Miscellaneous cases

Gisela Martinez-Romero, DMV, MSc, PhD, DACVP

emarti18@tufts.edu

Acknowledgments Thank you for all the photos!

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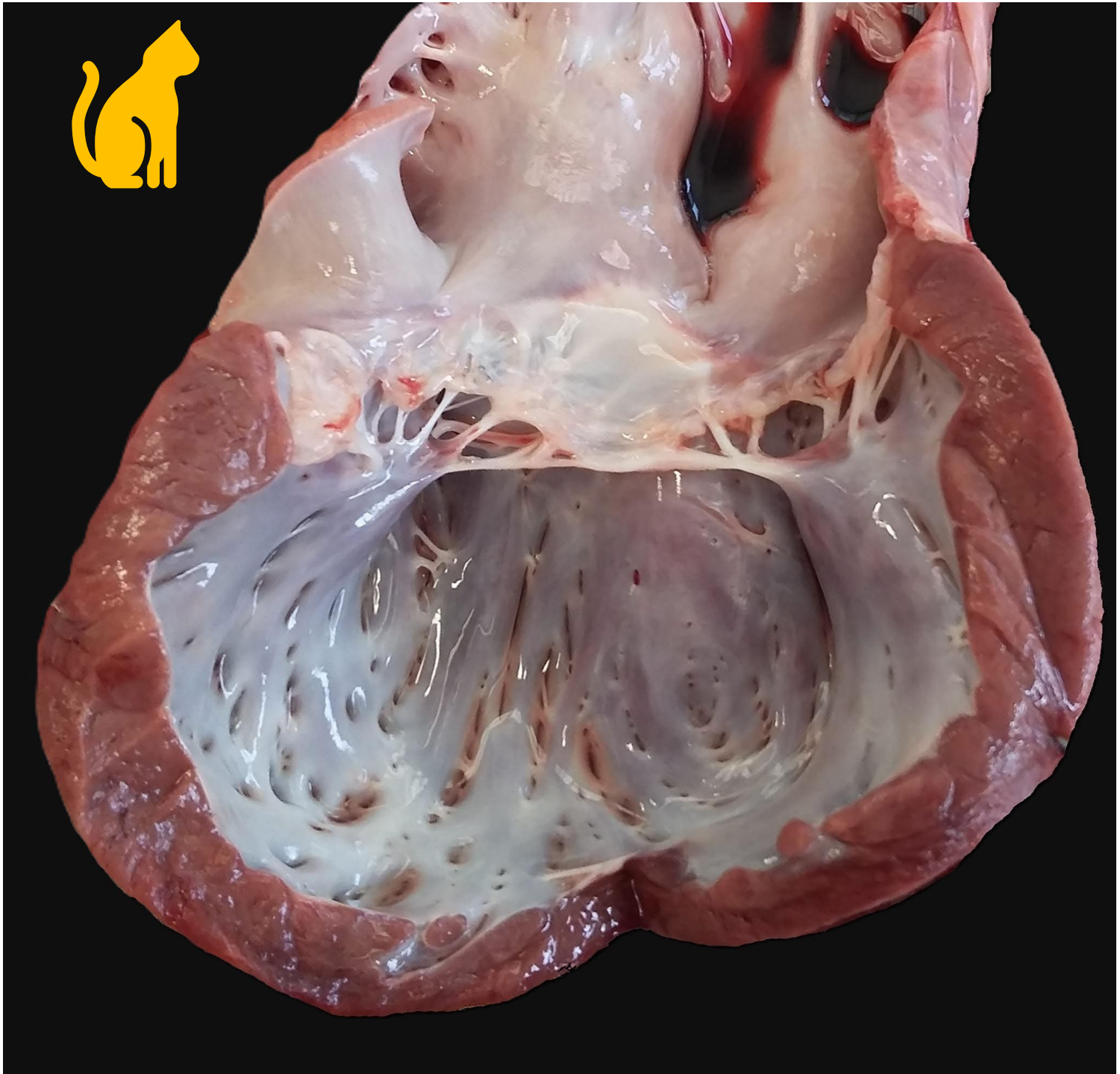
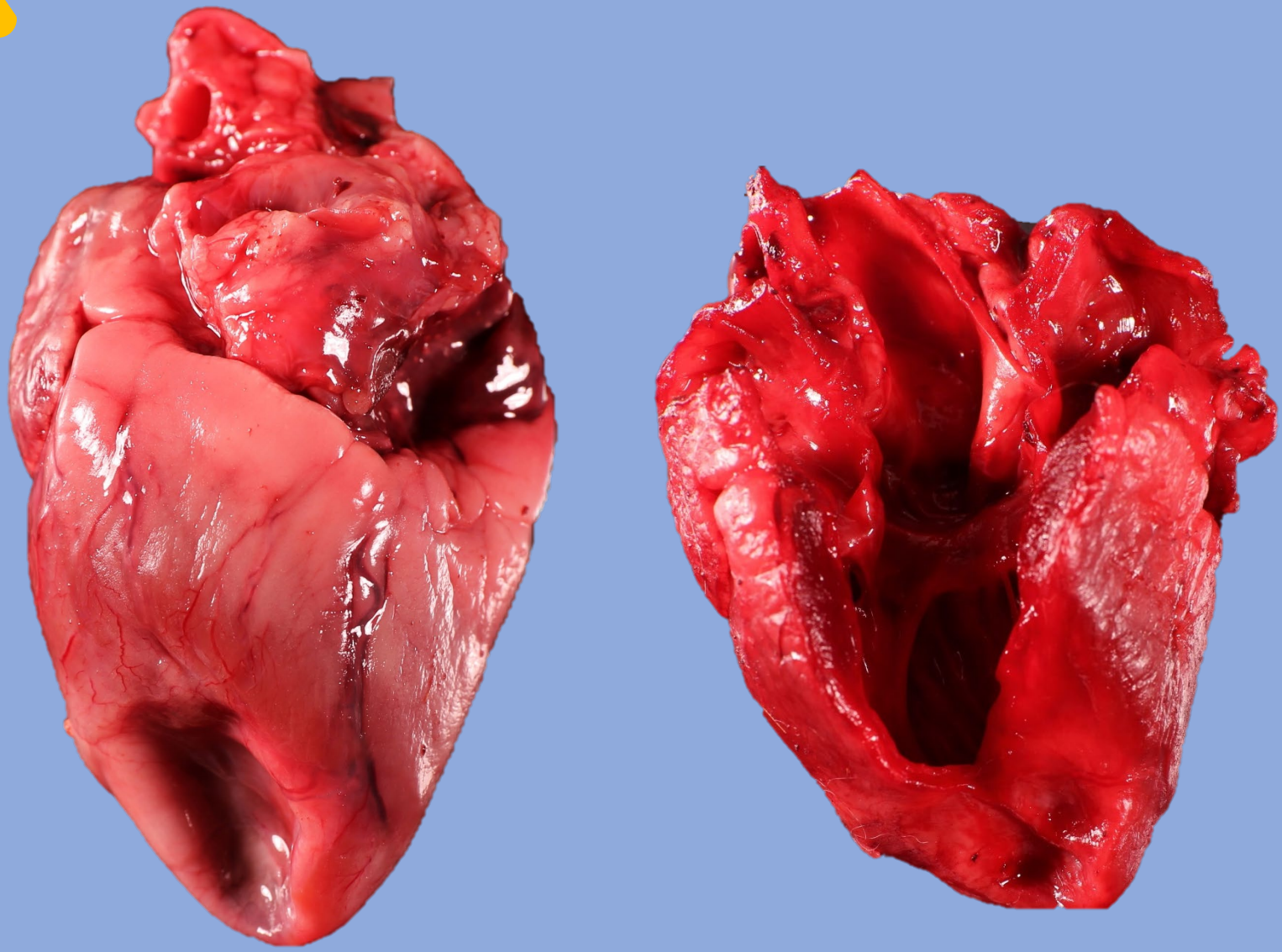
What is your diagnosis?



Endocardial fibroelastosis

- Rare, likely inherited disease that primarily affects Burmese and Siamese cats.
- Subendocardial proliferation of fibroblasts that progress to collagen and elastin deposition.
- Degeneration of the entrapped left bundle branch may lead to cardiac conduction abnormalities.



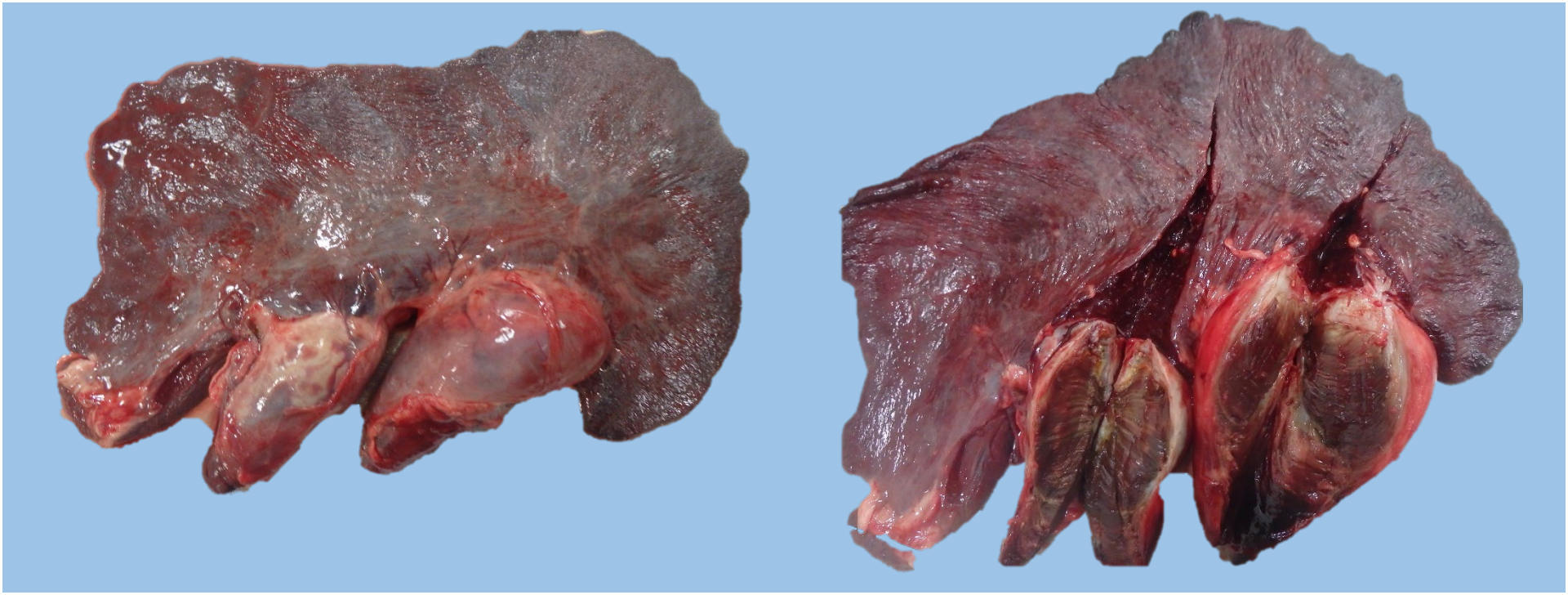
Apical aneurysm

- Localized dilatation of the cardiac wall, involving the three layers.

- Most available data on acquired left ventricular apical aneurysms comes from human medicine. The pathophysiology of these lesions usually involves an irreversible ischemic event, leading to myocyte death and fibrosis.

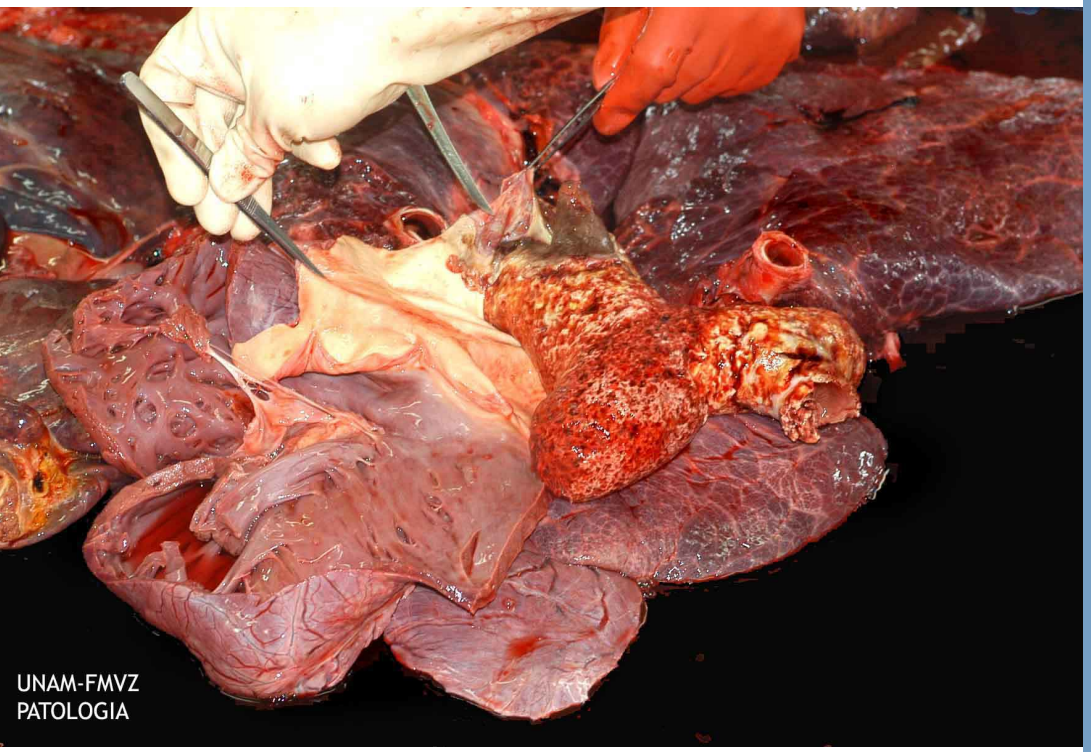
- Acquired aneurysms:
  - Myocardial infarction, leading to the bulging of necrotized and fibrotic areas.
  - Associated with cardiomyopathy, viral or idiopathic myocarditis.

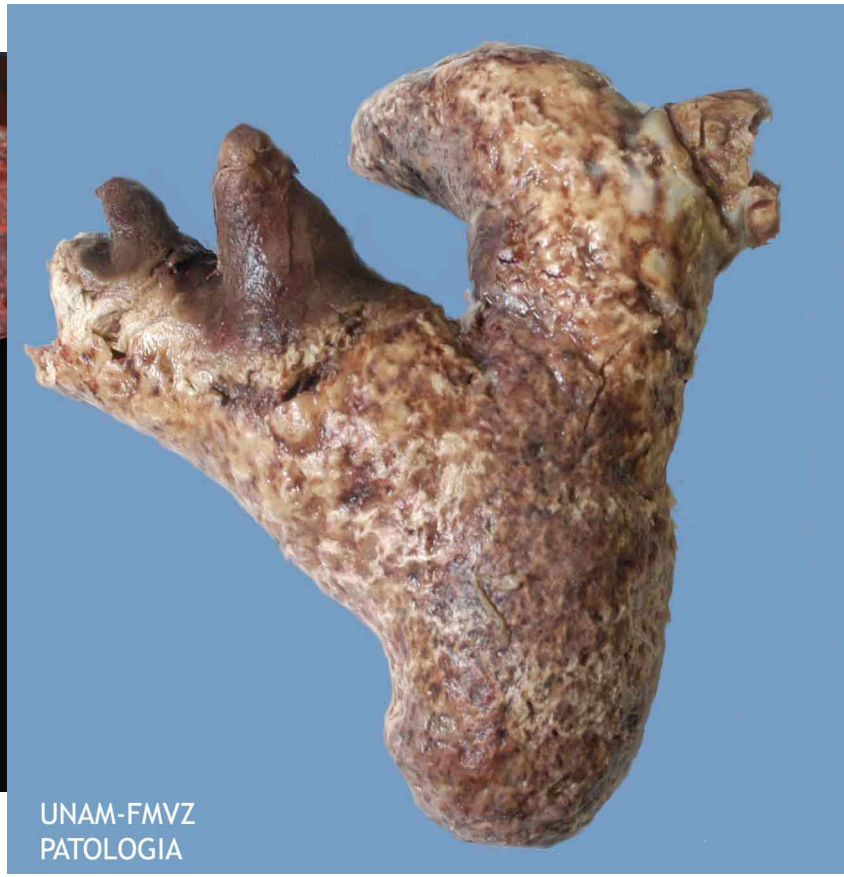
Tissue?



Thrombosis of the splenic vein

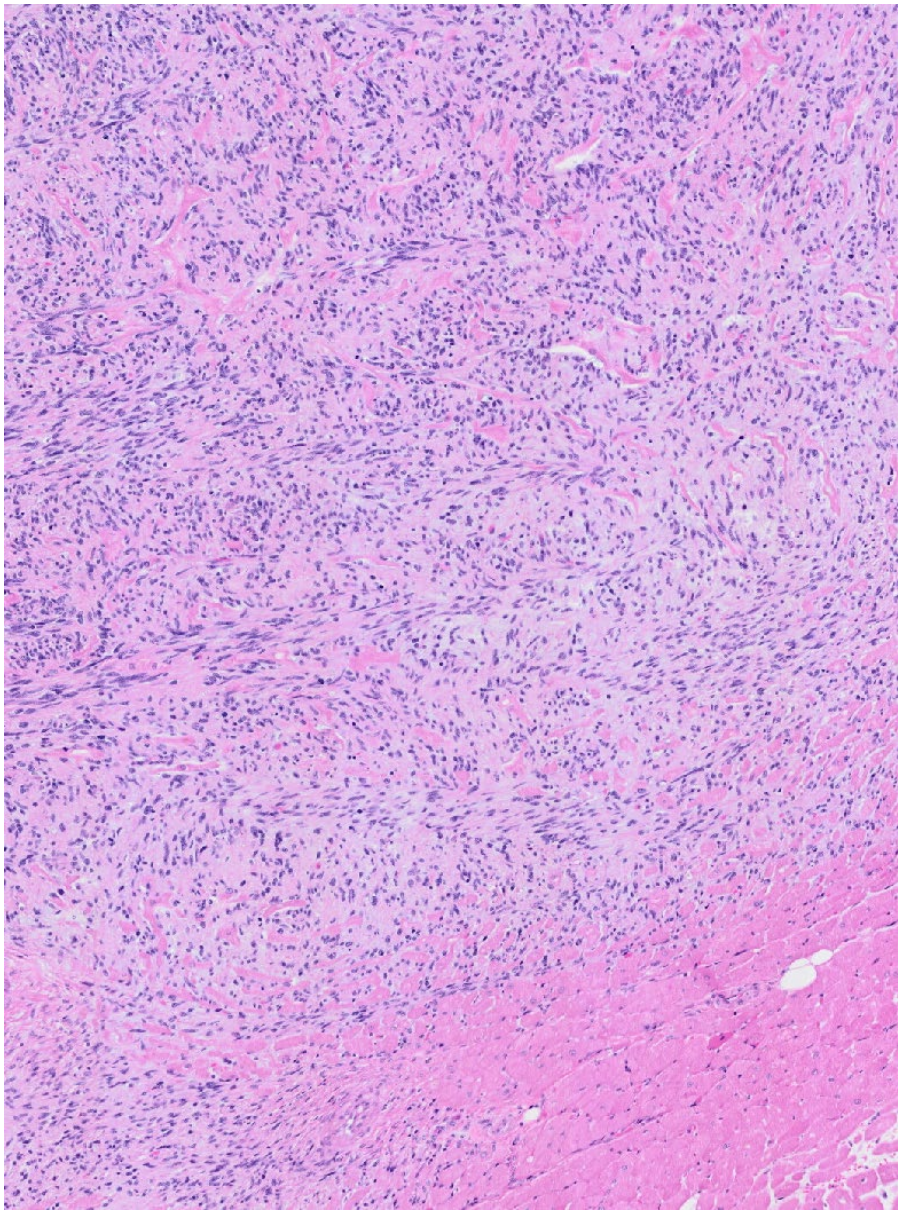
- Reported in llamas
- No infectious agents involved
- Unknown cause
- No clinical signs
- Incidental finding

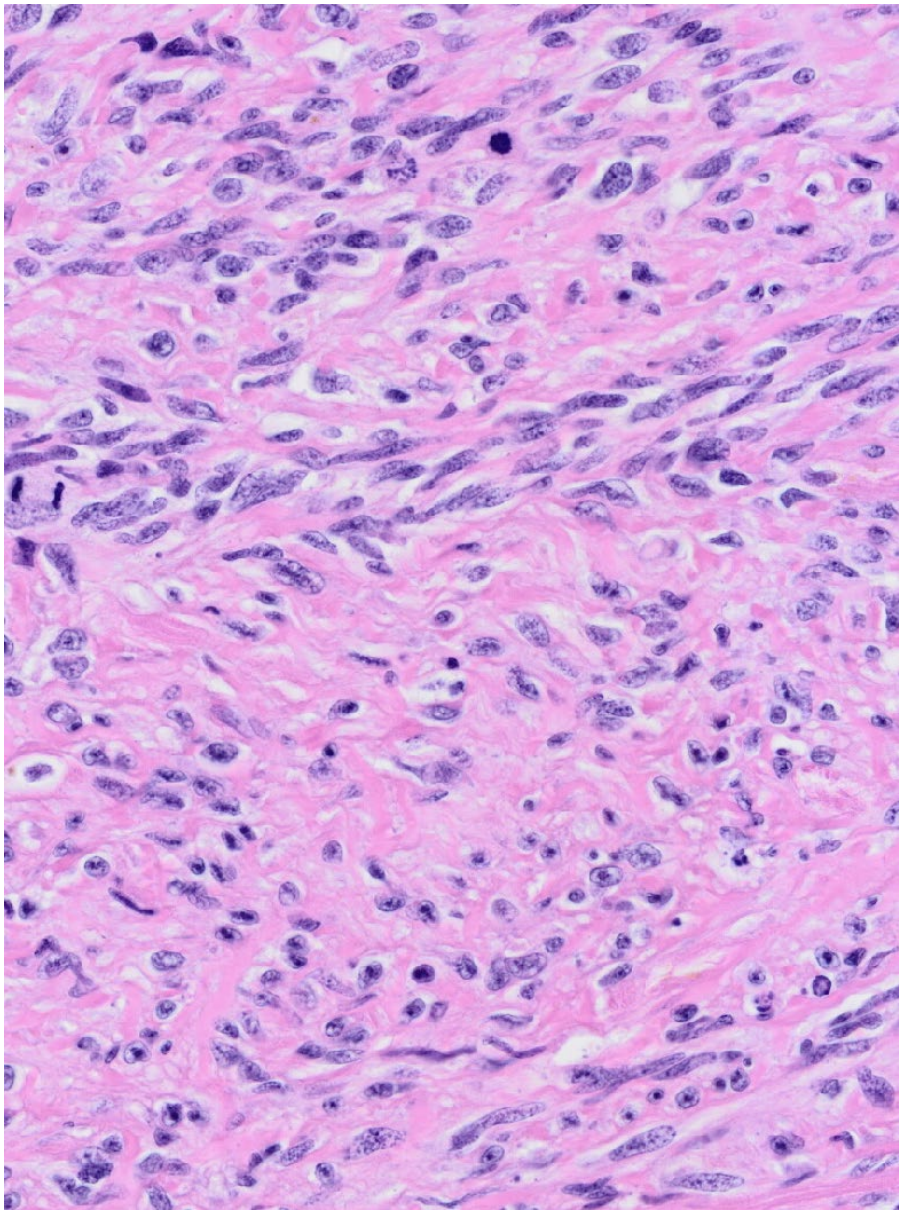


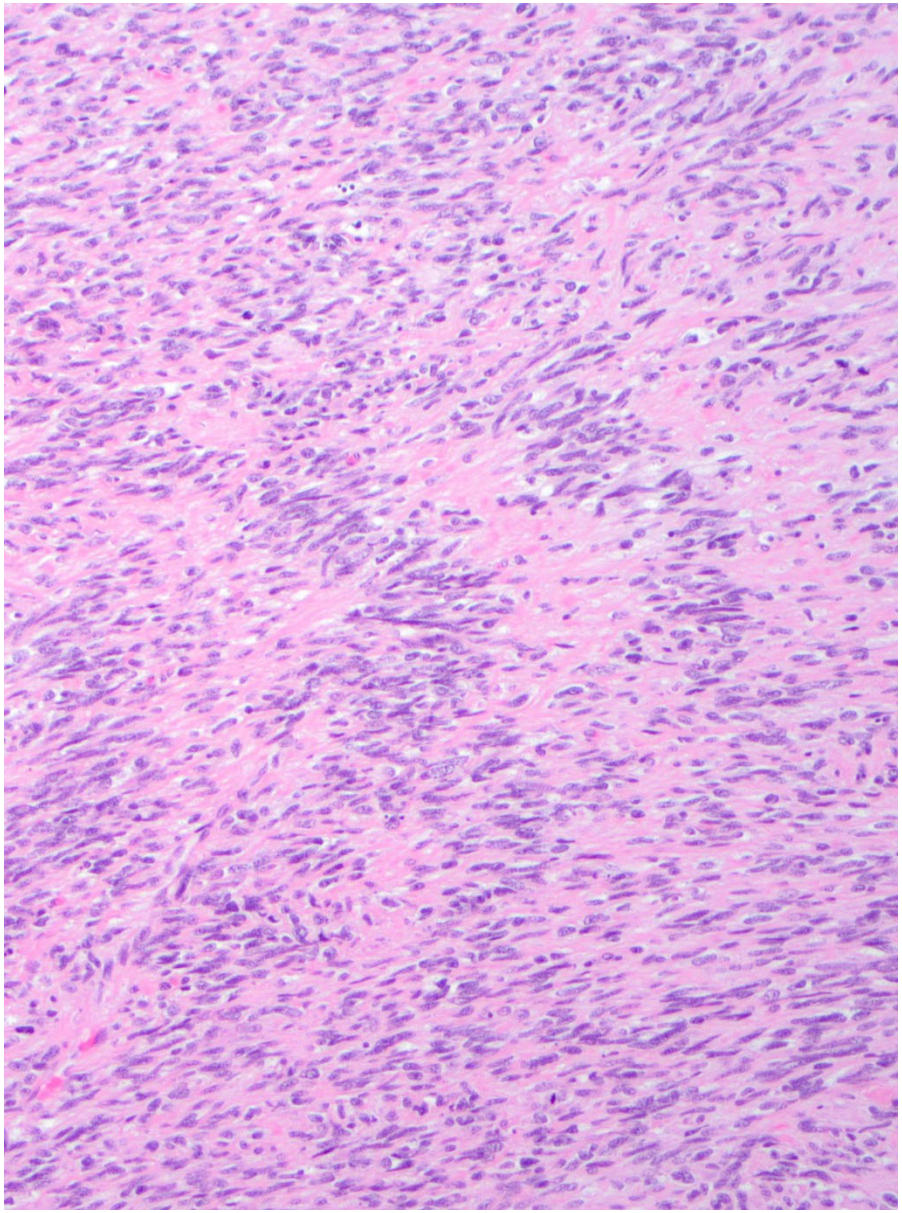


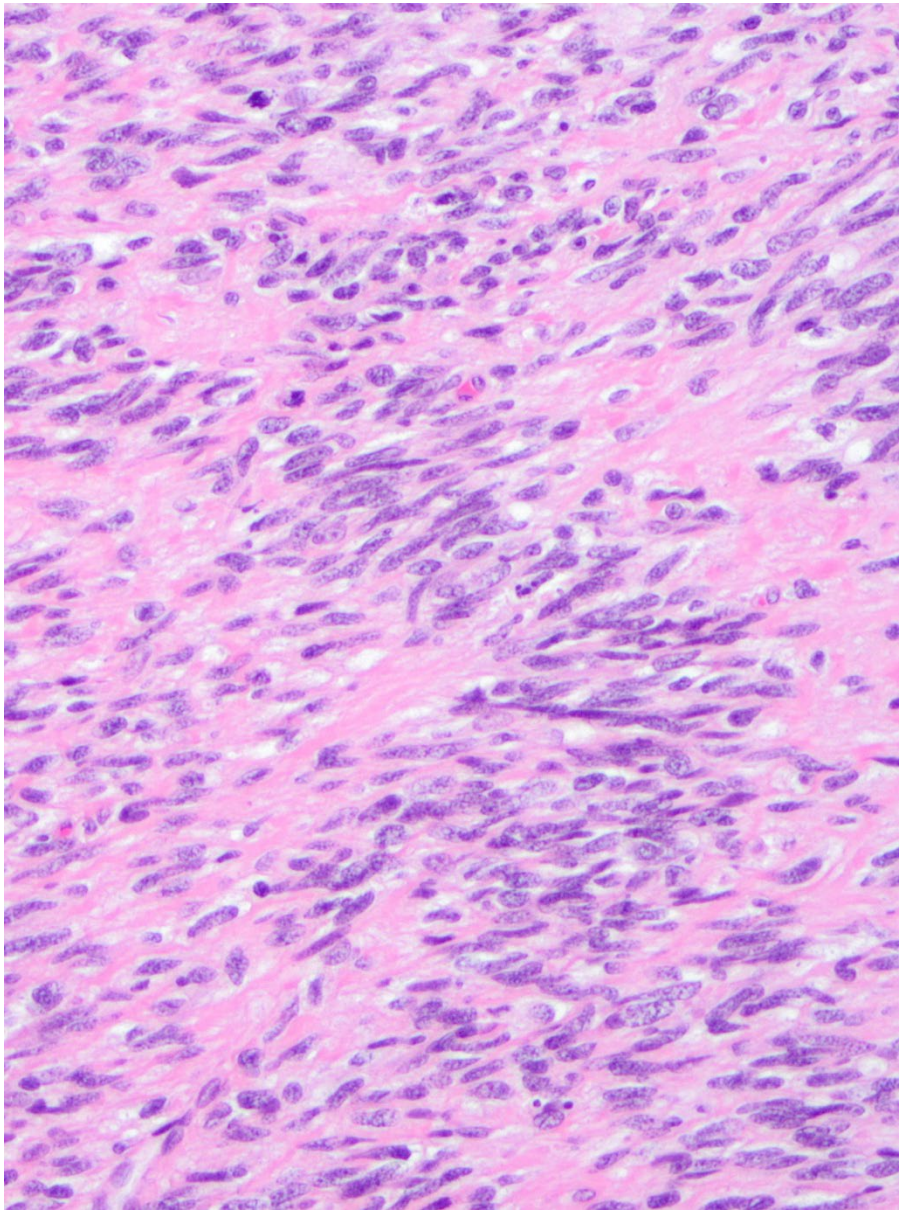
Pulmonary thromboembolism

- DIC
- IMHA
- Hyperadrenocorticism
- Protein-losing nephropathy or enteropathy
- Surgery or trauma
- Sepsis
- Heart disease
- Cancer
- Pancreatitis









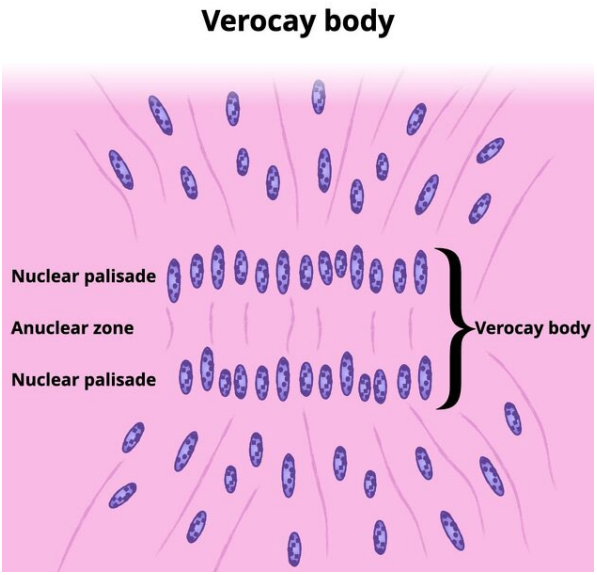
Left ventricular malignant nerve sheath tumor

- Primary cardiac MNST is extremely rare in dogs.

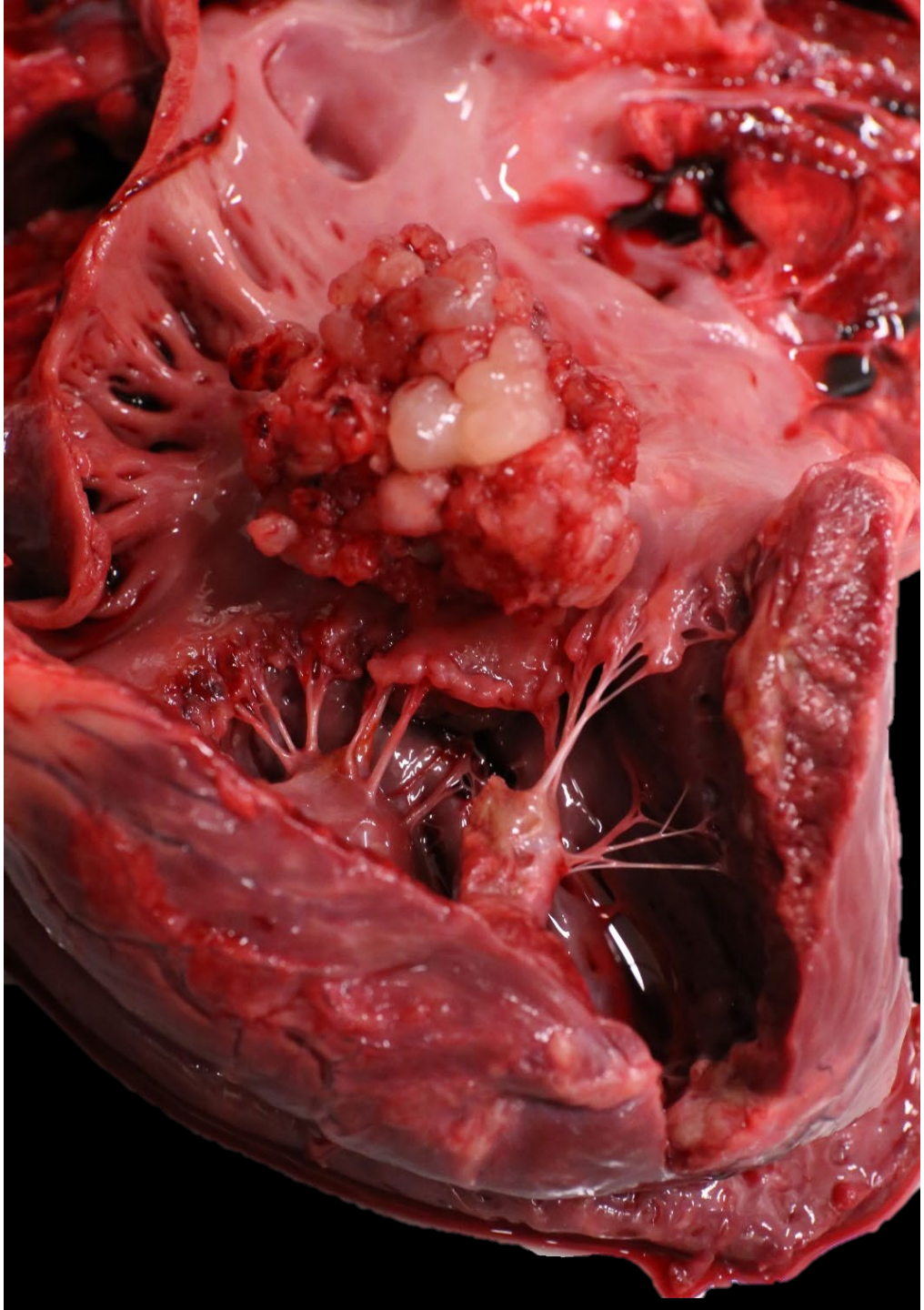
- Right side, close to the interatrial septum (might be the origin of MNST from cardiac branches of the vagus nerve).

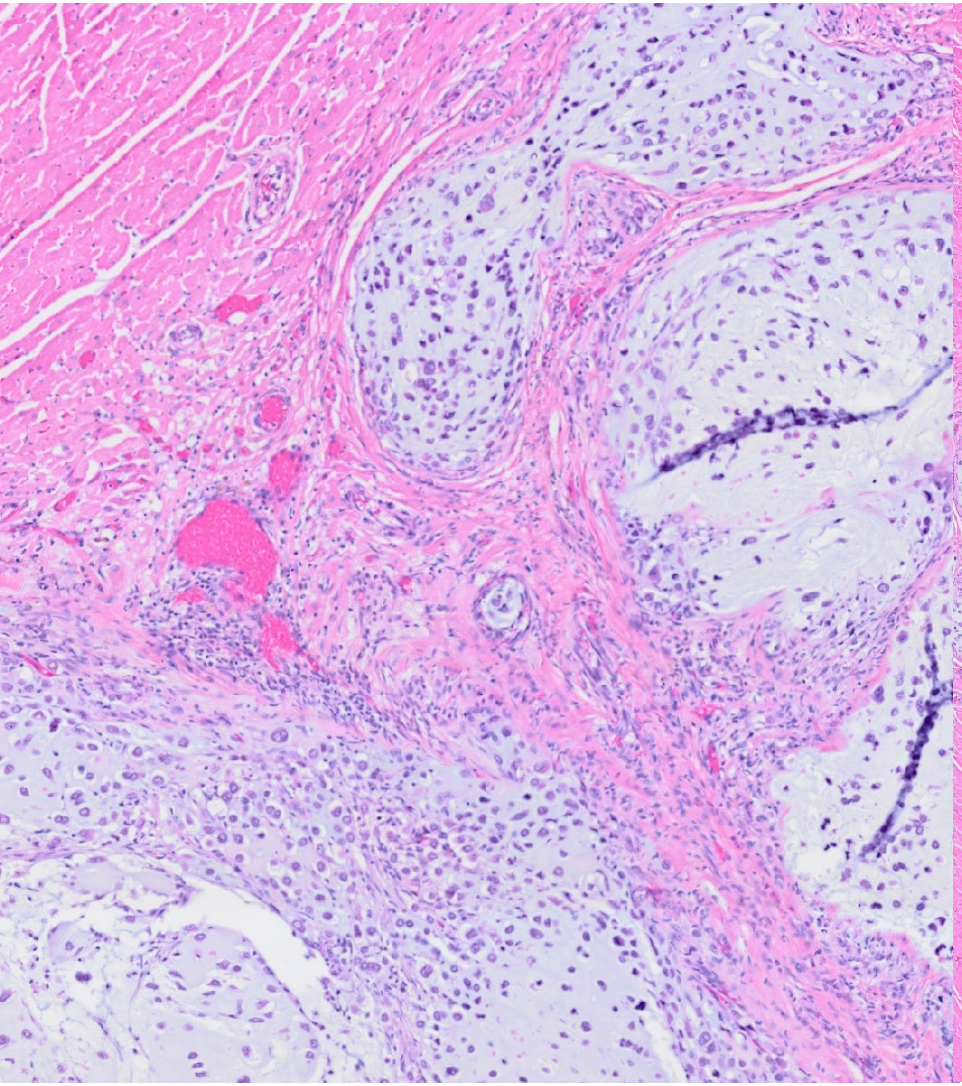
- Differential diagnosis for cardiac sarcomas:

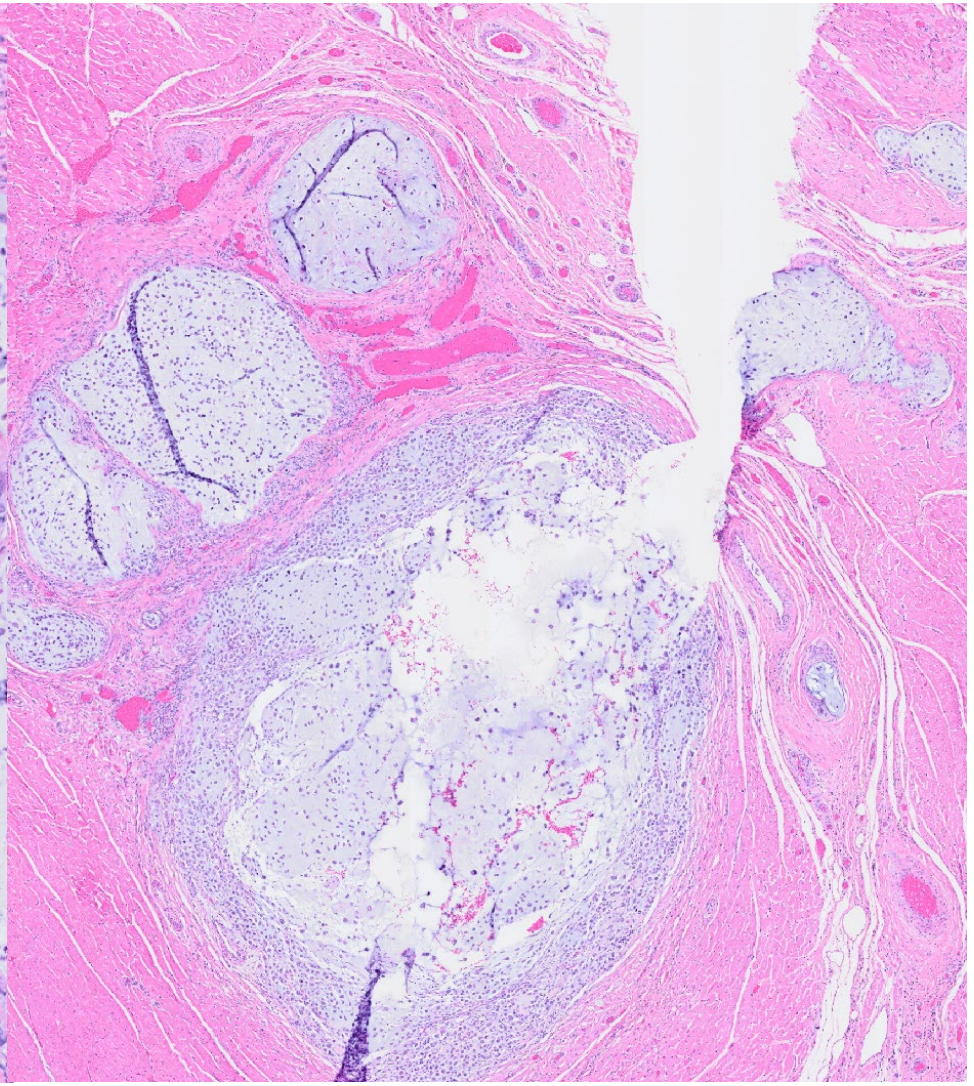
  - Chondrosarcoma
  - Fibrosarcoma
  - Myxoma
  - Myxosarcoma
  - Extraskeletal osteosarcoma
  - Undifferentiated sarcoma



https://radiopaedia.org/articles/verocay-bodies



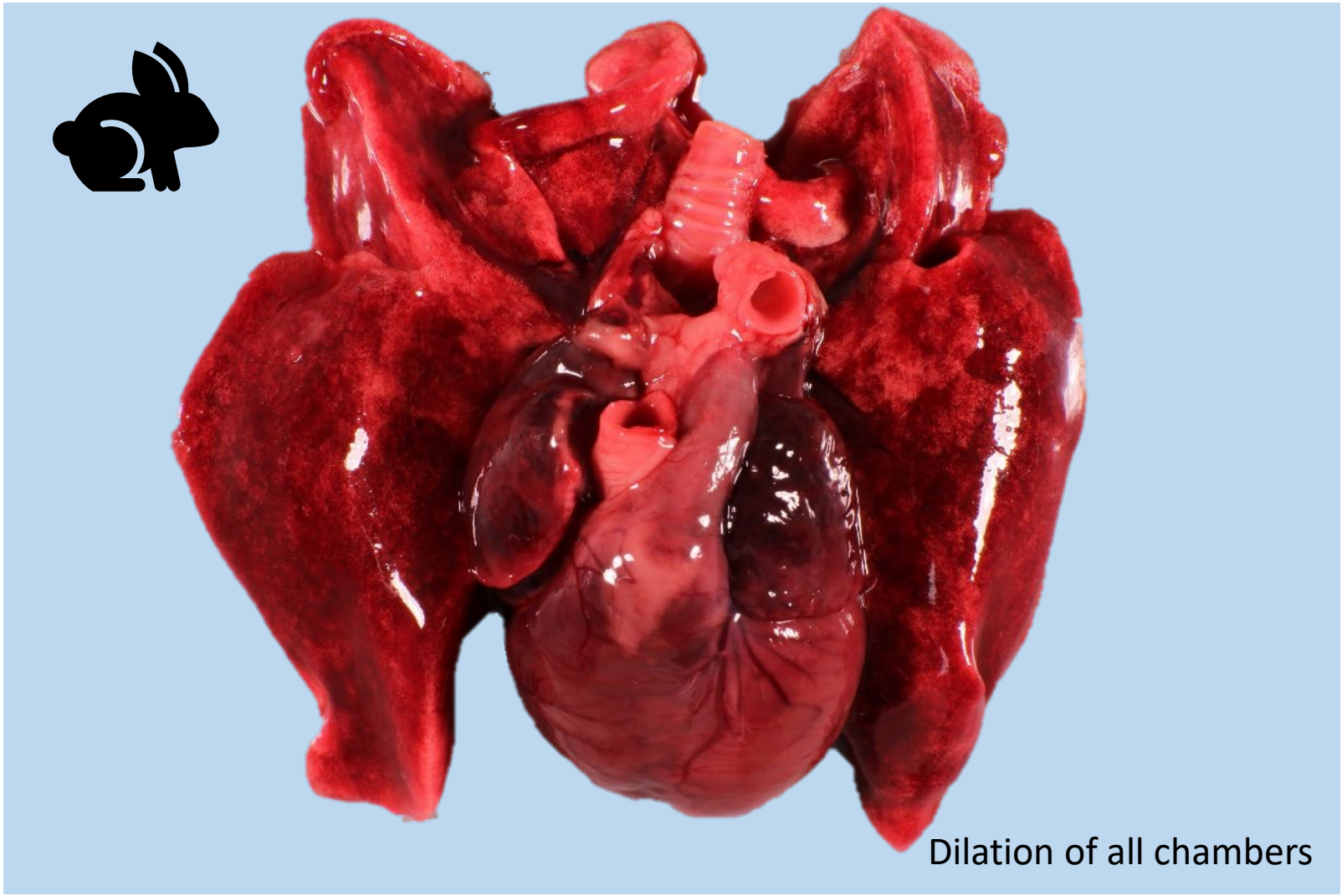


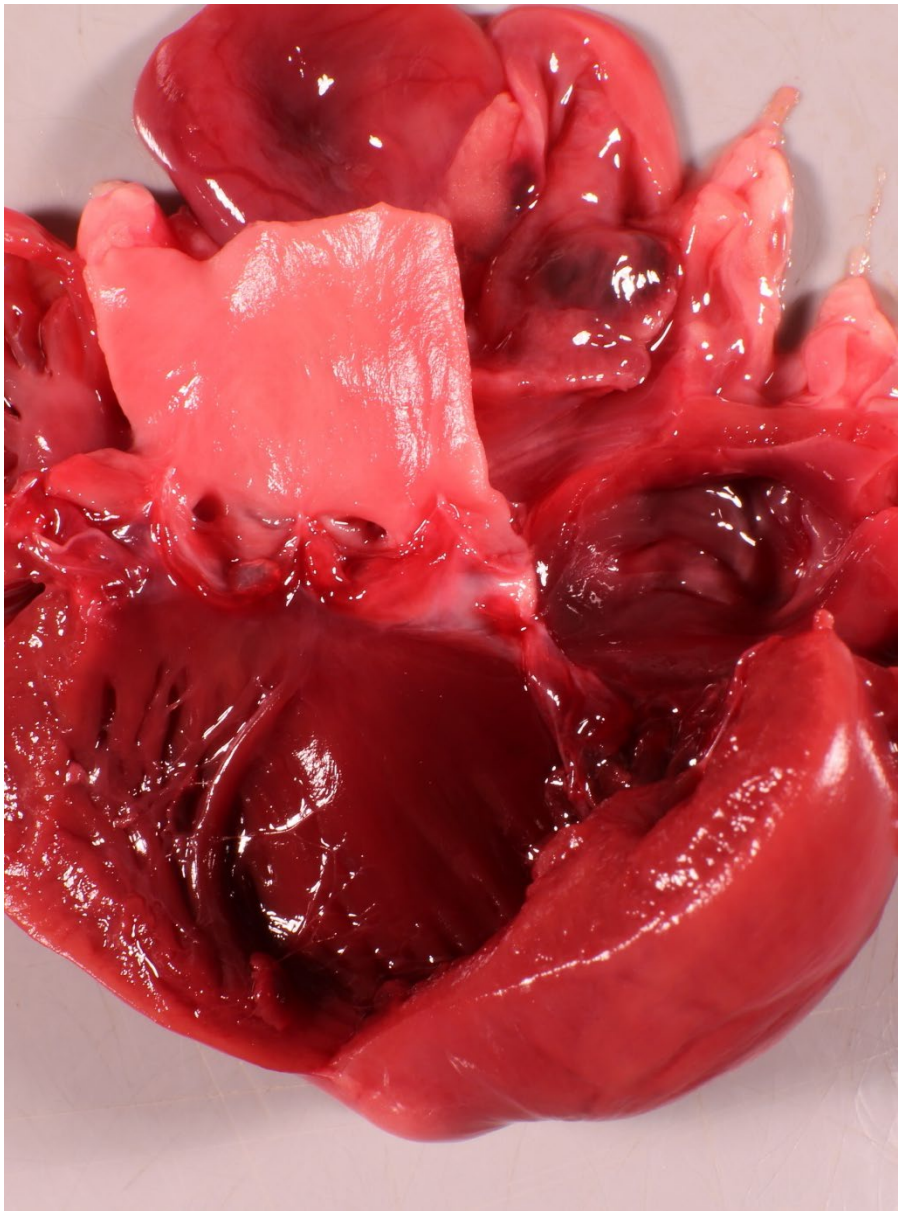


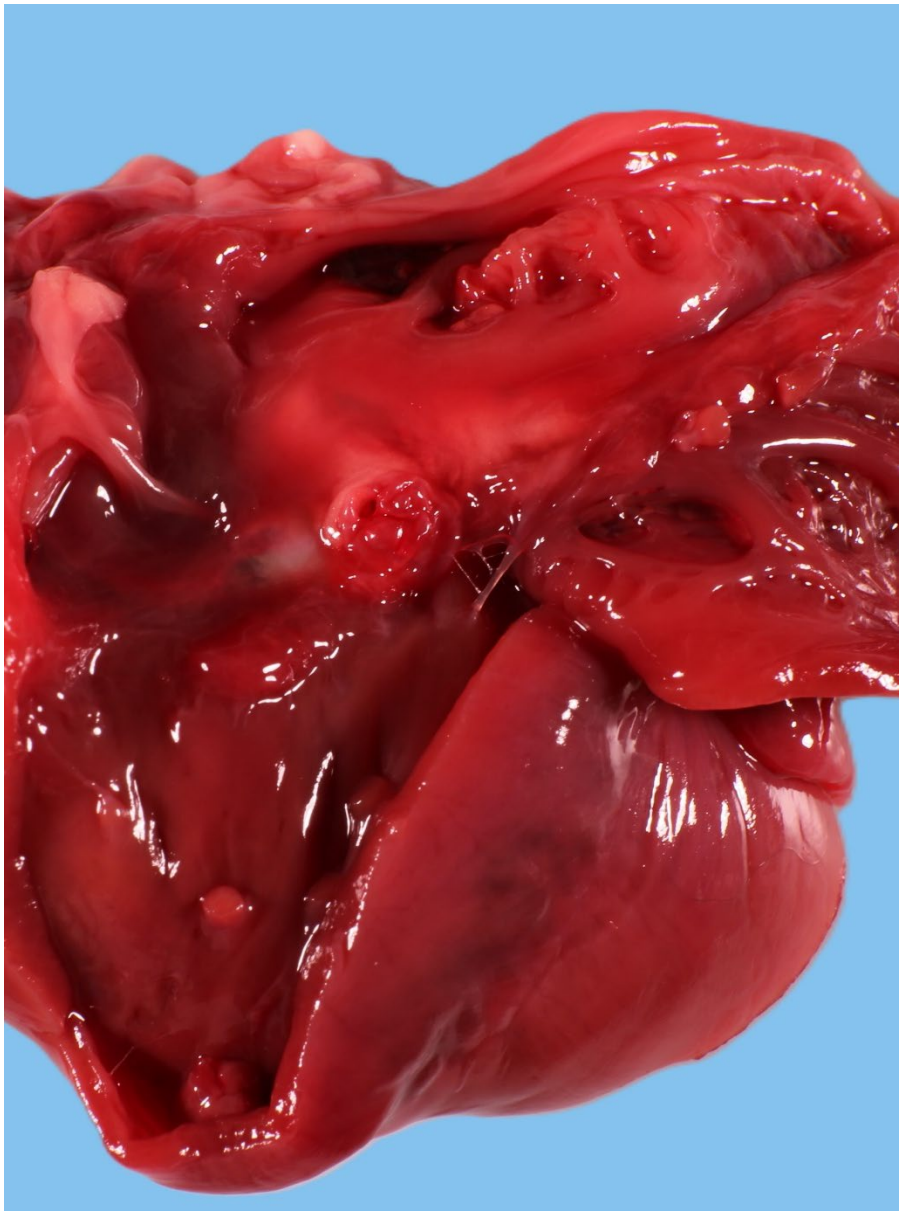
Chondrosarcoma

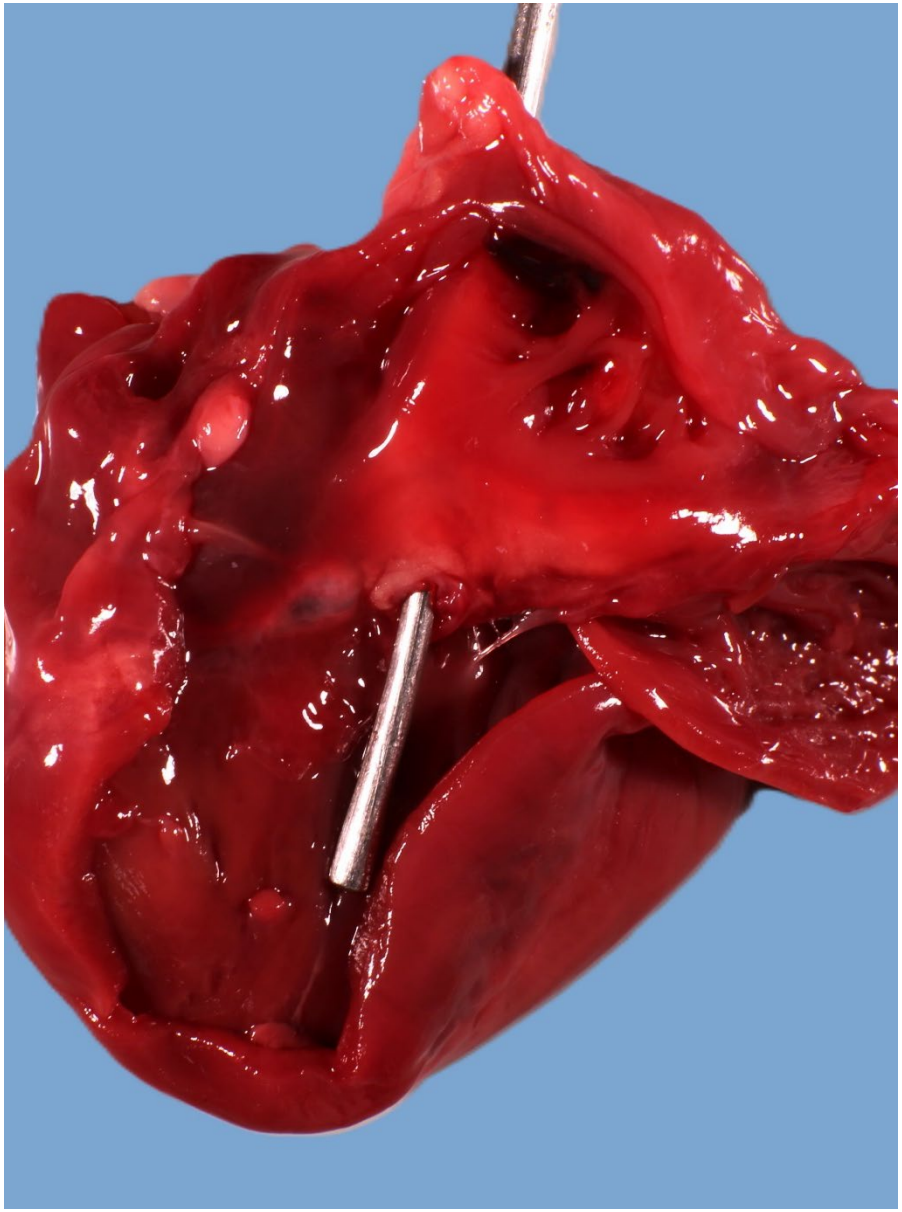
- Chondrosarcoma is a malignant tumor of cartilaginous tissues that rarely originates in the heart.
- Primary chondrosarcoma in the left heart often originates from the myocardial tissue and is mainly found in the left atrium.
- It is presumed to arise from multipotent mesenchymal stem cells, which undergo malignant cartilaginous differentiation.

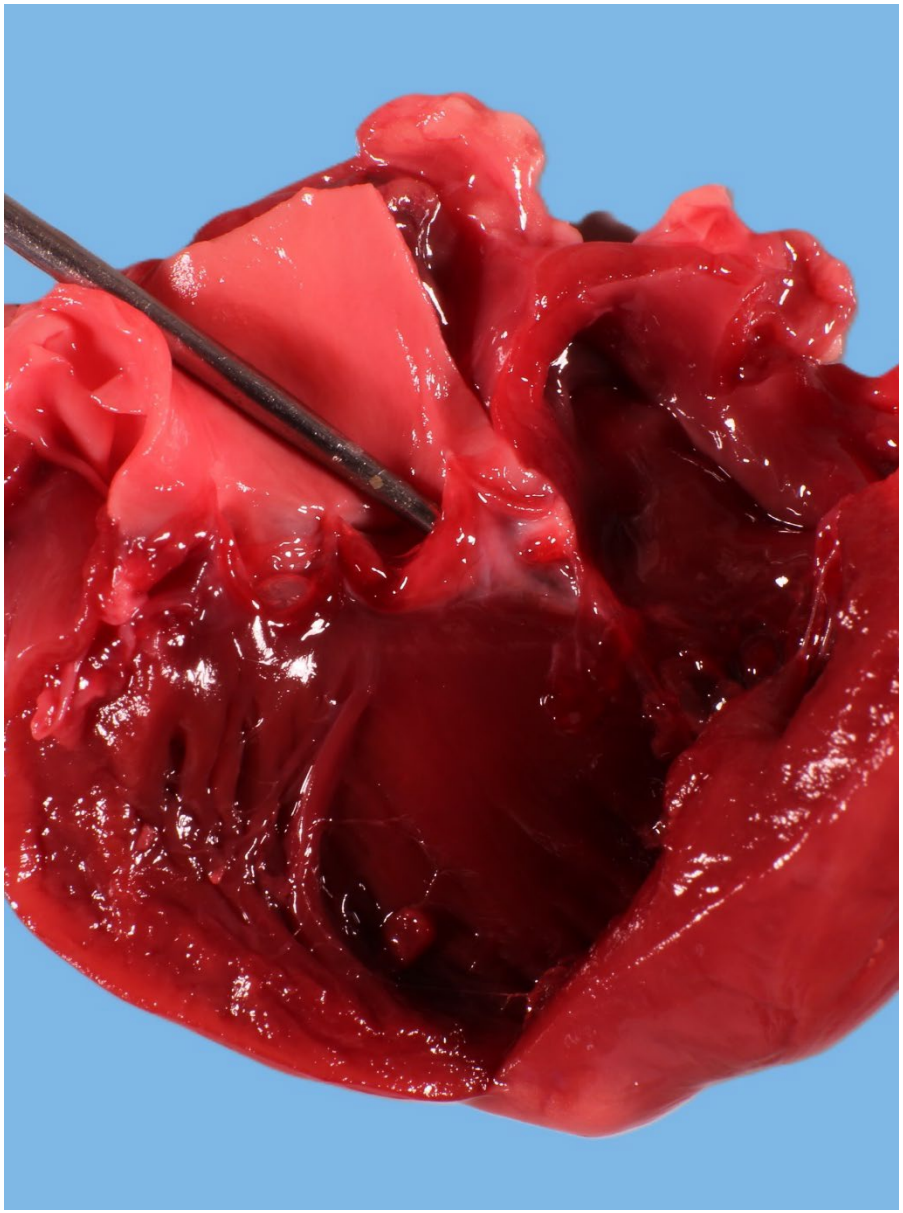
8-year-old male French lop rabbit









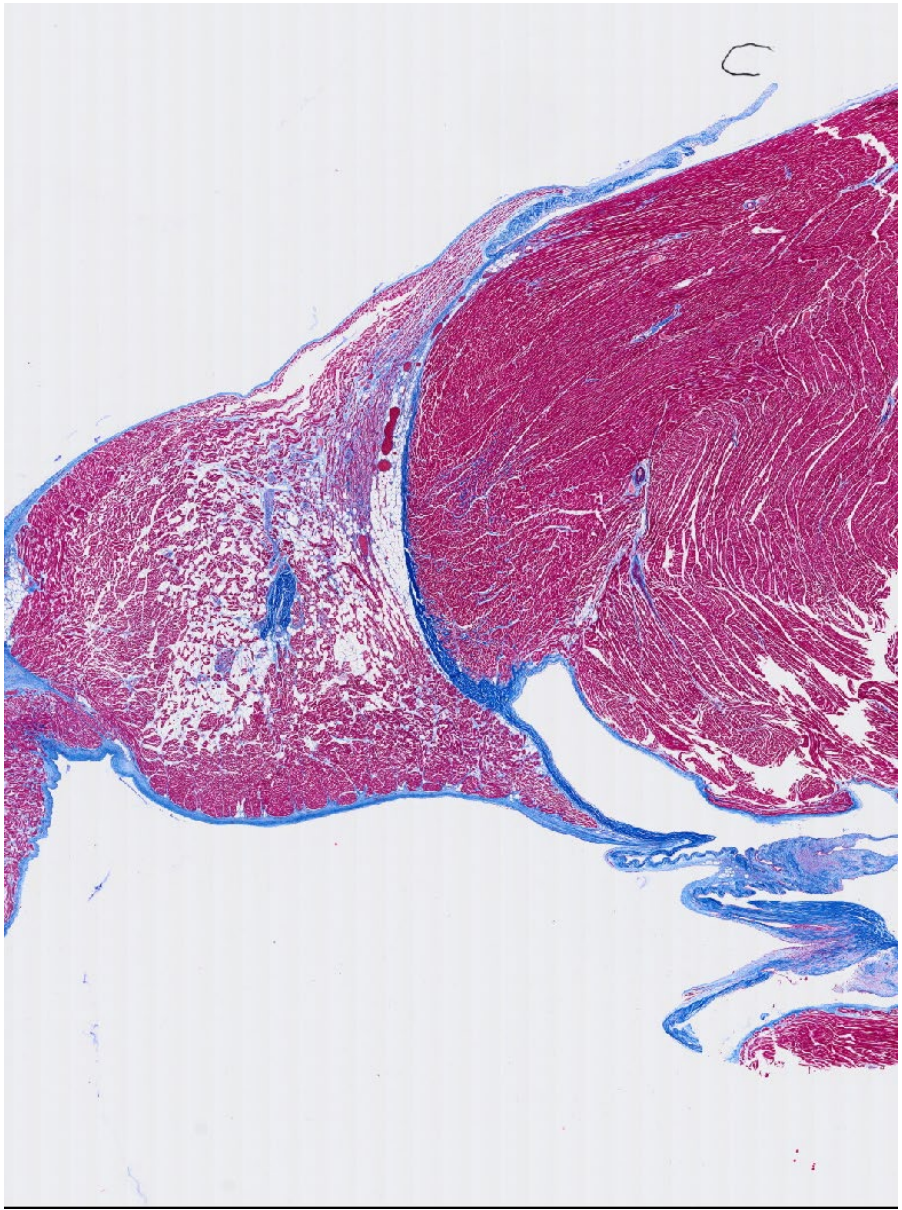


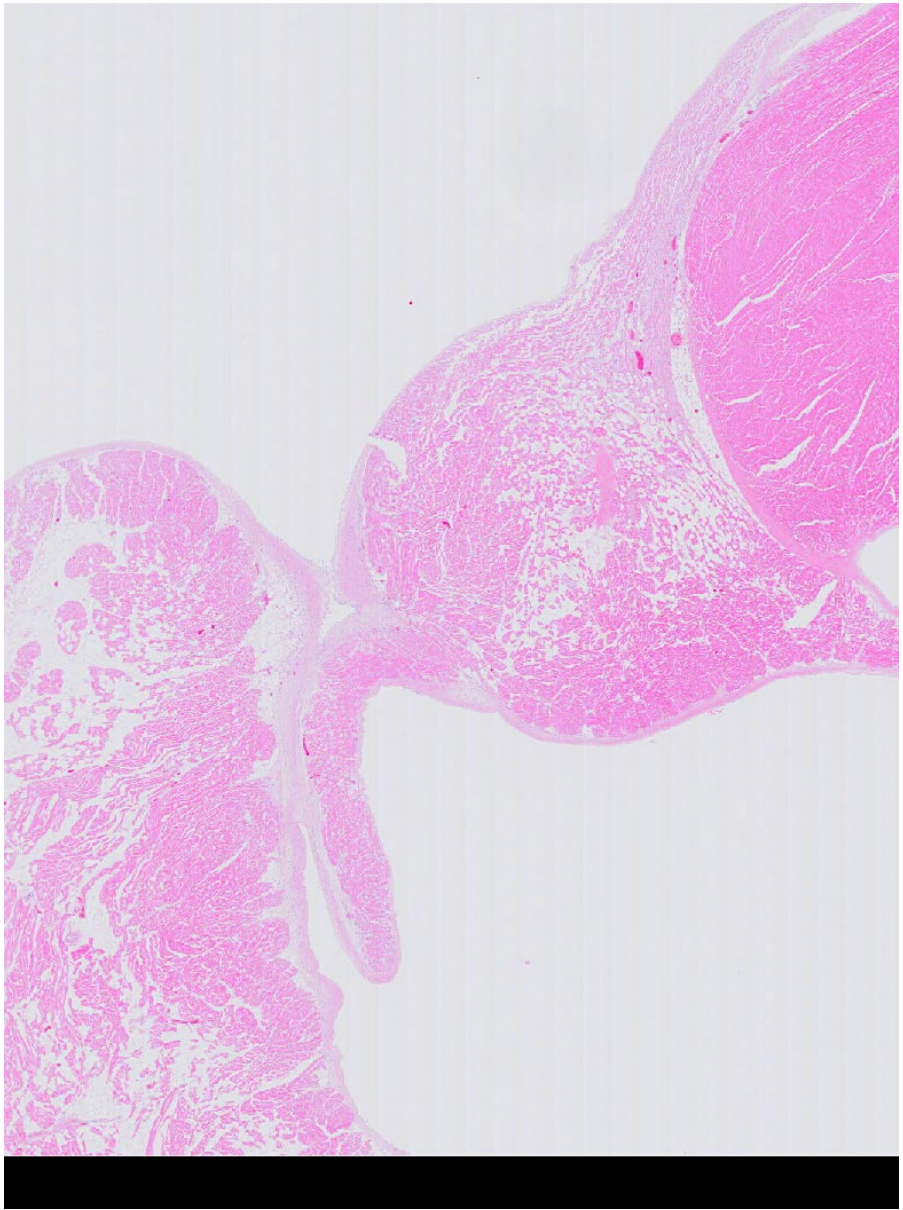
Aorto-atrial fistula with thrombosis

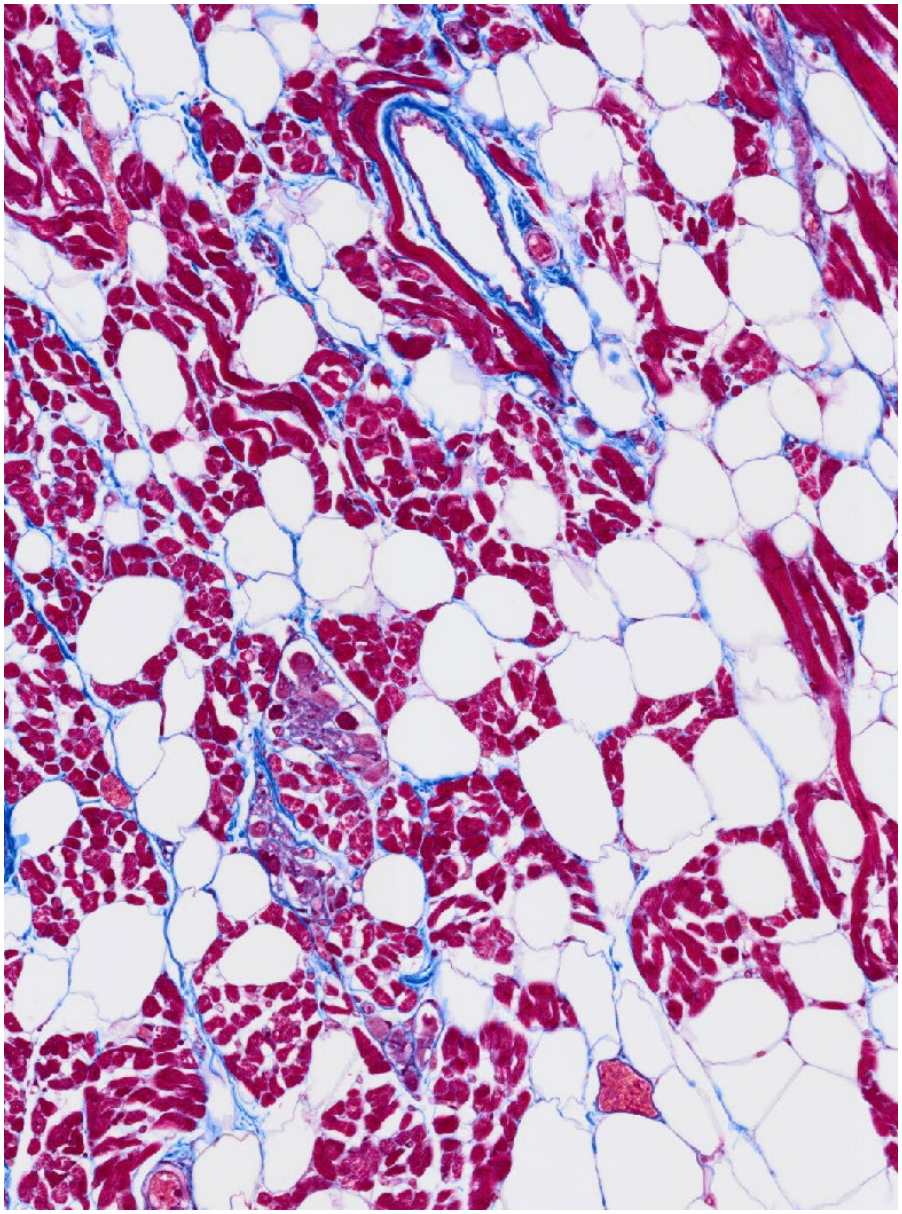
Abnormal communication, or opening, that forms between the aorta and the atria (left or right).

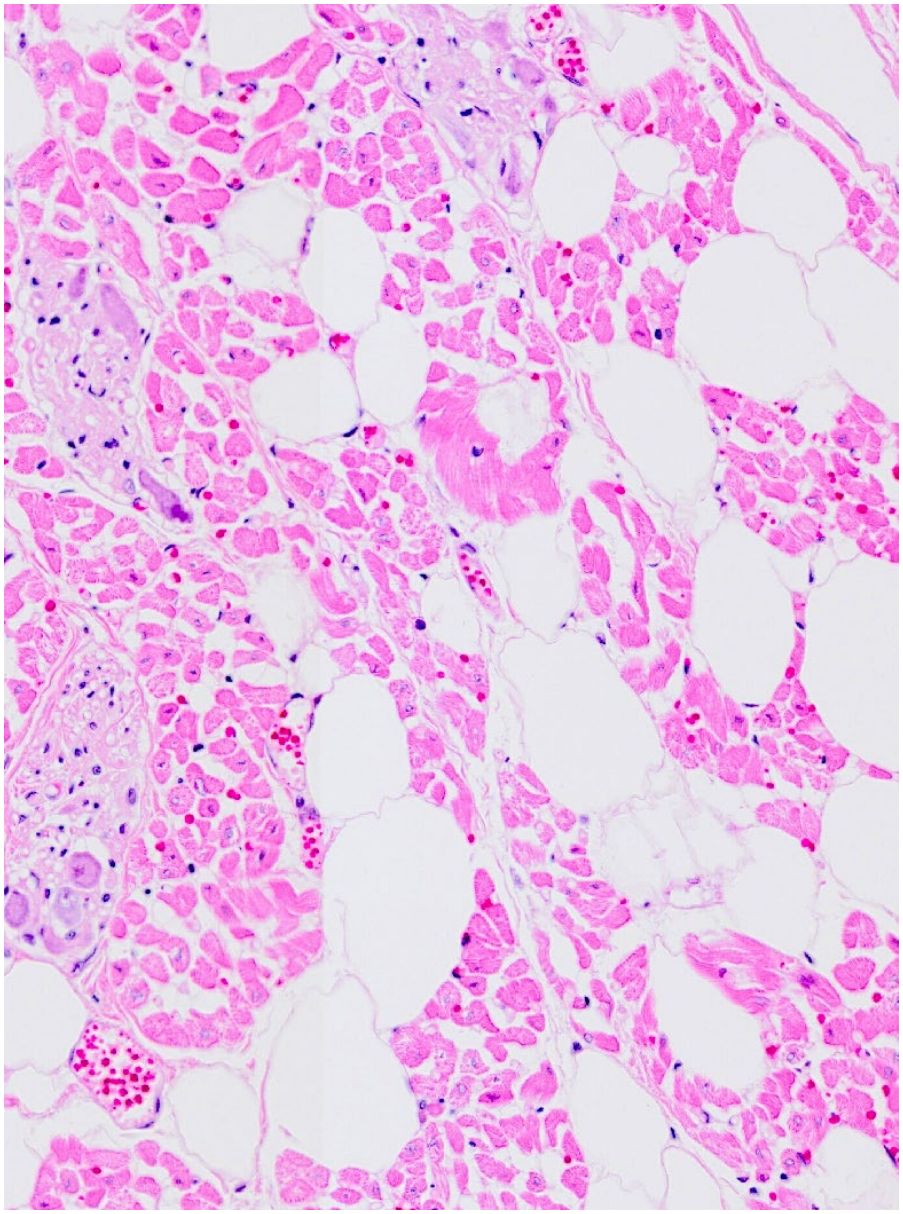
- Infective endocarditis
- Aortic aneurysms or dissections
- Congenital defects
- Iatrogenic

Chihuahua cross dog
Nodule located in the interatrial septum, above the IVS







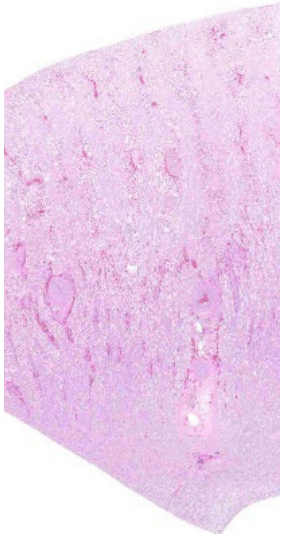


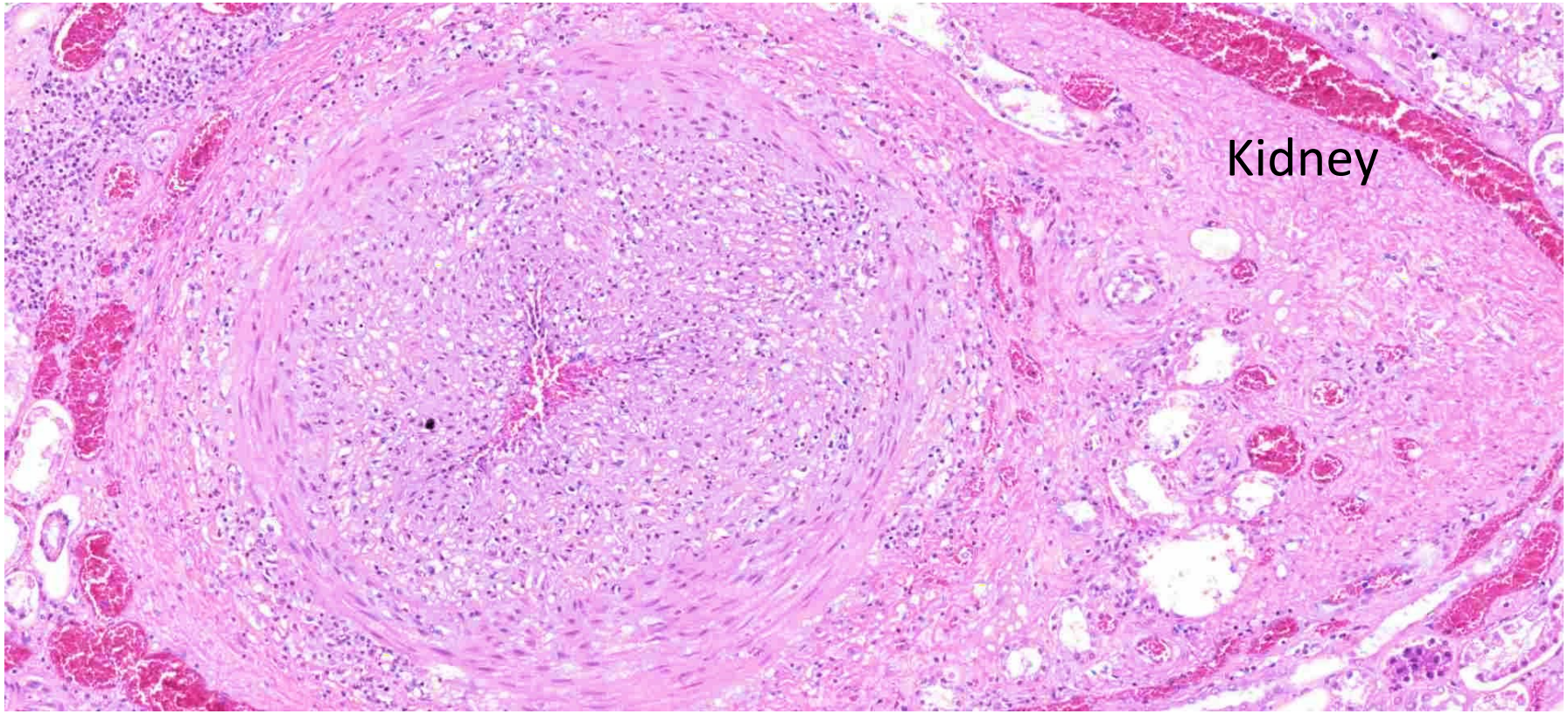
Lipomatous hypertrophy of the interatrial septum

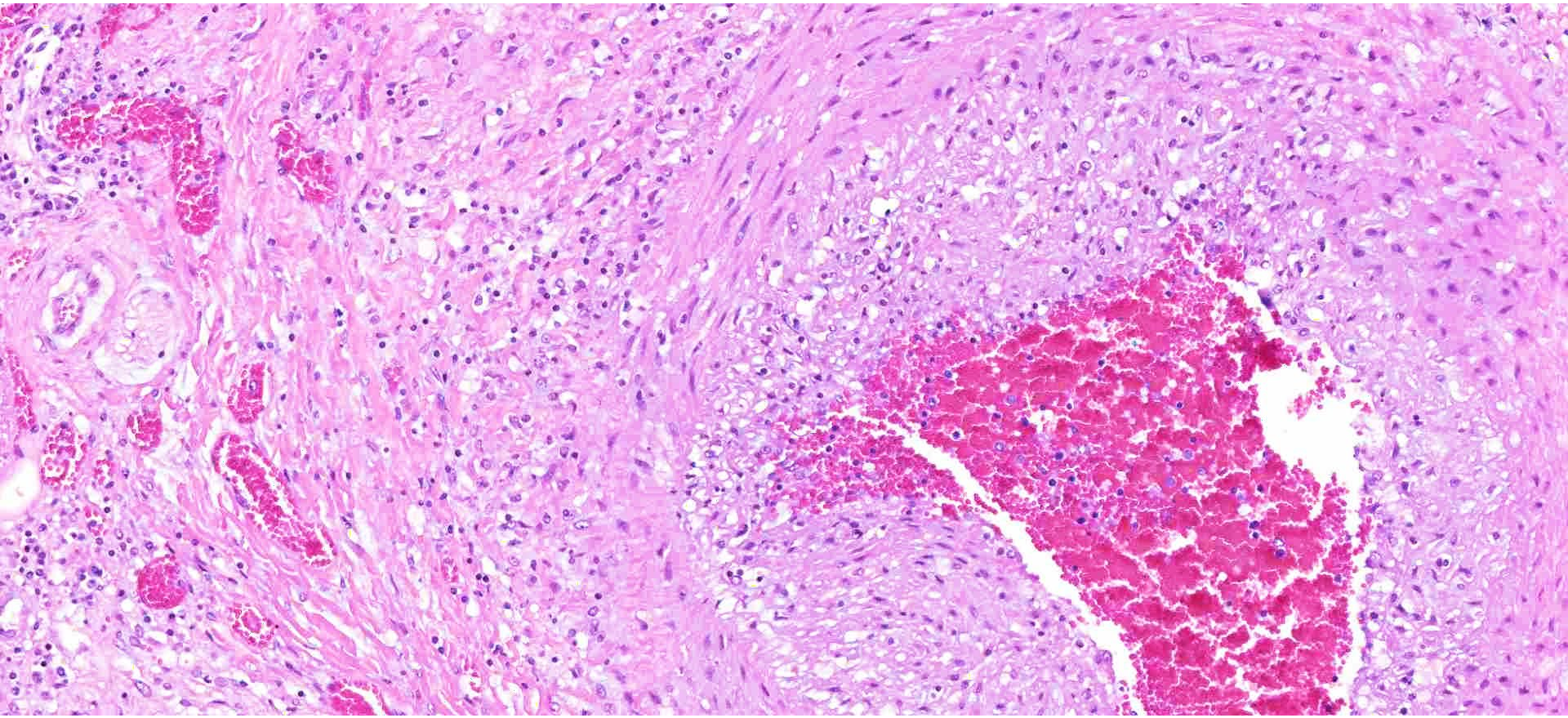
Uncommon disorder of the heart characterized by benign fatty infiltration of the interatrial septum.

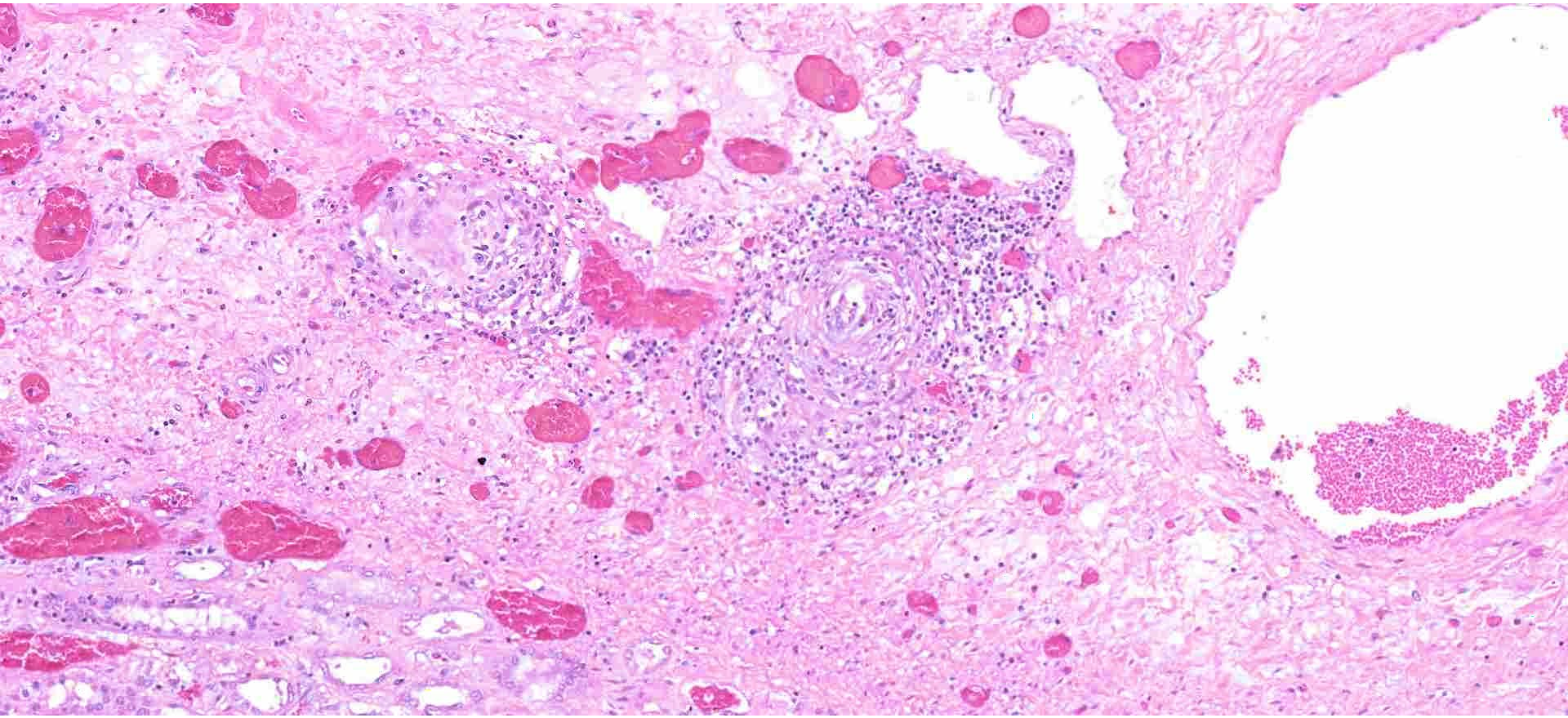
It is commonly found in elderly and obese patients as an asymptomatic incidentally discovered finding.

- Septal fat deposits increase with age.
- With increased septal fat infiltration, there is a progressive disruption and disorganization of the myocardial fibers, leading to the development of fibrosis.









Proliferative arteriopathy

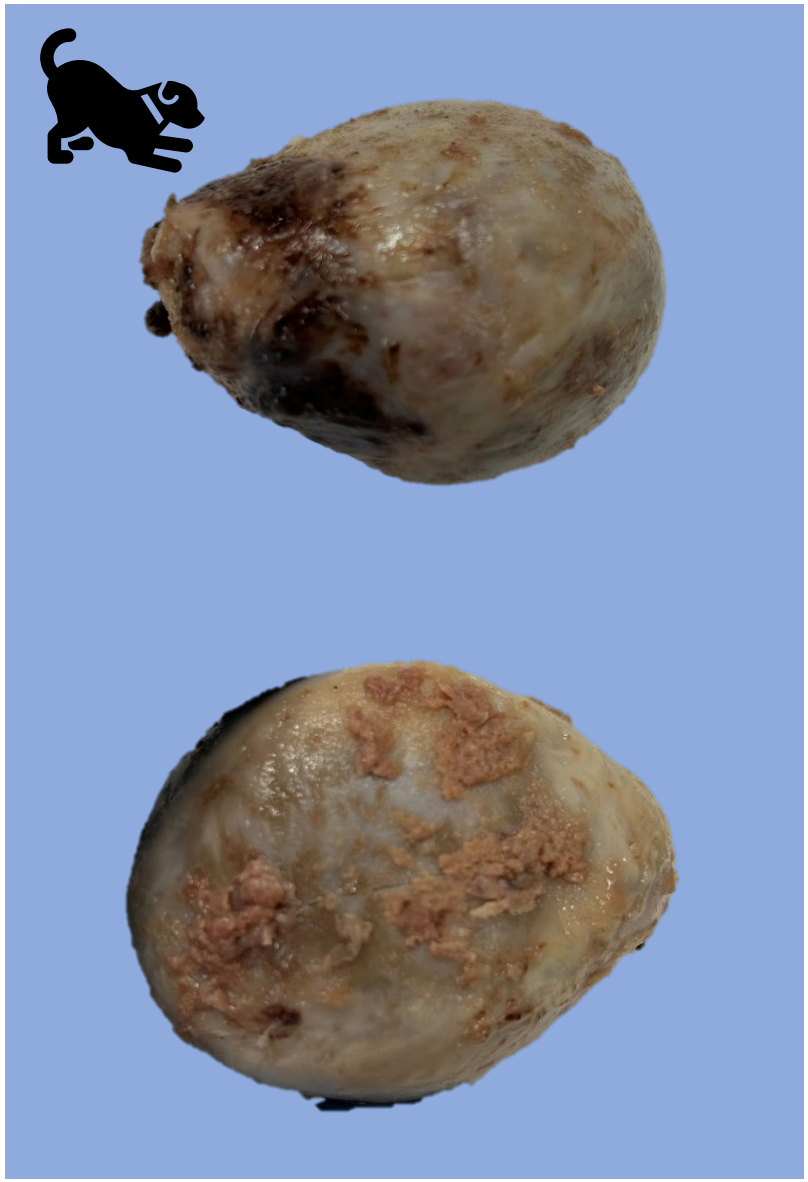
Malignant catarrhal fever: ovine-herpesvirus 2

- Neointimal hyperplasia (proliferative arteriopathy), has been reported in cattle and bison with prolonged clinical MCF-induced disease and in recovered cases.

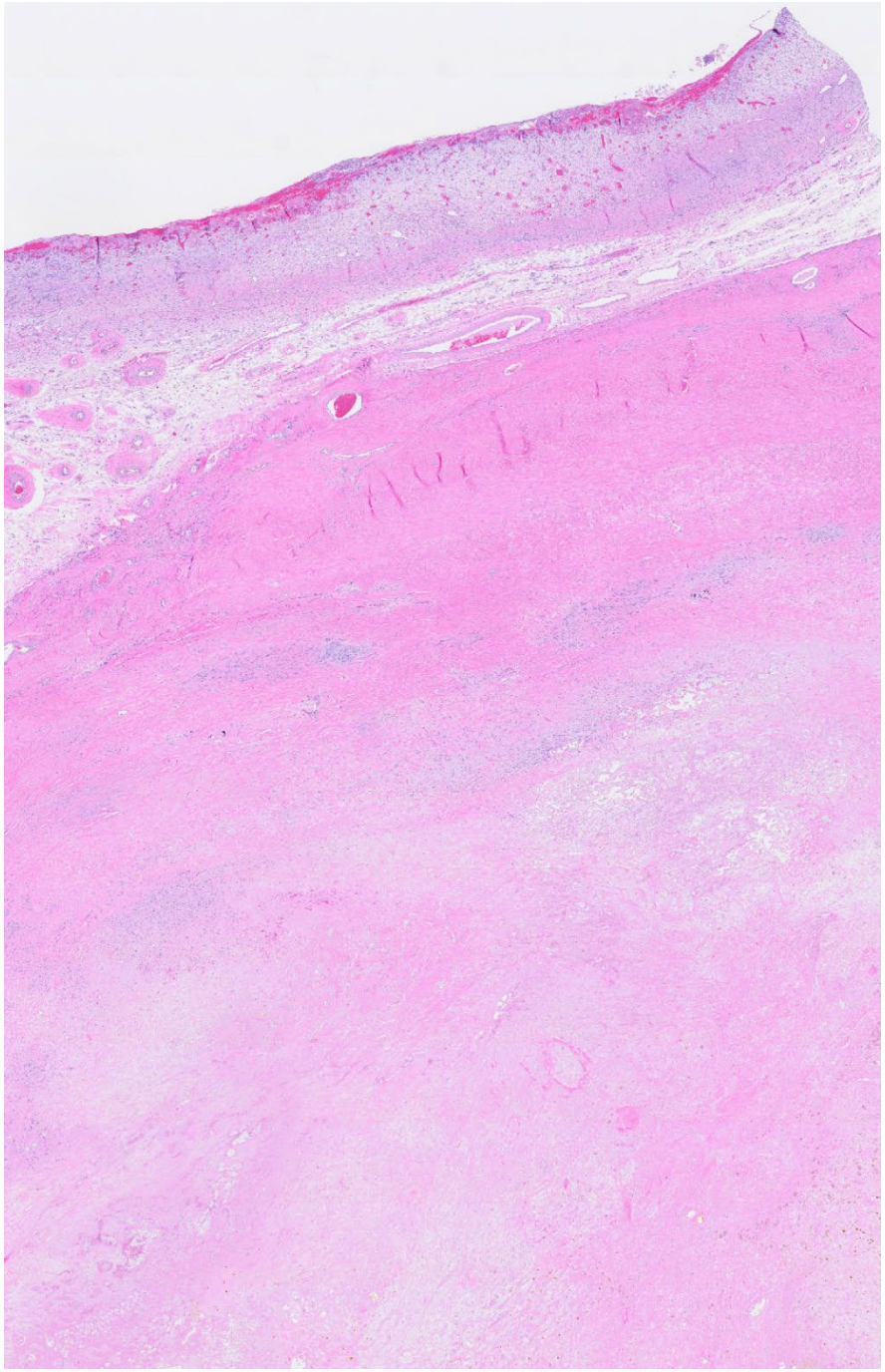
Neointimal hyperplasia occurs by:
Endothelial-to-mesenchymal transition induced by upregulation of transforming growth factor (TGF)-β signaling

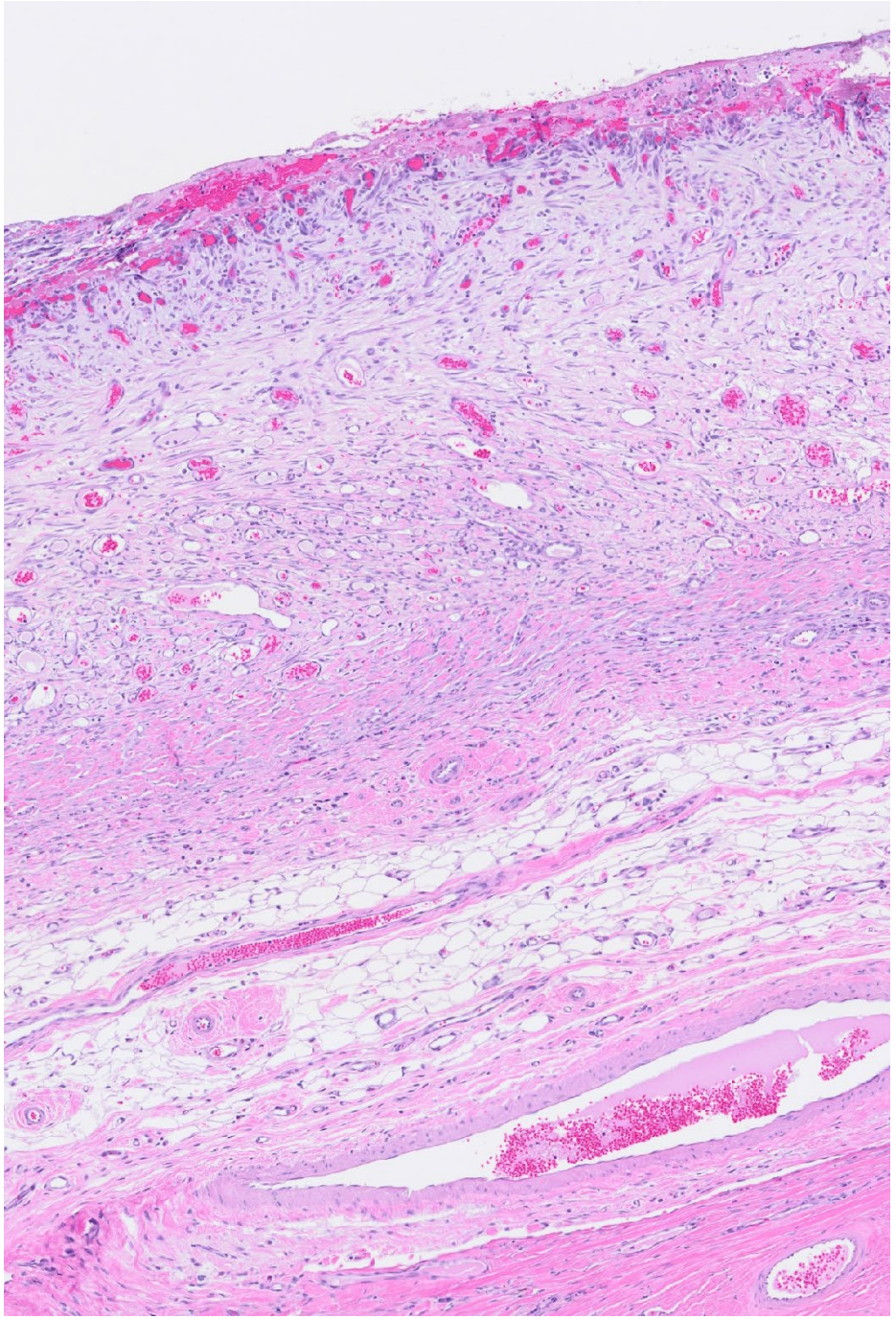
or

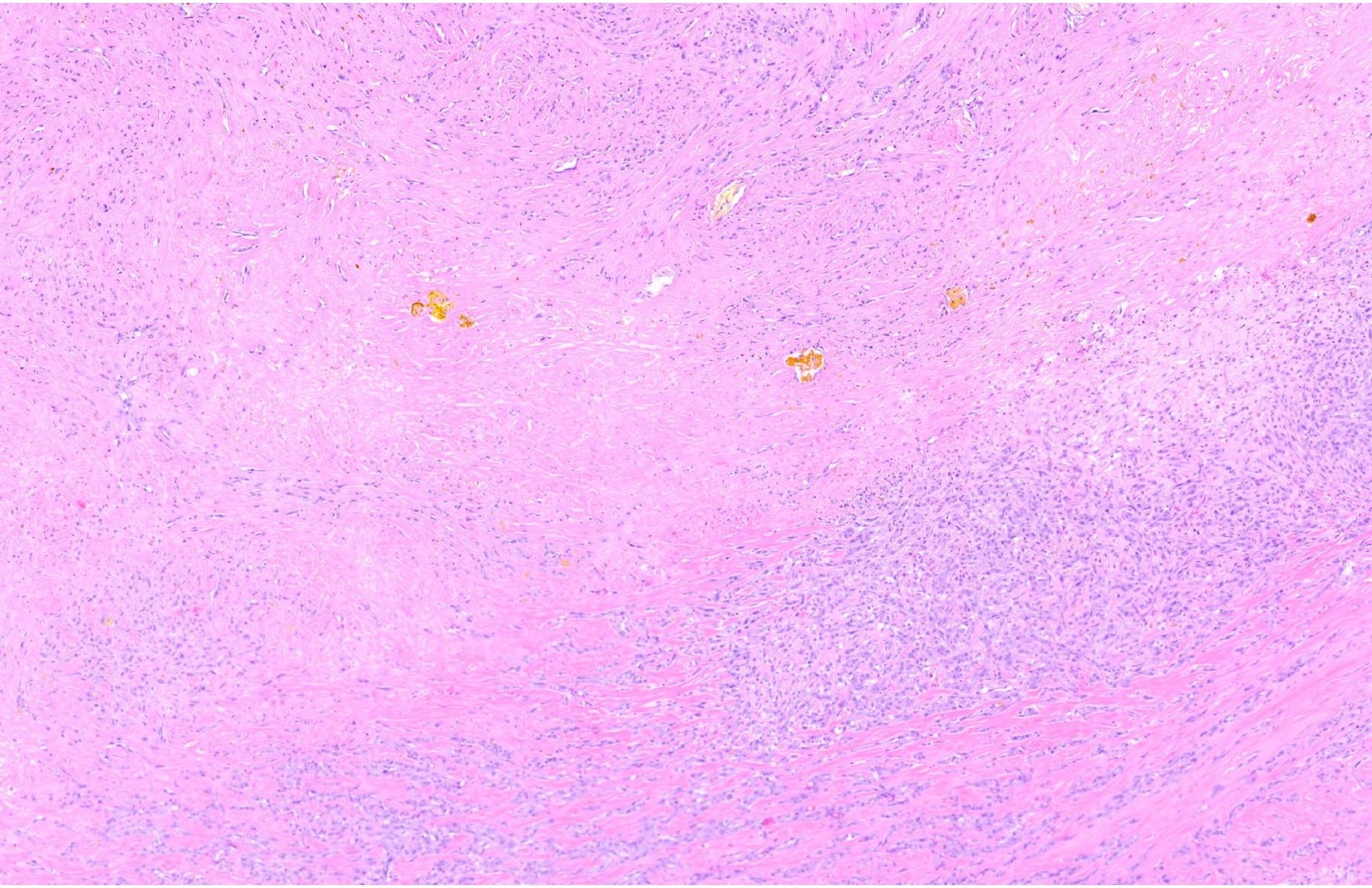
Differentiation of resident fibroblasts in the adventitia into myofibroblasts in response to TGF-β

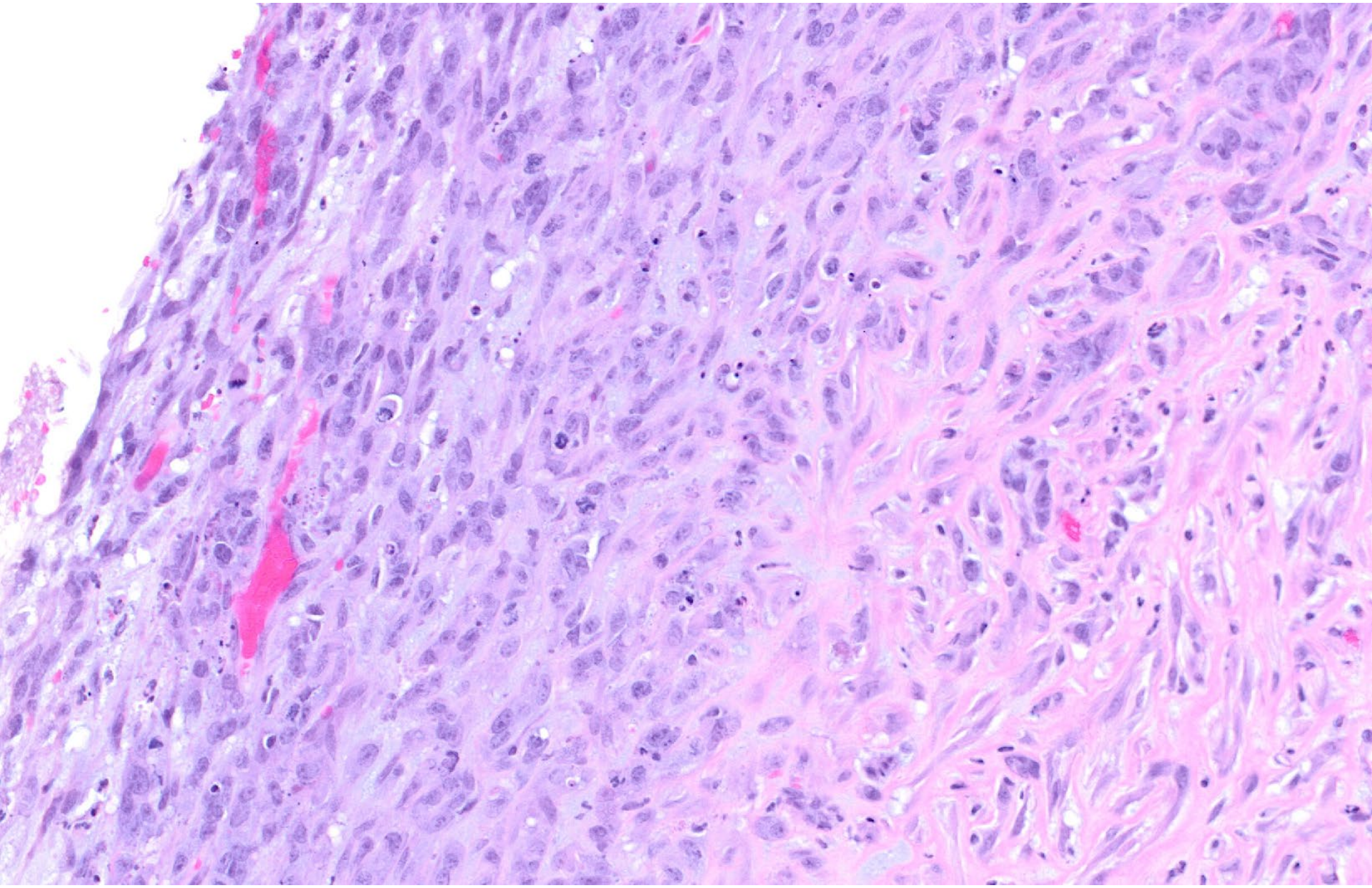


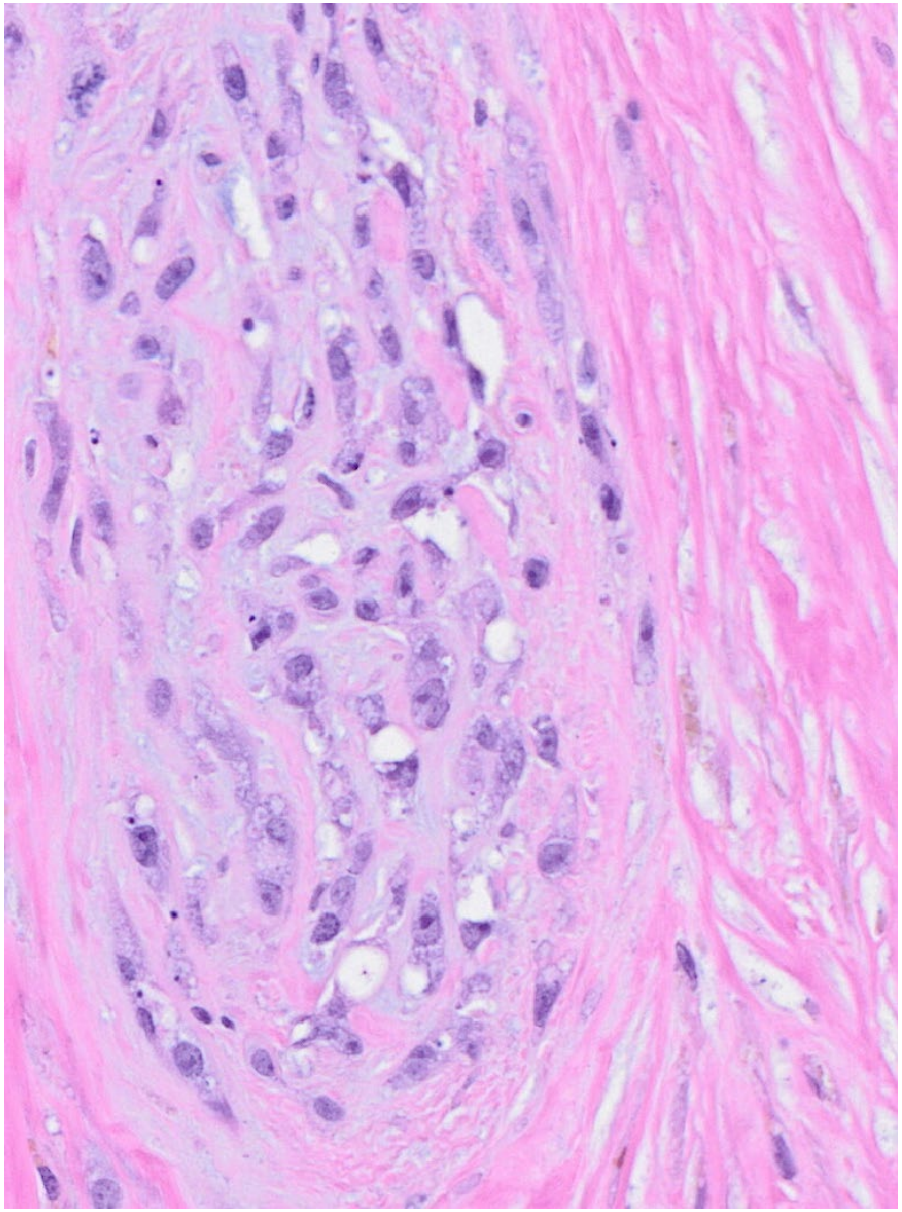
Mass attached to the pericardium
6.4 cm x 4.8 x 4.2 cm

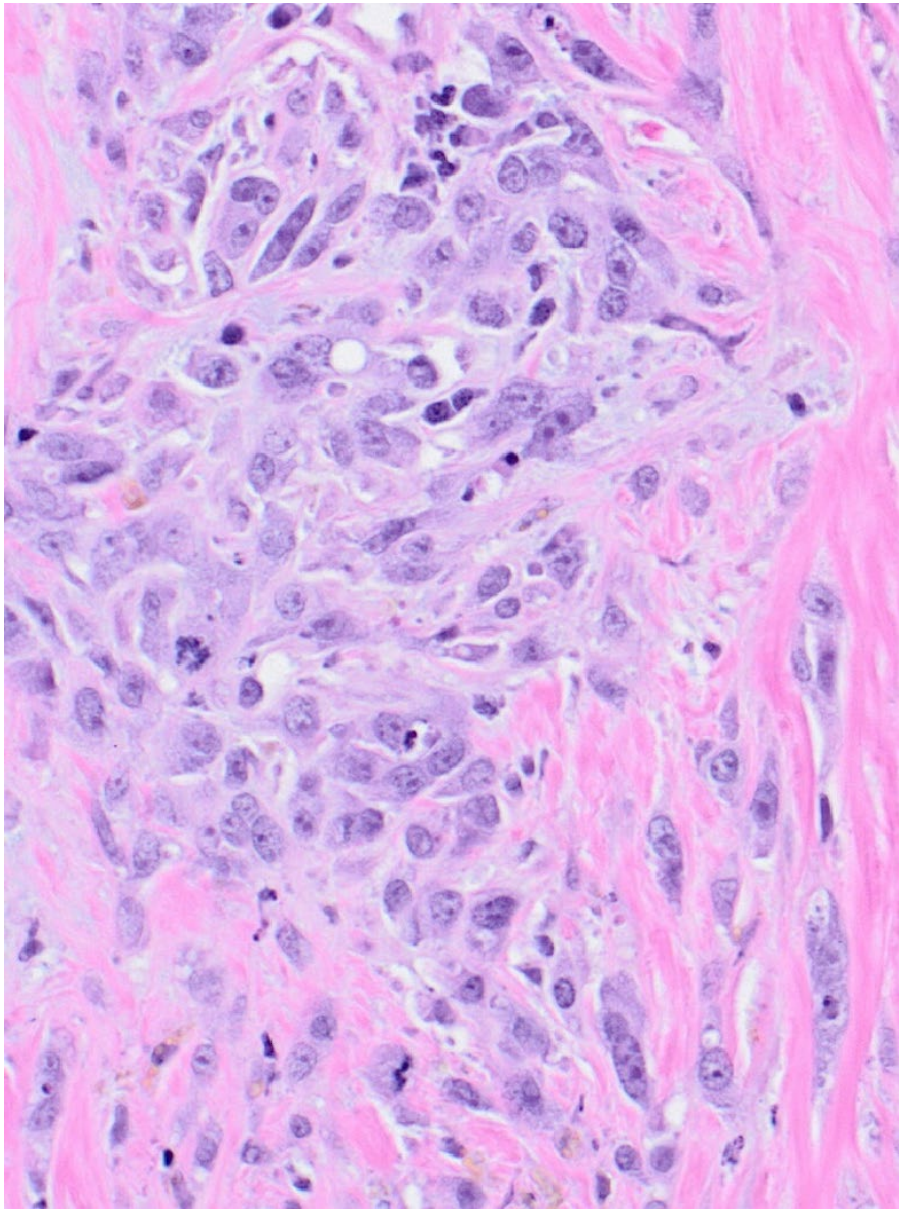












Nodule: Encapsulated pericardial fat necrosis with entrapped reactive mesothelial hyperplasia

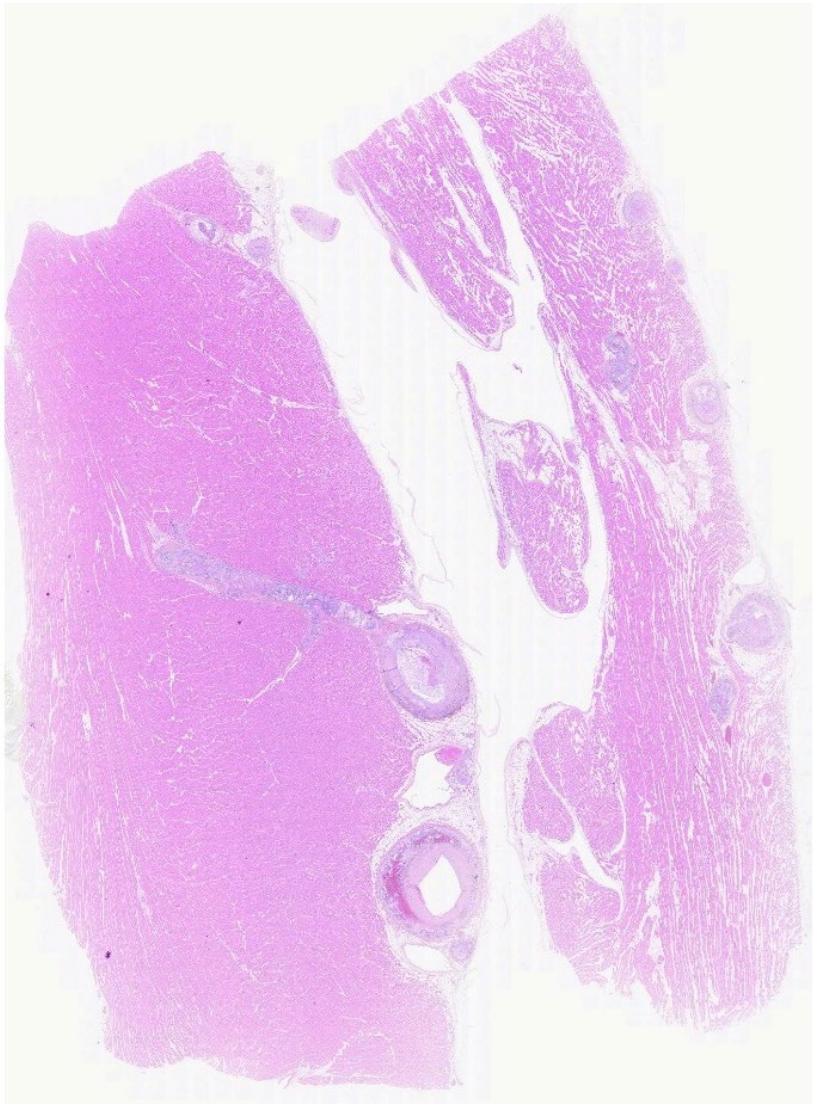
Pericardial fat necrosis:

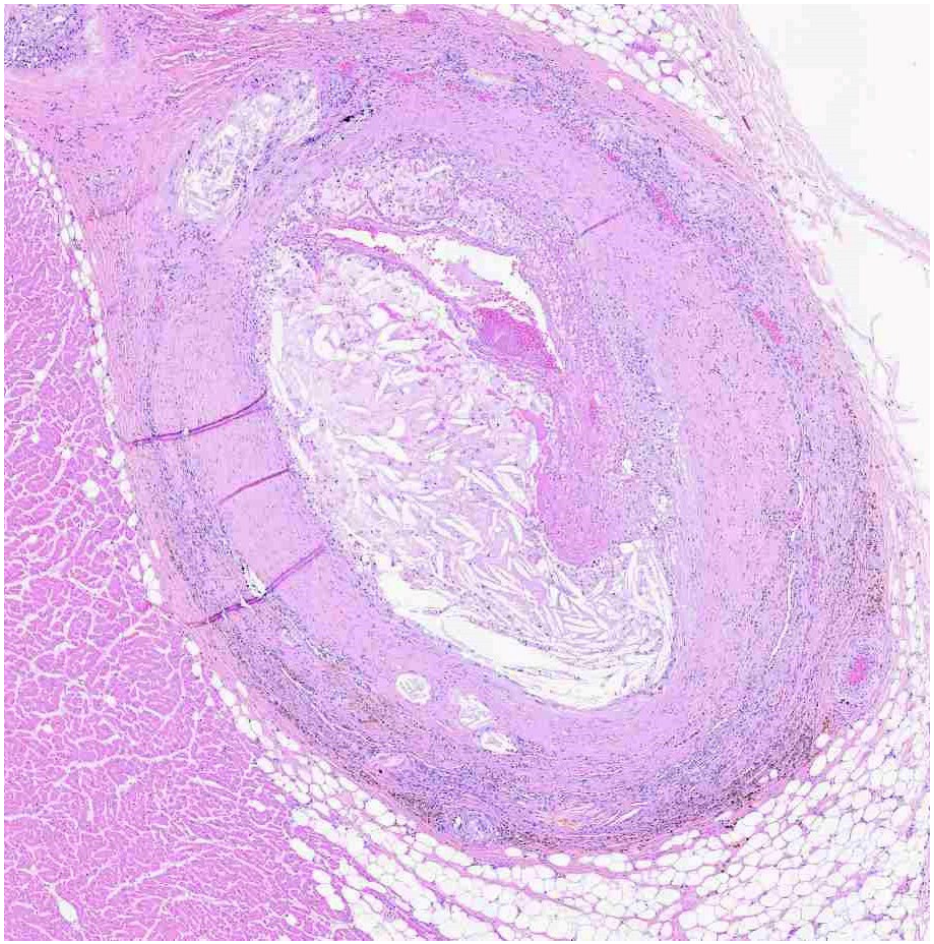
Torsion of the pericardial fat or lipoma

Fat necrosis is surrounded by a capsule and is mixed with hemorrhage, proteinaceous fluid, hemosiderin, foamy macrophages, lakes of mineral, fibrosis, and cholesterol clefts.

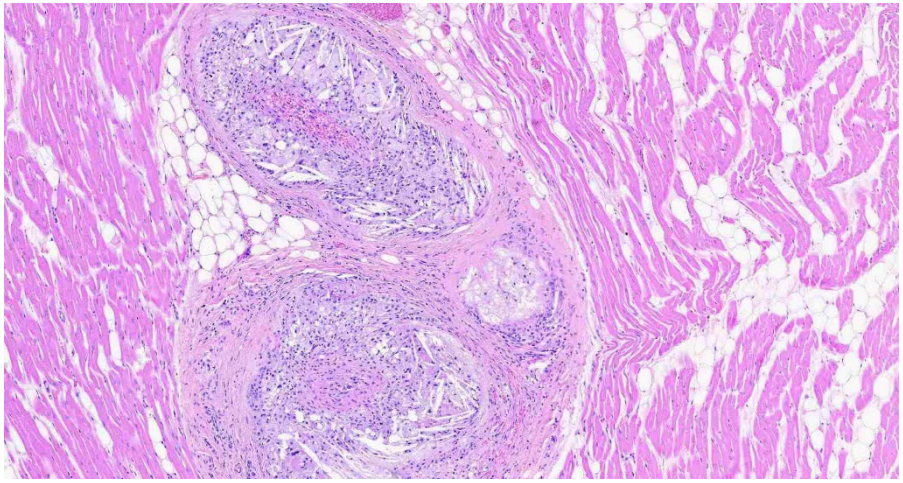
The mesothelial cells are considered reactive and hyperplastic. No stromal invasion or desmoplastic stroma is observed in areas where they form sheets or where they are trapped in the fibrotic tissue. Mitotic count and cytologic atypia are not usually considered useful for distinguishing between mesothelial hyperplasia and mesothelioma.

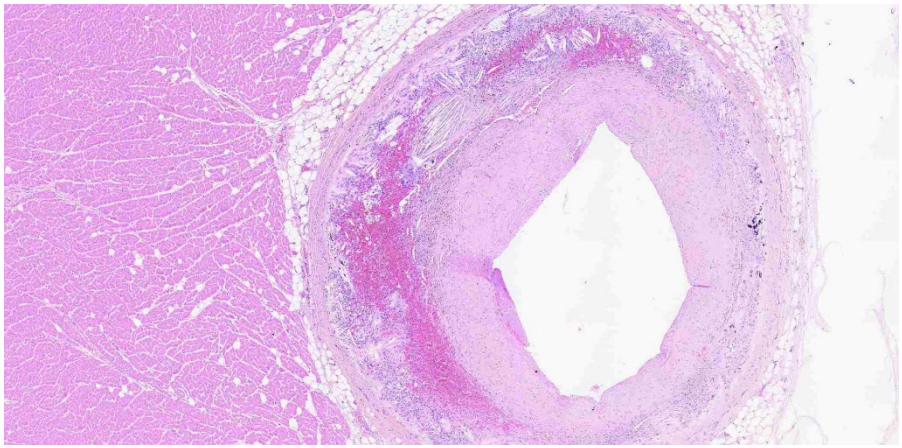

unam-fmvz
patologia

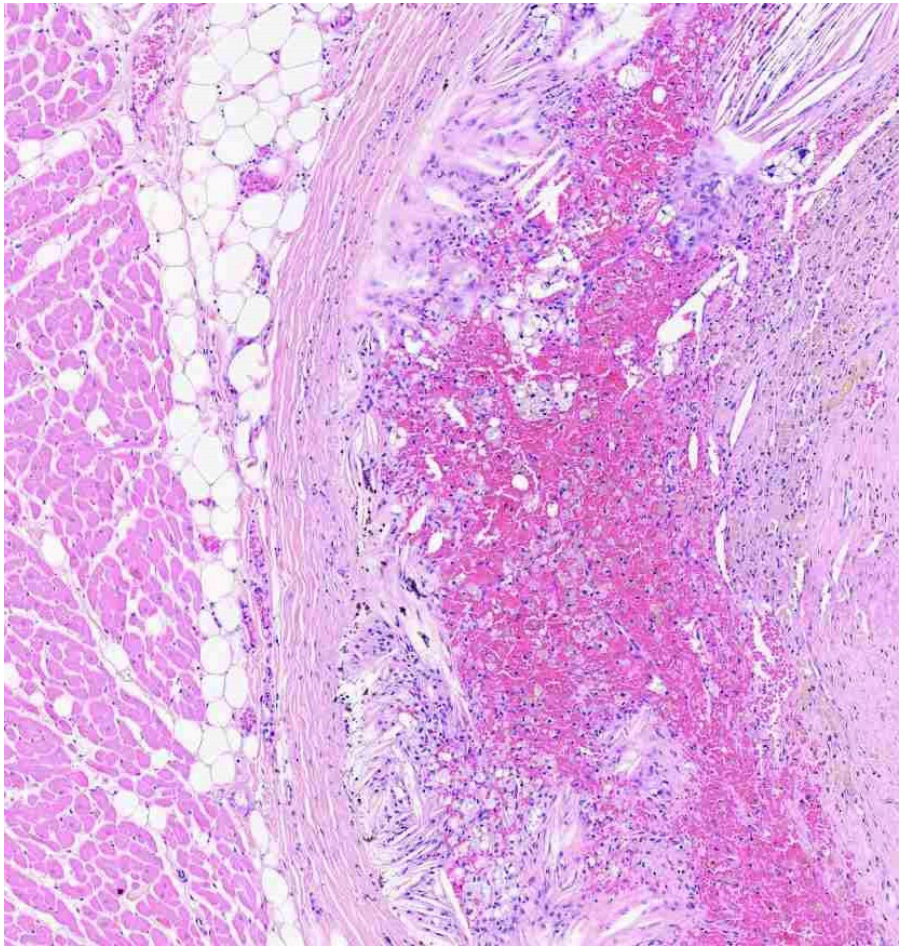


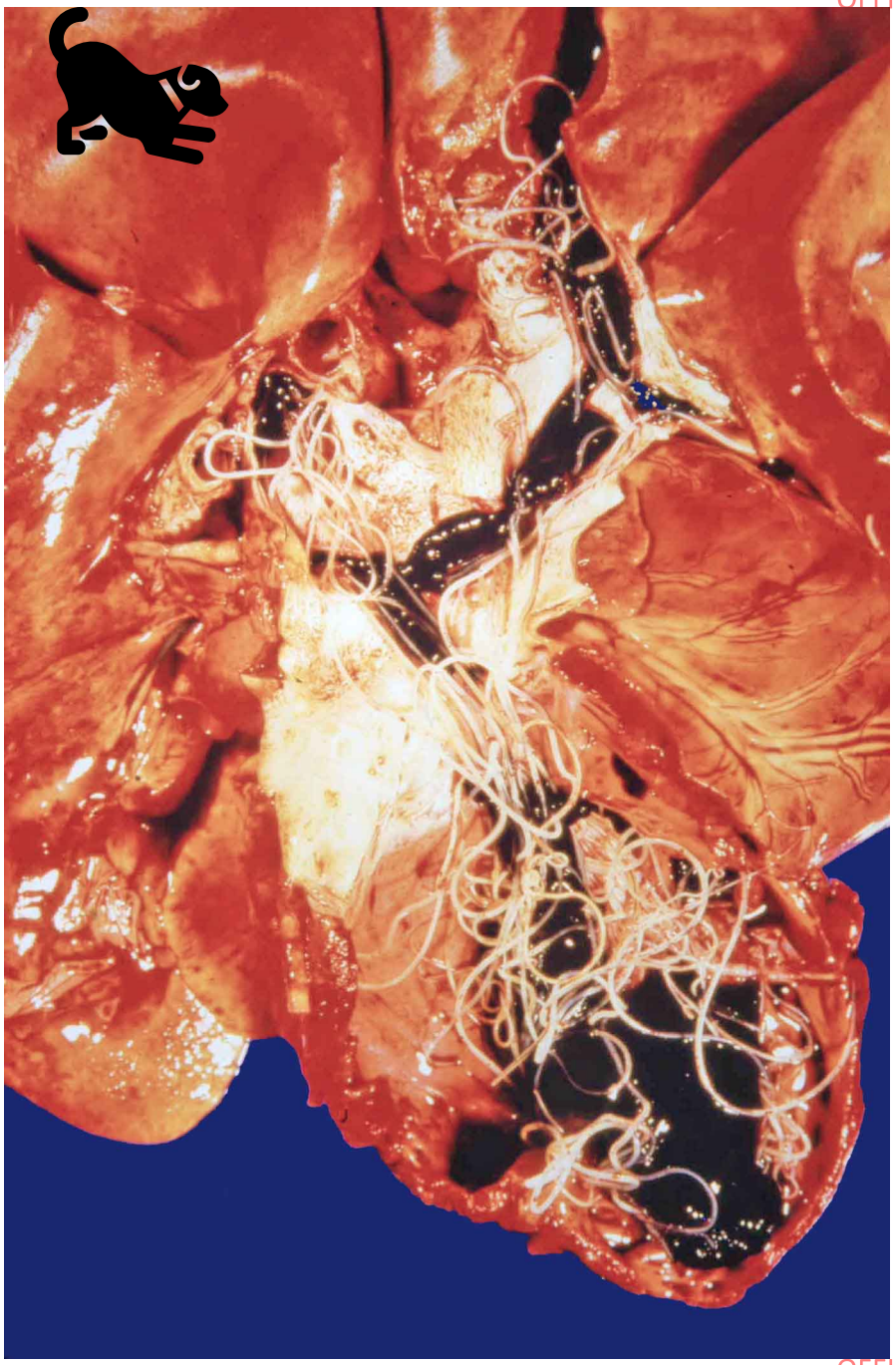


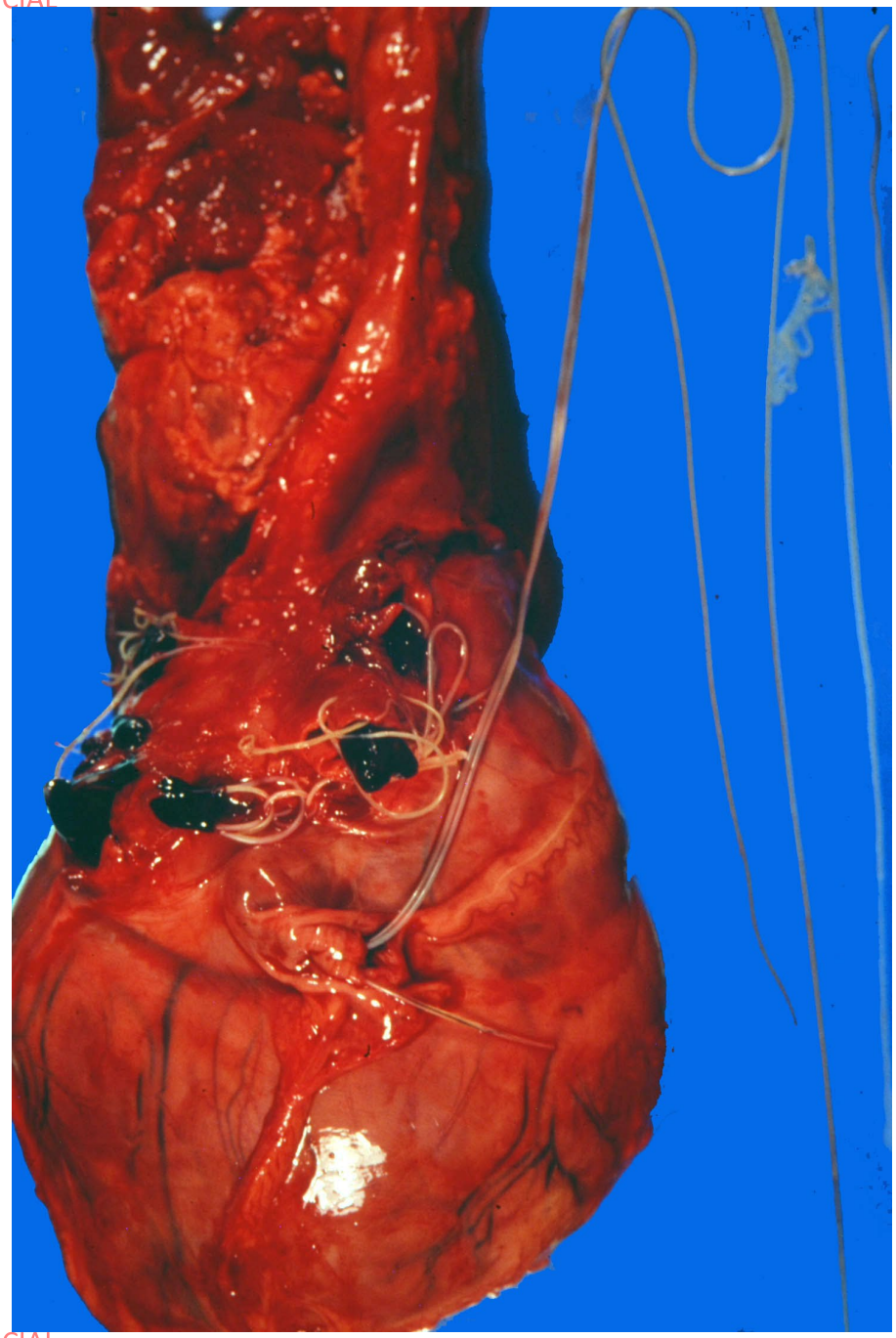
Atherosclerosis



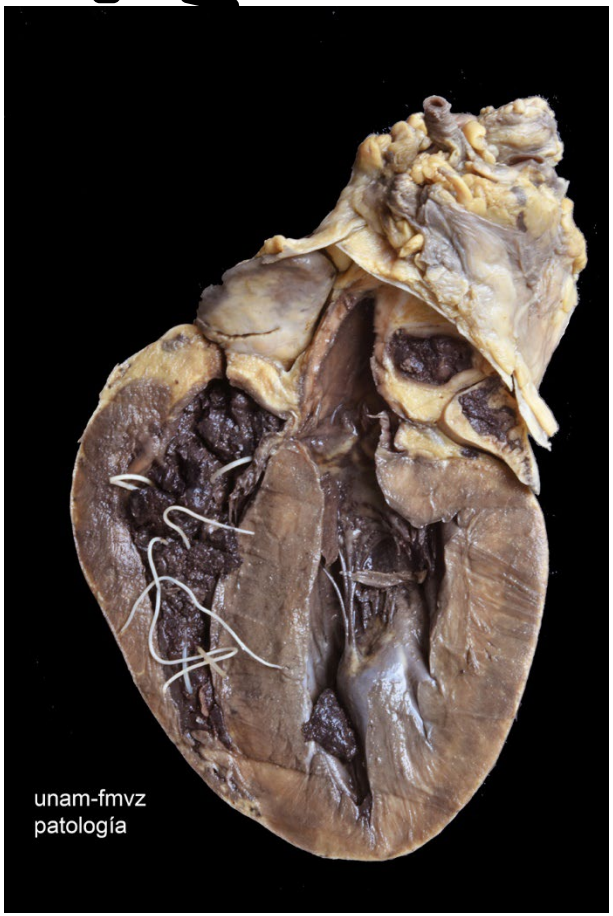


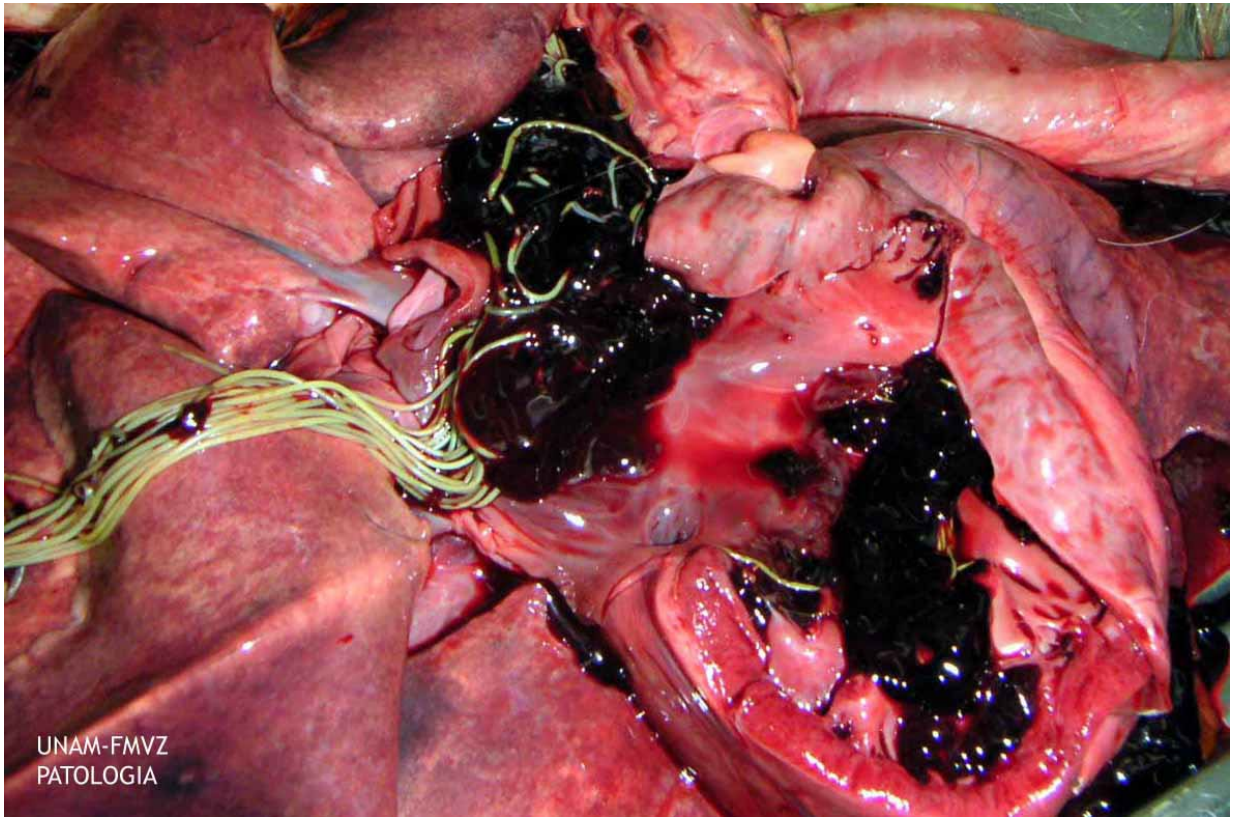






Dirofilaria immitis





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