

## CASE 8

### CLINICAL HISTORY

This 53 year-old man suddenly collapsed at home. CPR was started and he was transferred to A&E. He was in VF but became asystolic and died. He had a history of interstitial lung disease and was usually short of breath on mild exercise. He had been previously admitted to hospital with palpitations associated with dizziness.

### SUMMARY OF AUTOPSY FINDINGS

Height 163 cm, weight 69.7 kg.

Lungs right 820, left 680 g. Widespread fibrosis.

Focal pericarditis over the anterior wall of the left ventricle.

Coronary arteries: no significant atheroma.

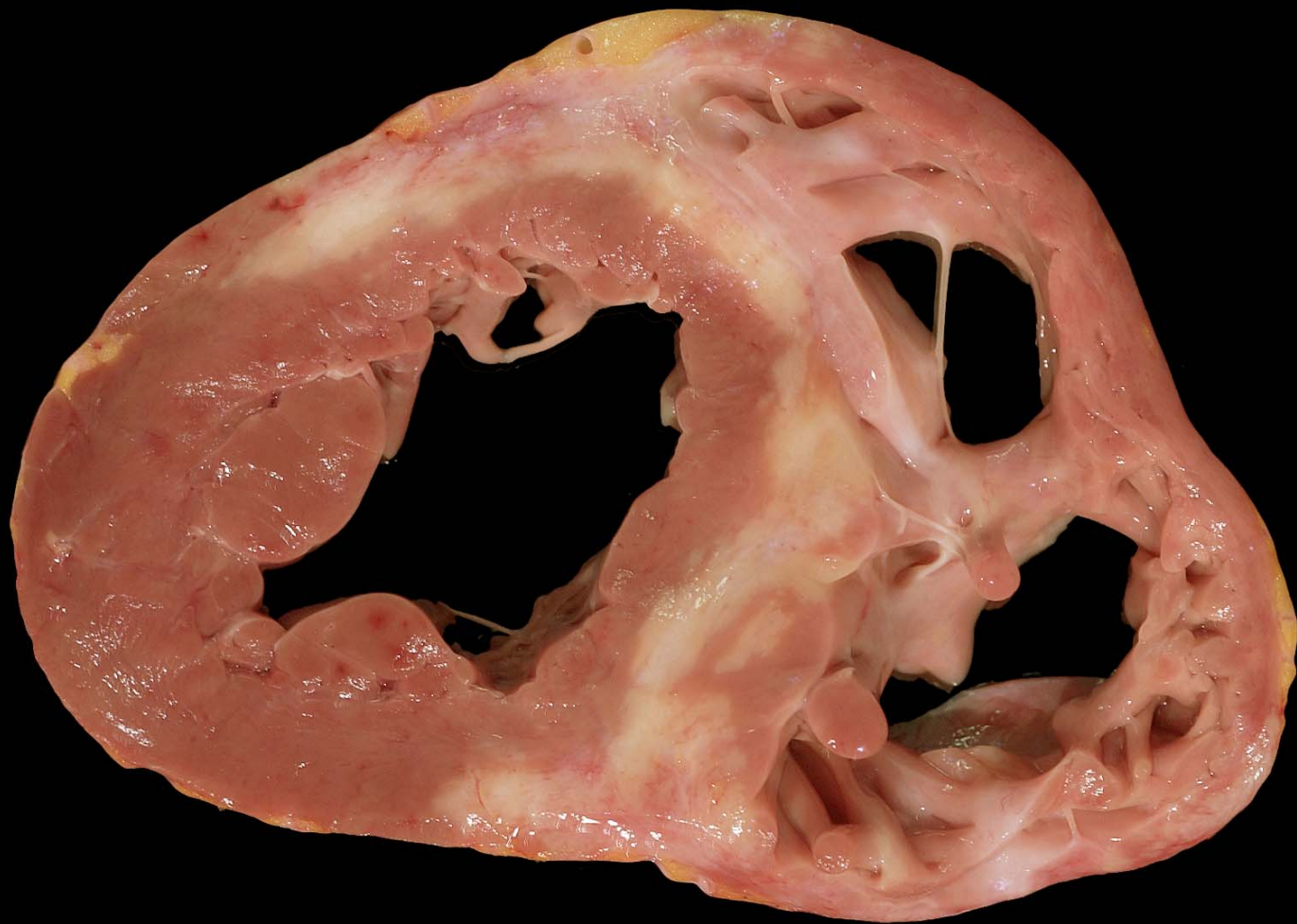
Heart: (280 g): See image. Multiple pale white plaques throughout the septum and anterior wall of the left ventricle.

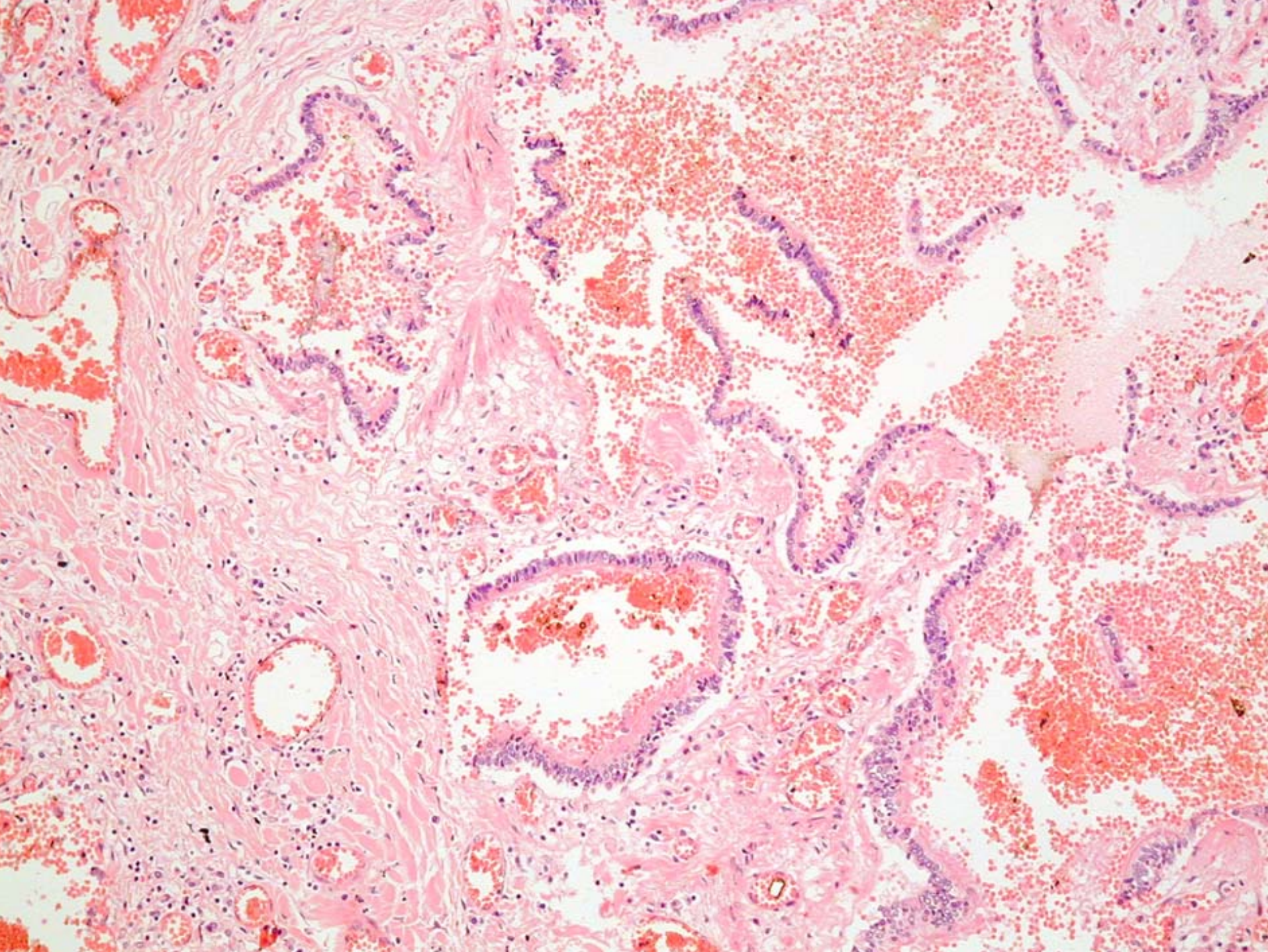
Liver: (1540 g) Normal.

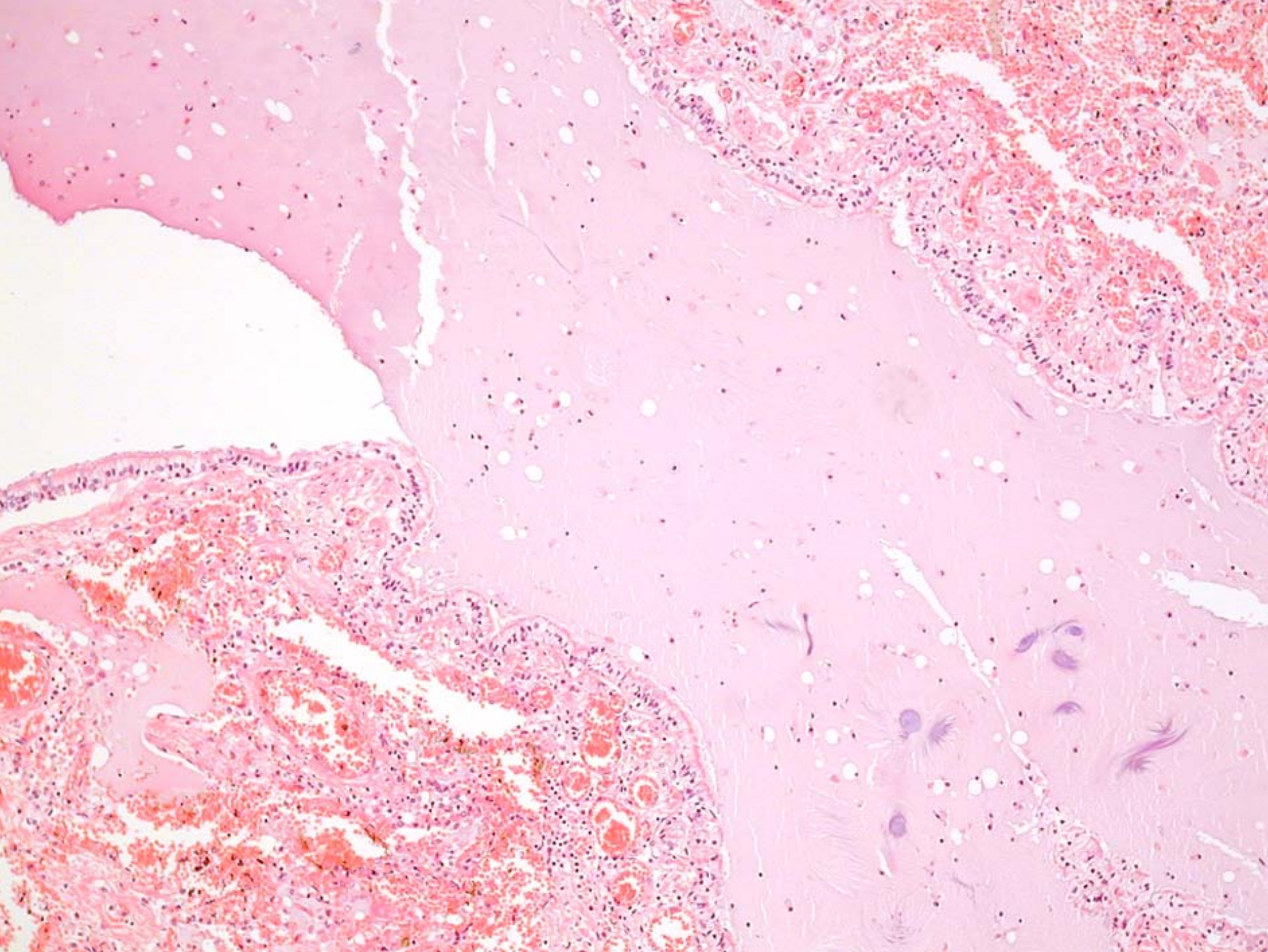
Kidneys: both 120 g and normal.

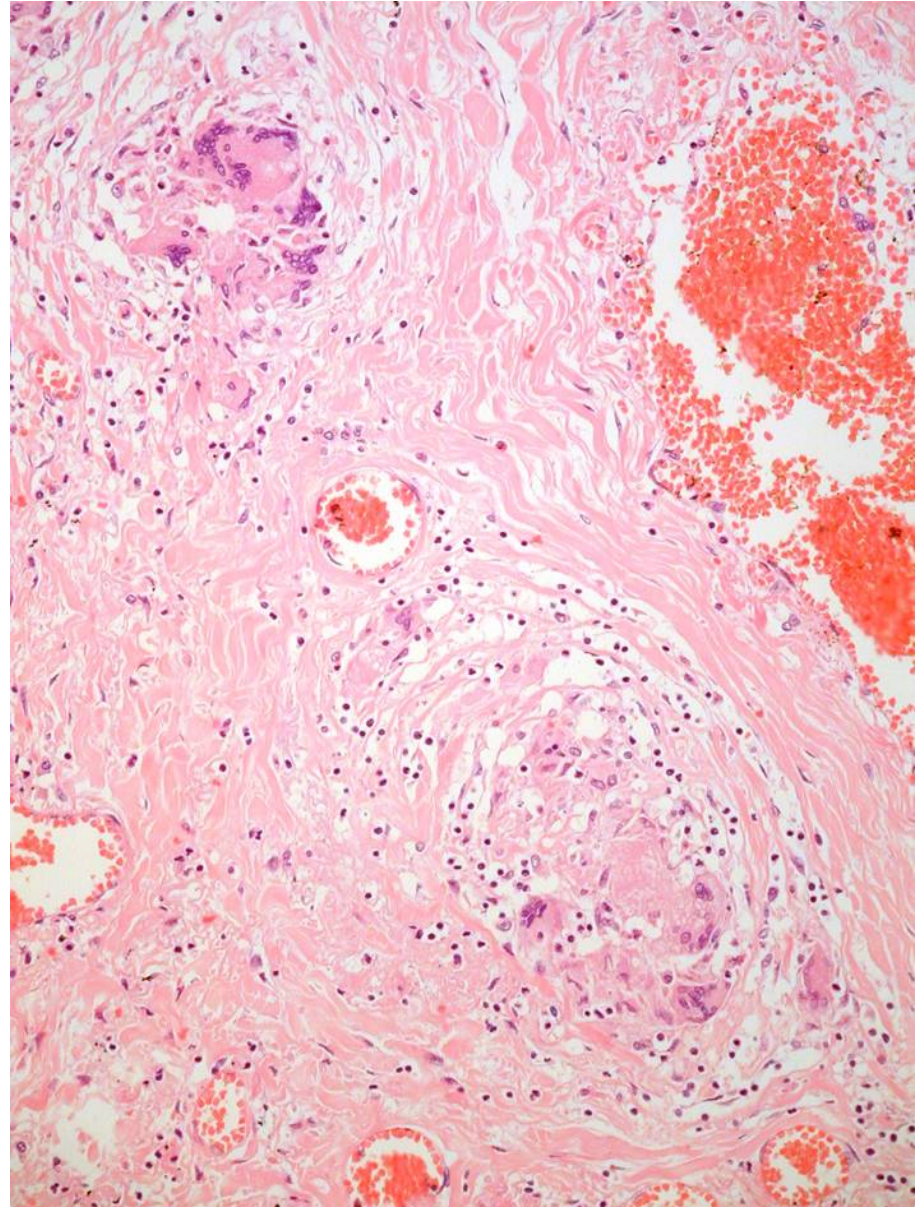
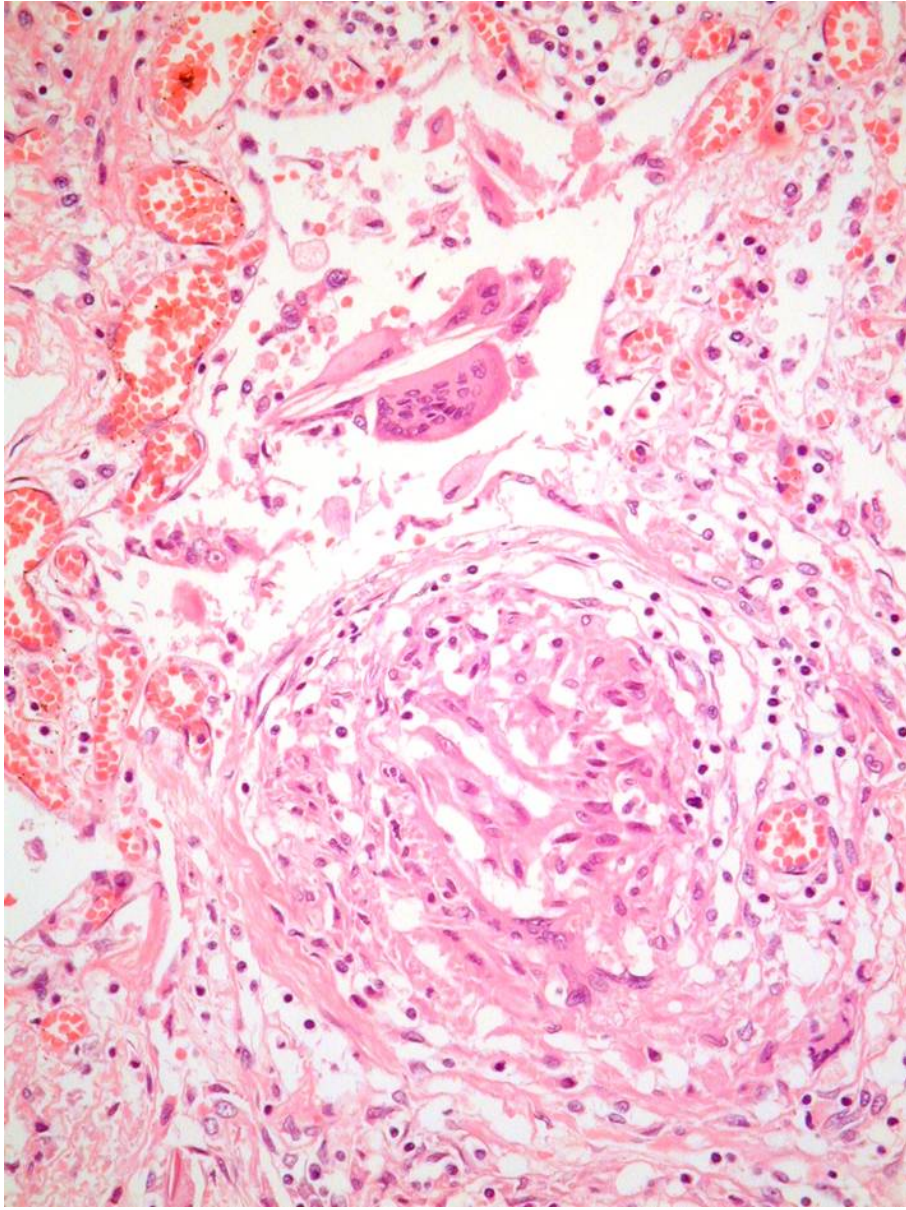
Spleen: (240 g) normal.

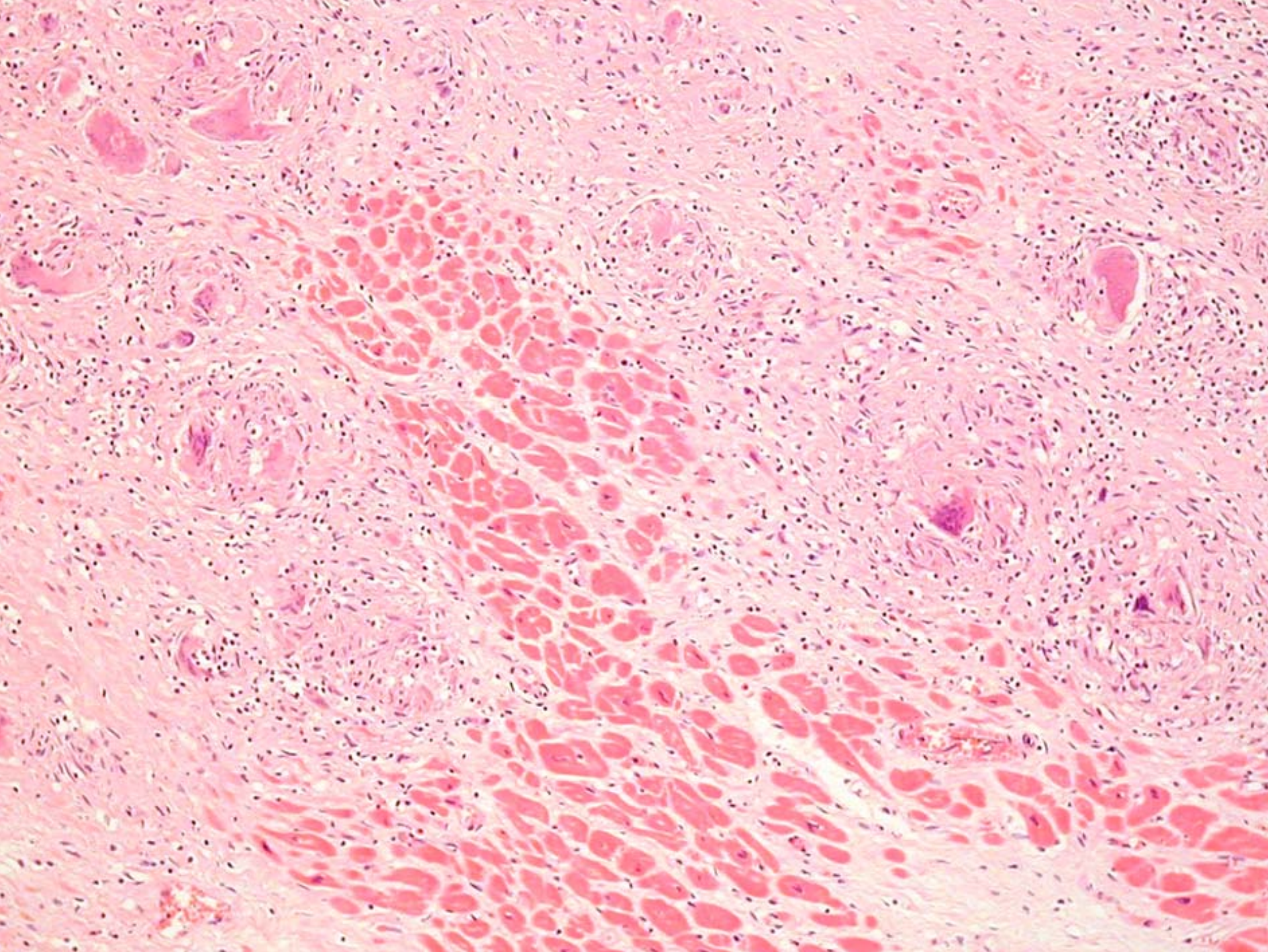
Mild lymphadenopathy within the mediastinum.

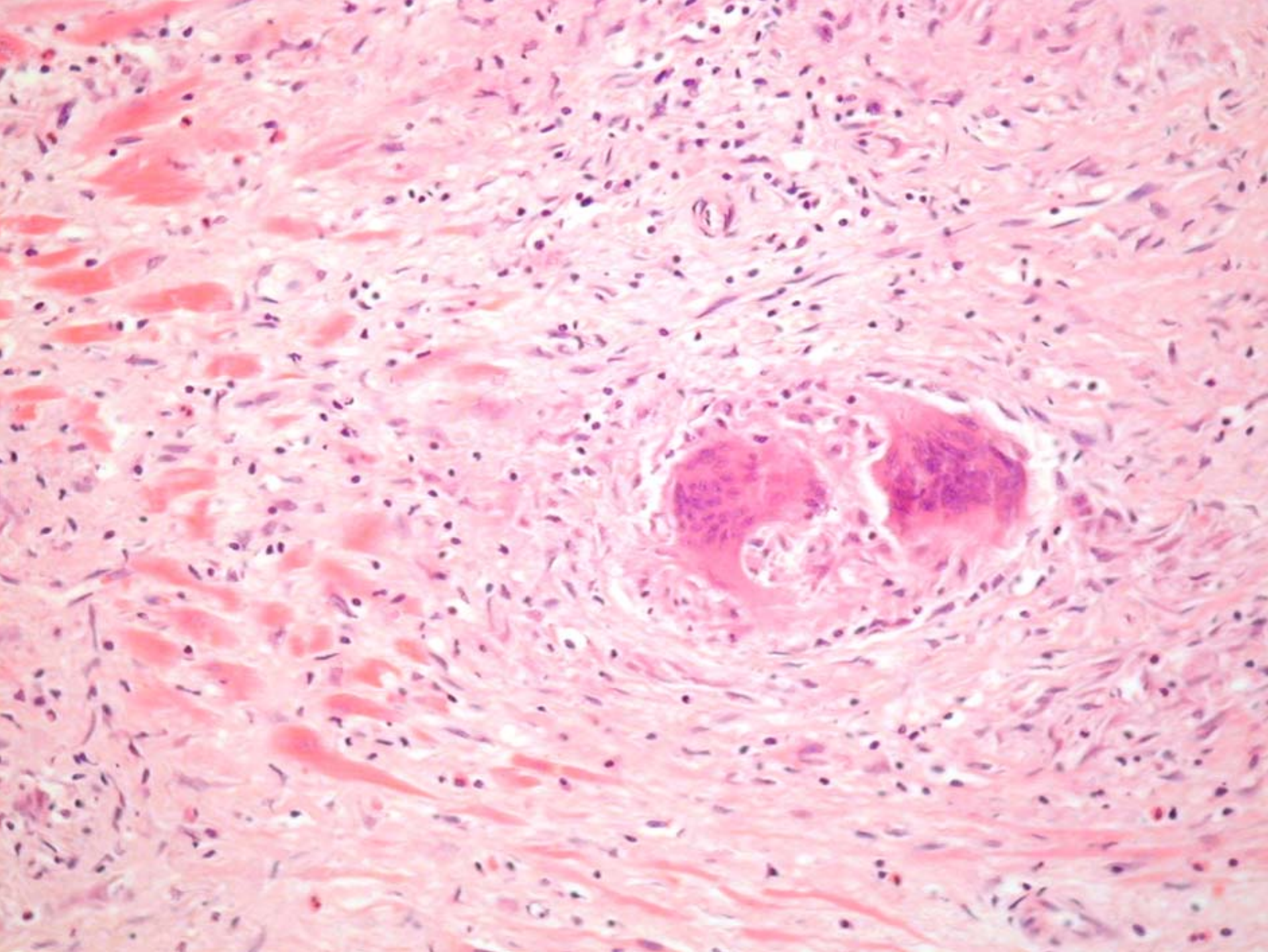


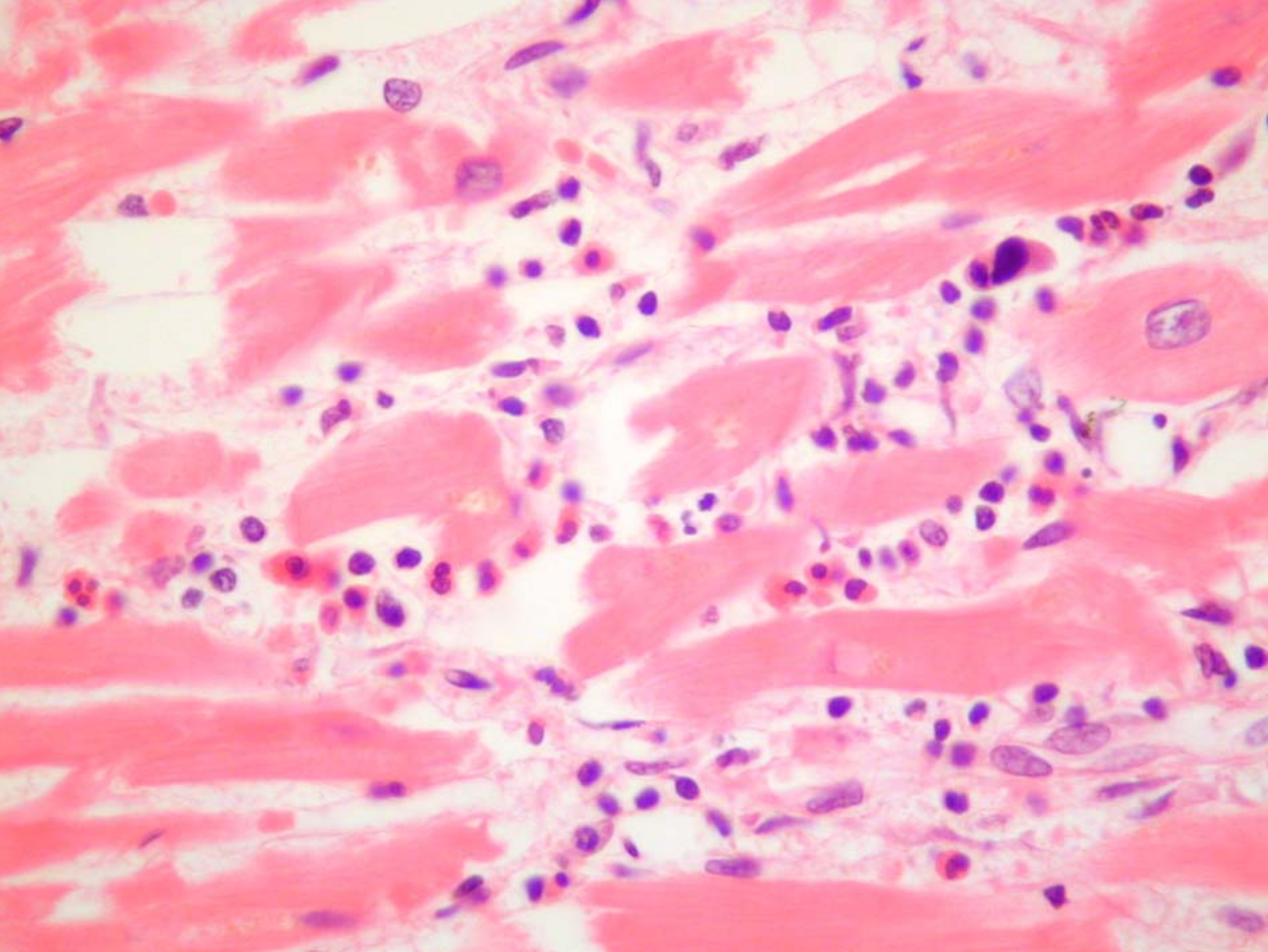


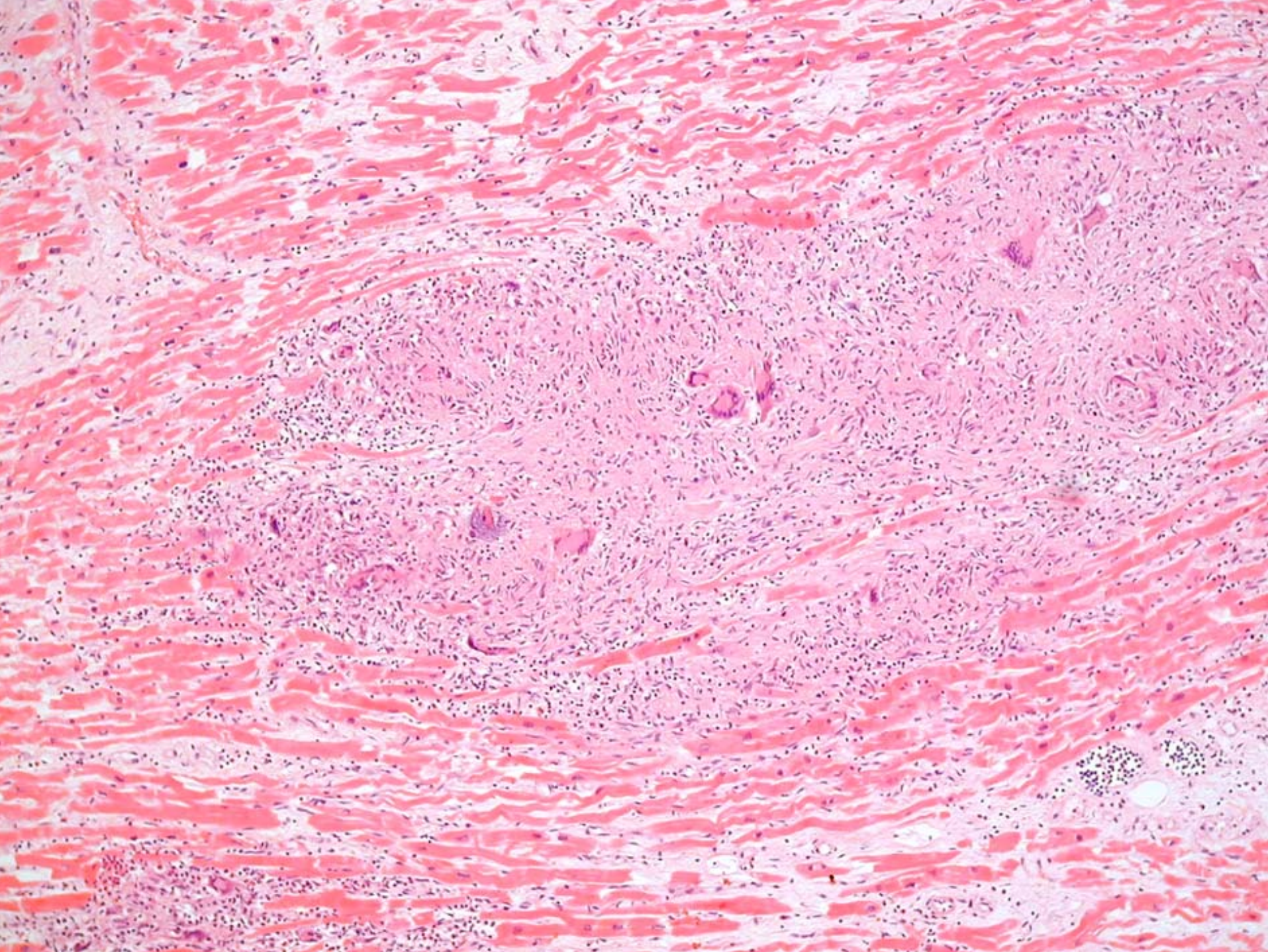


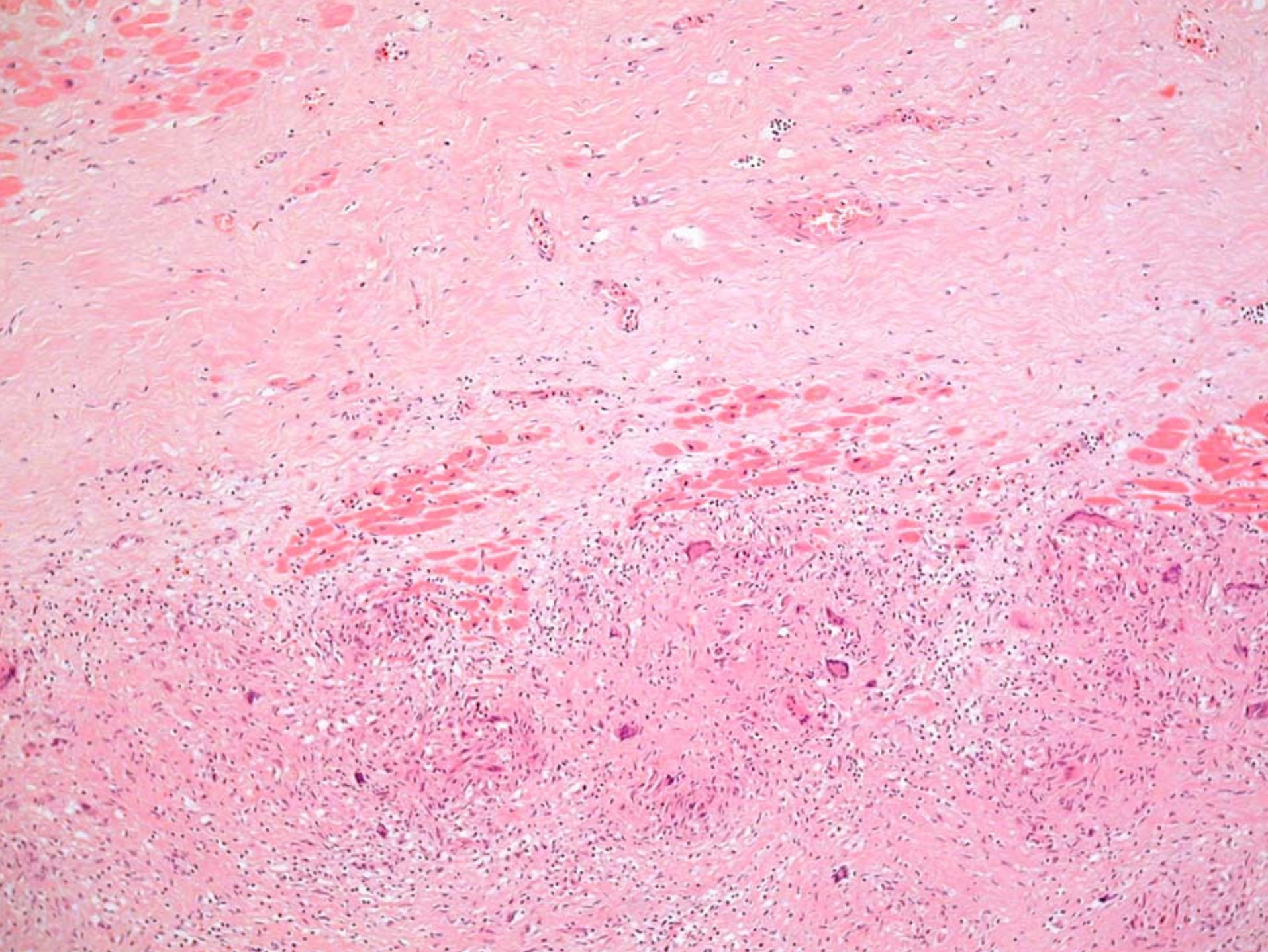


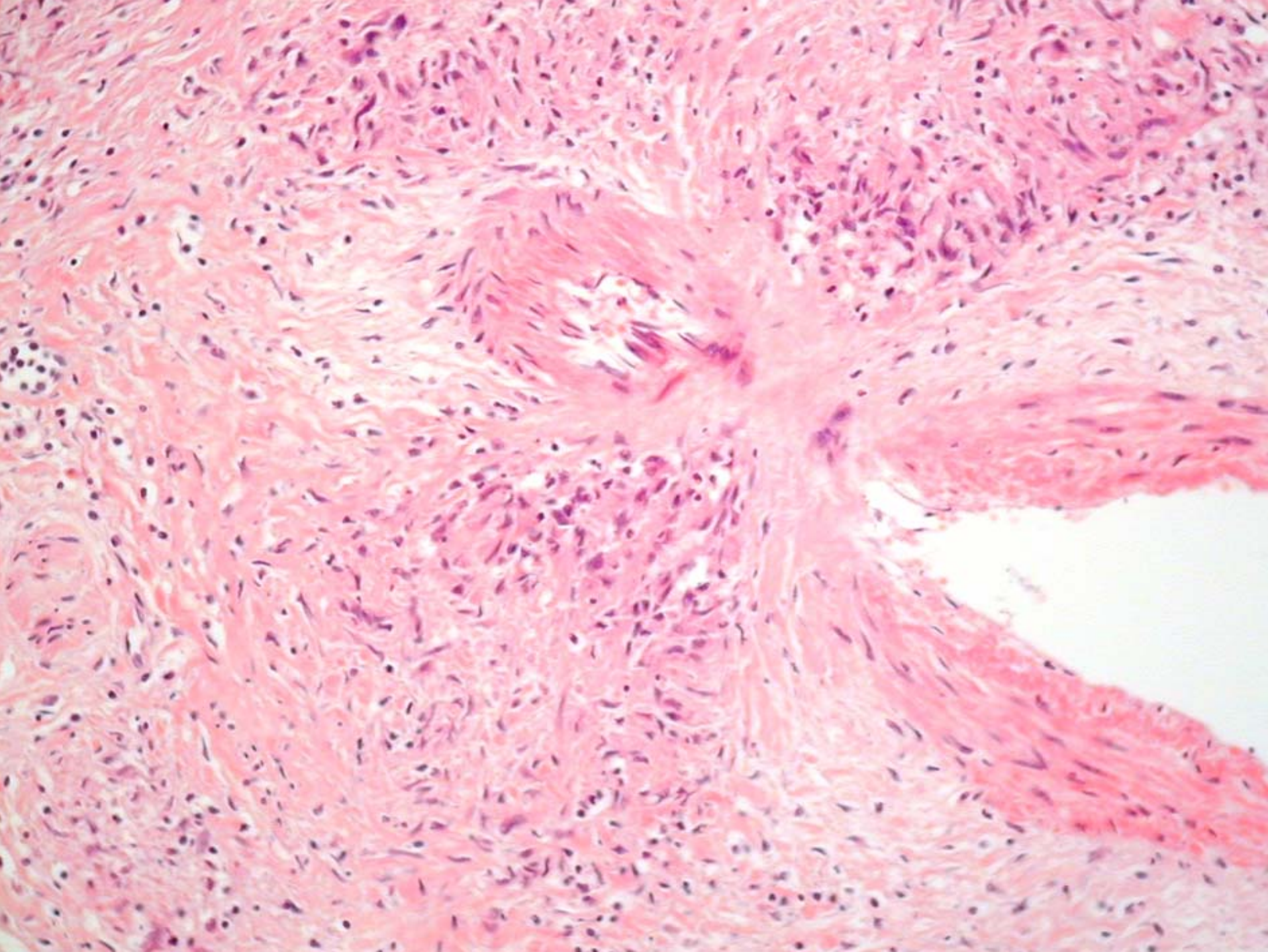












# RESPONSES

Rheumatoid heart and lung disease

Giant cell myocarditis associated with idiopathic pulmonary fibrosis

Non-necrotising sarcoidal granulomatosis

Sarcoidosis x4

# DIAGNOSIS

Cardiac sarcoidosis

# DIFFERENTIAL DIAGNOSIS

Giant cell myocarditis

Features against diagnosis

GCs part of granulomas

extracardiac granulomas

no necrosis

scanty eosinophils

## CASE REPORT

*J Forensic Sci*, July 2007, Vol. 52, No. 4  
doi: 10.1111/j.1556-4029.2007.00455.x  
Available online at: [www.blackwell-synergy.com](http://www.blackwell-synergy.com)

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Sudden Cardiac Death due to Giant Cell  
Inflammatory Processes\*

# DIFFERENTIAL DIAGNOSIS

	Features against diagnosis
Giant cell myocarditis	GCs part of granulomas extracardiac granulomas no necrosis scanty eosinophils
Wegener's granulomatosis	no arteritis, necrosis
Tuberculosis	no necrosis ZN negative
Rheumatic fever	excluded clinically no Aschoff bodies

# Cardiac Sarcoidosis

Review of all published cases of cardiac sarcoid 1966-2002

## Clinical presentation:

Asymptomatic - <5% of patients with sarcoidosis have clinical signs of heart disease vs 30% show evidence of cardiac involvement at autopsy

Complete heart block

Ventricular or atrial arrhythmias

Congestive cardiac failure (dilated cardiomyopathy)

Sudden death - ~70% of fatal cardiac sarcoid diagnosed only at autopsy

# Cardiac Sarcoidosis

## Investigations:

ECG abnormalities – ventricular premature beats, repolarisation abnormalities

Echocardiography – abnormal in 14-31% of patients with nodularity or thinning

Thallium scan – abnormal in 32-63% of patients

Cardiac MRI – early contrast enhancement with inflammation, delayed contrast accumulation with scar tissue

Schultz-Menger et al. Heart 2006;92:399-400

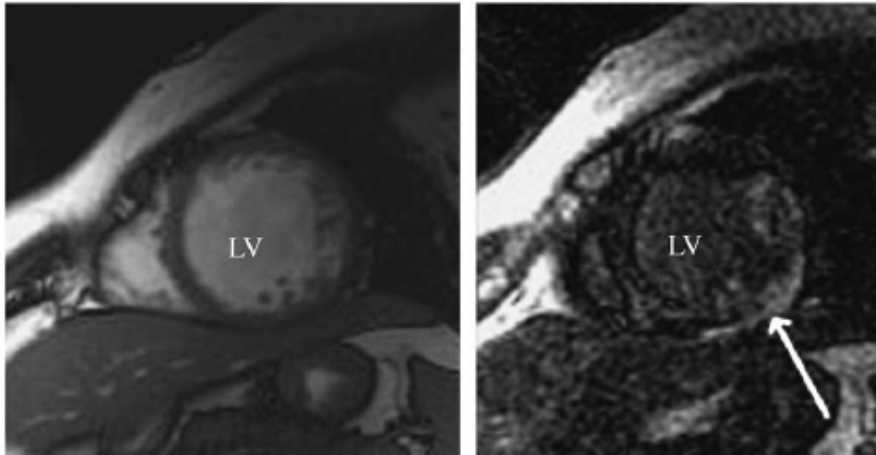
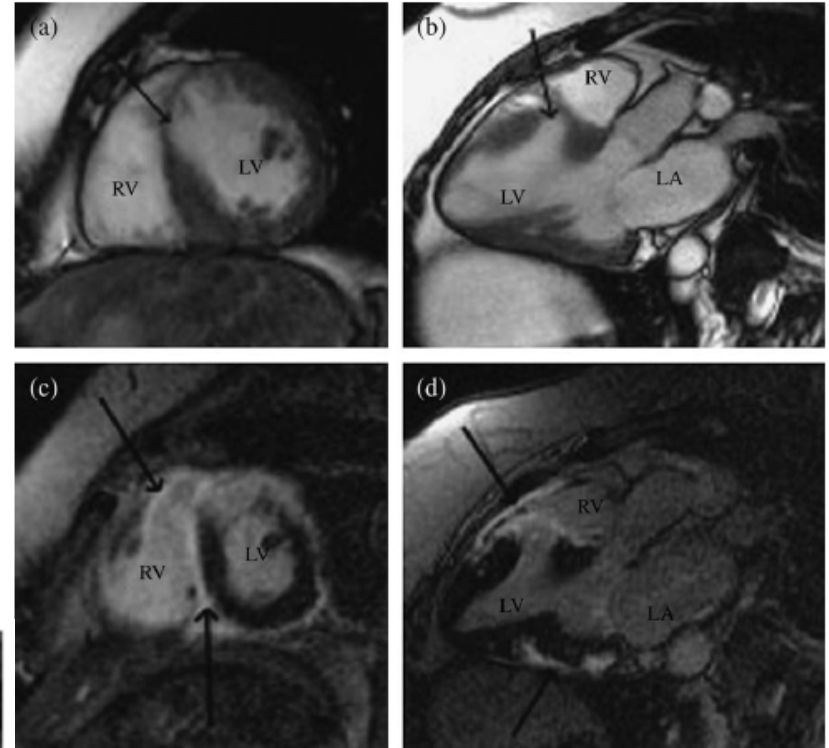
Endomyocardial biopsy unreliable due to patchy disease – 4-19% of biopsies show granulomata

REVIEW

# Cardiac sarcoidosis

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Cardiac MRI