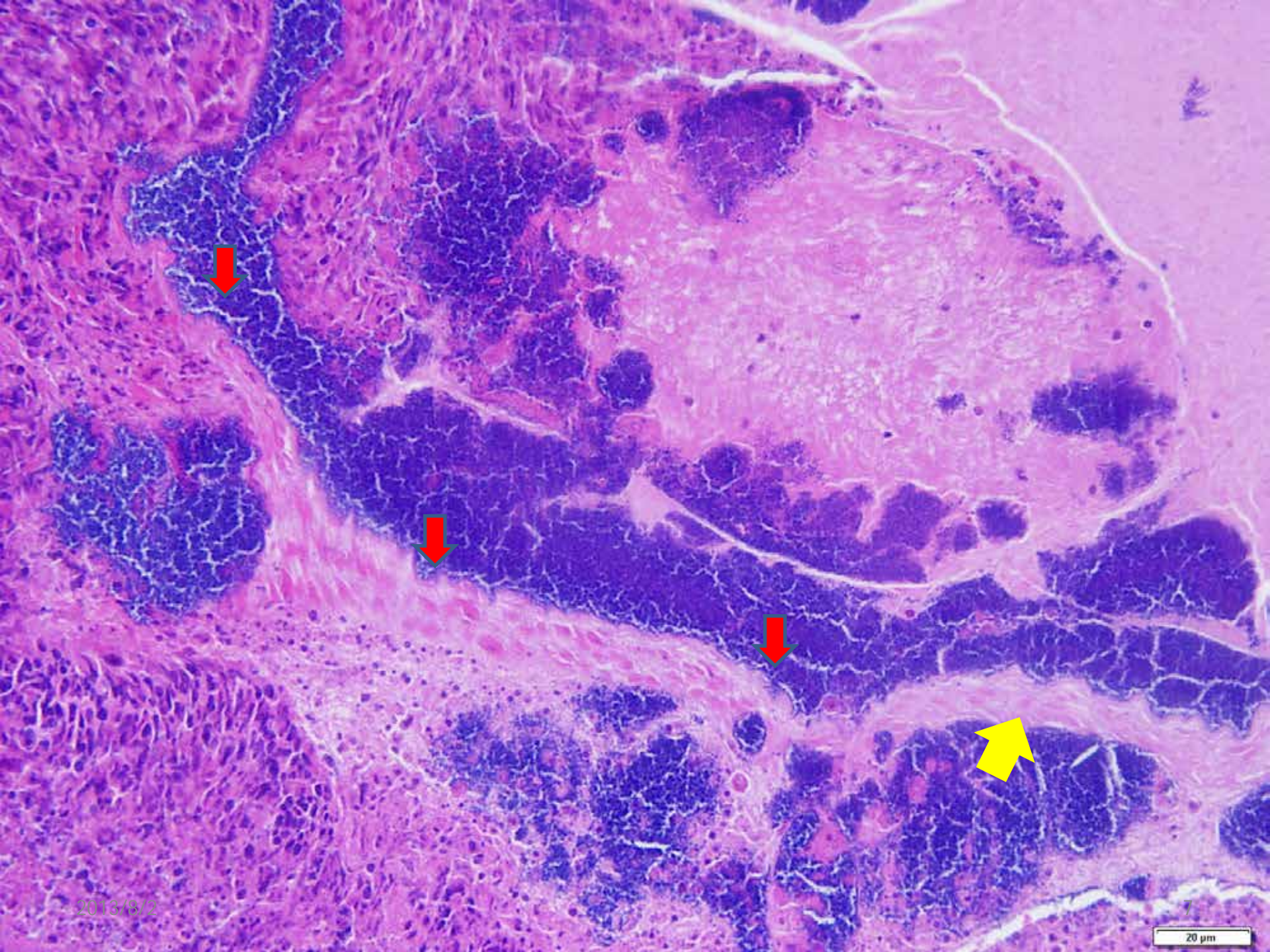
4

100 μ m



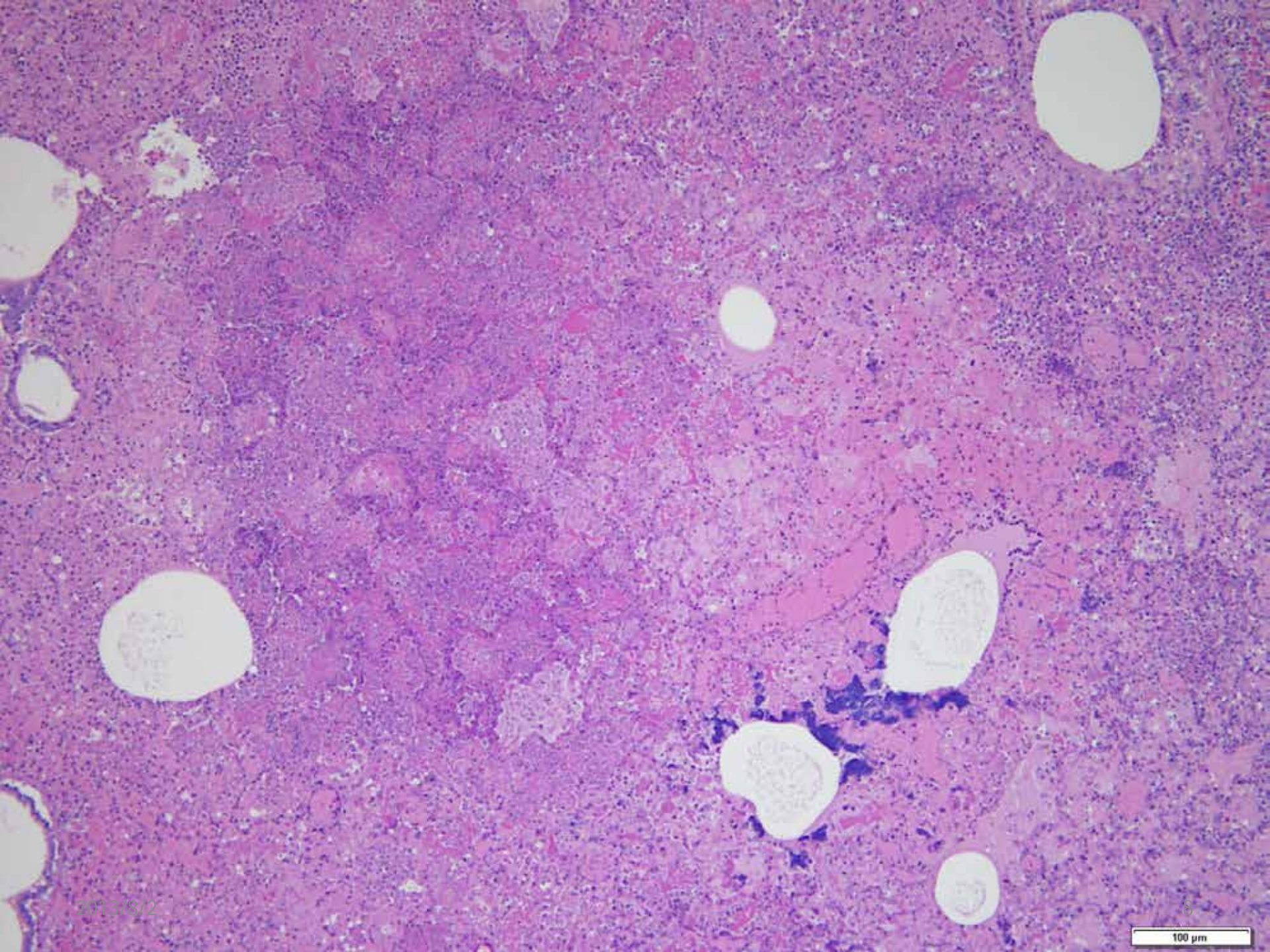


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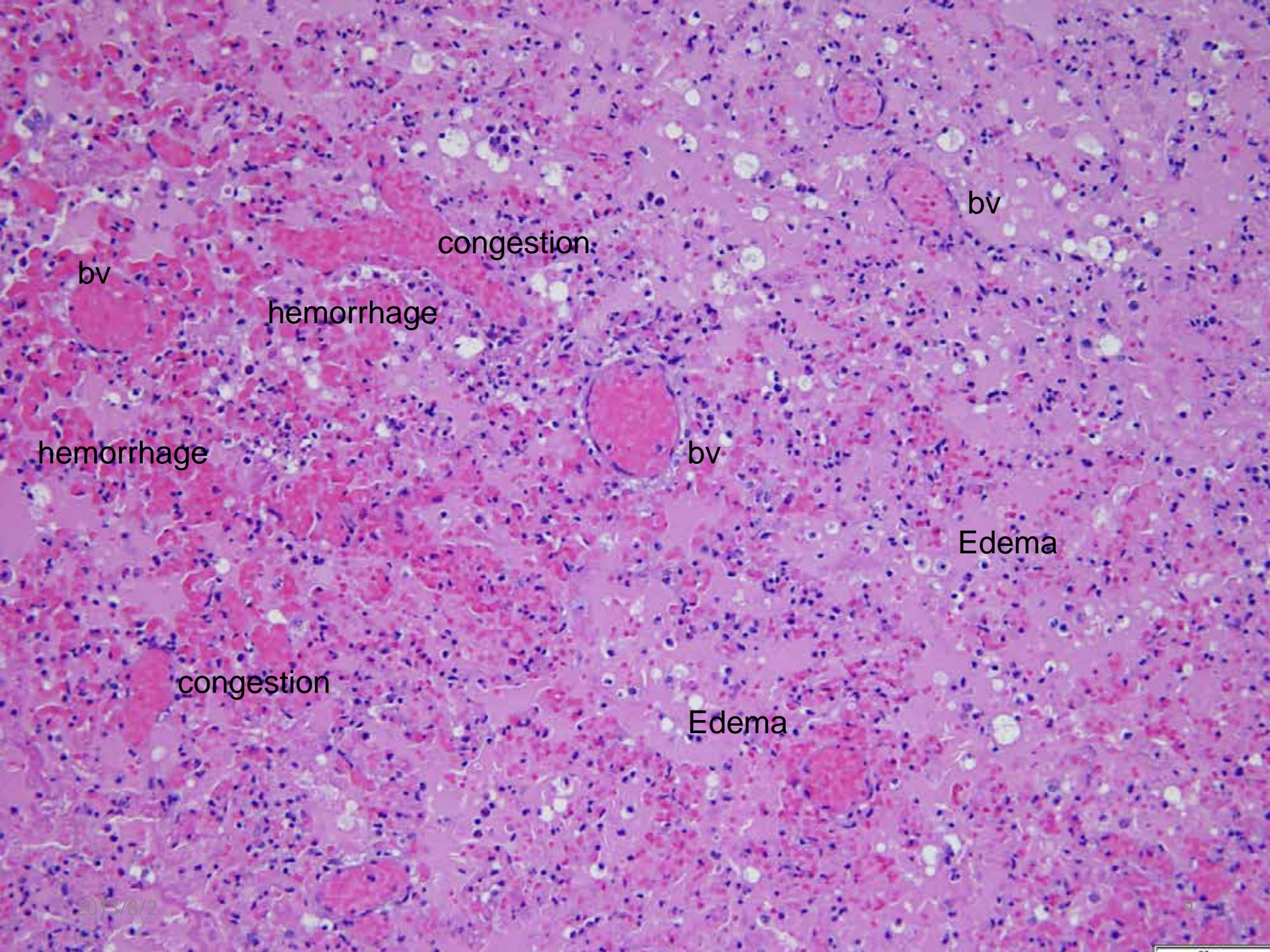
20 μm

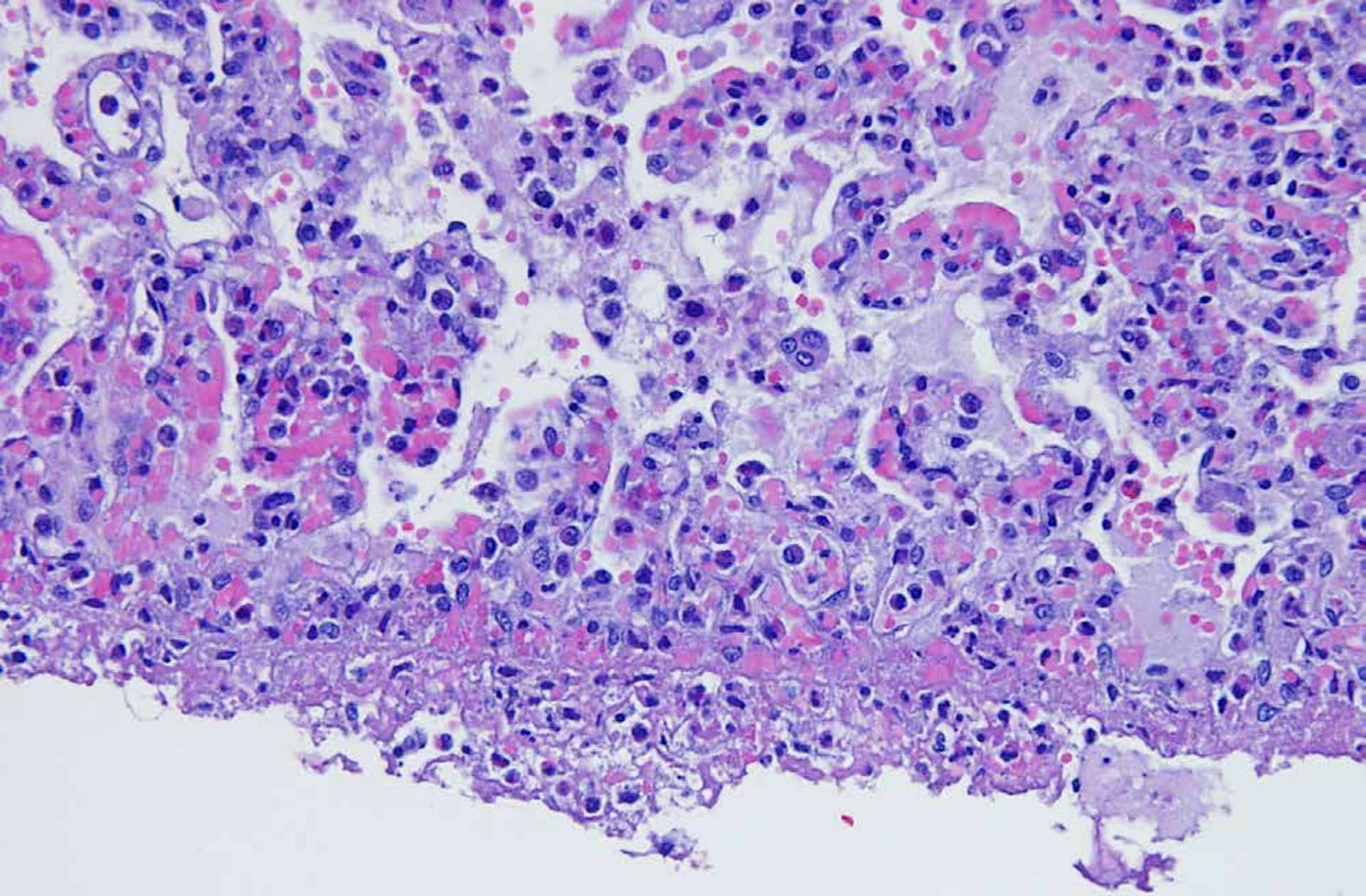


2013/8/2

8

100 μm





2013/8/2

10

20 μ m

Contributor's Morphologic Diagnosis:

Lung: Marked, acute, multifocal, heterophilic and necrotizing pulmonary thrombosis, vascular fibrinoid necrosis and heterophilic, necrotizing bronchointerstitial pleuropneumonia with intralesional coccoid bacteria and marked, multifocal pulmonary congestion and edema.

JPC Diagnosis:

Lung: Pneumonia, heterophilic and necrotizing, diffuse, severe, with necrotizing vasculitis, thrombosis, and large colonies of intra alveolar and intravascular cocci.

Contributor's Comment:

nAcute death due to catheter-related septicemia .

n*Staphylococcus aureus* was isolated from the lung, liver, pericardial fluid, and pleural fluid.

nLarge coccoid bacteria were also visualized histologically within the large fibrinosuppurative thrombus in the right jugular vein.

nEmbolism of the thrombus within the jugular vein would result in lodgment of the emboli in the next vascular bed, in this case, the lungs.

nThere are four possible sequelae to thrombus formation - Propagation, embolization, dissolution , or organization and recanalization.

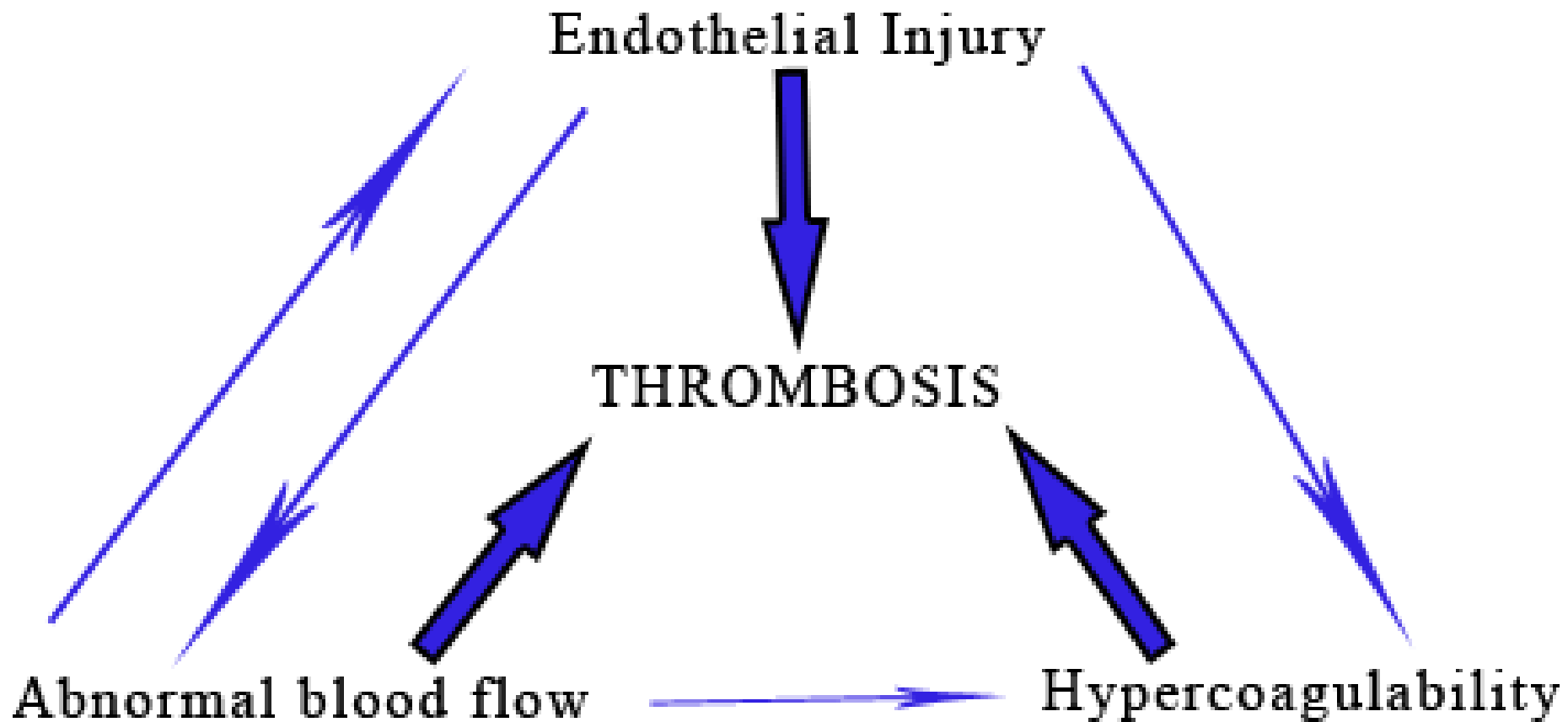
Conference Comment:

Three primary abnormalities, referred to as "Virchow's triad", lead to thrombus formation: 1) endothelial injury,

2) alterations in blood flow (stasis or turbulence),

3) hypercoagulability of blood.

Virchow's Triad in Thrombosis*:



**adapted from Robbins and Cotran Pathologic Basis of Disease, 8th ed.*