scenarios

- **Question 1**

- a 67 year old man presents at UTH complaining of a headache and tenderness over his right temporal area. He also complains of blurred vision. He gives a history of joint stiffness and flu like symptoms. His blood test demonstrates an evaluated erythrocyte sedimentation rate (ESR)

    - a) What is the most likely diagnosis?

    - b) How would you confirm the diagnosis?

    - c) What are the most common complications of this disease?

    - d) How would you treat the disease?

Rheumatic Heart Disease / Infectious Endocarditis
Mitral Stenosis
Mitral Regurgitation
Antibiotics

- **Question 2**

- **A 3 year old boy presents with a desquamative rash, cervical lymphadenopathy and fever. Blood tests show raised troponin I and T. Coronary vessel angiography demonstrate obstructive lesions and a thrombus.**

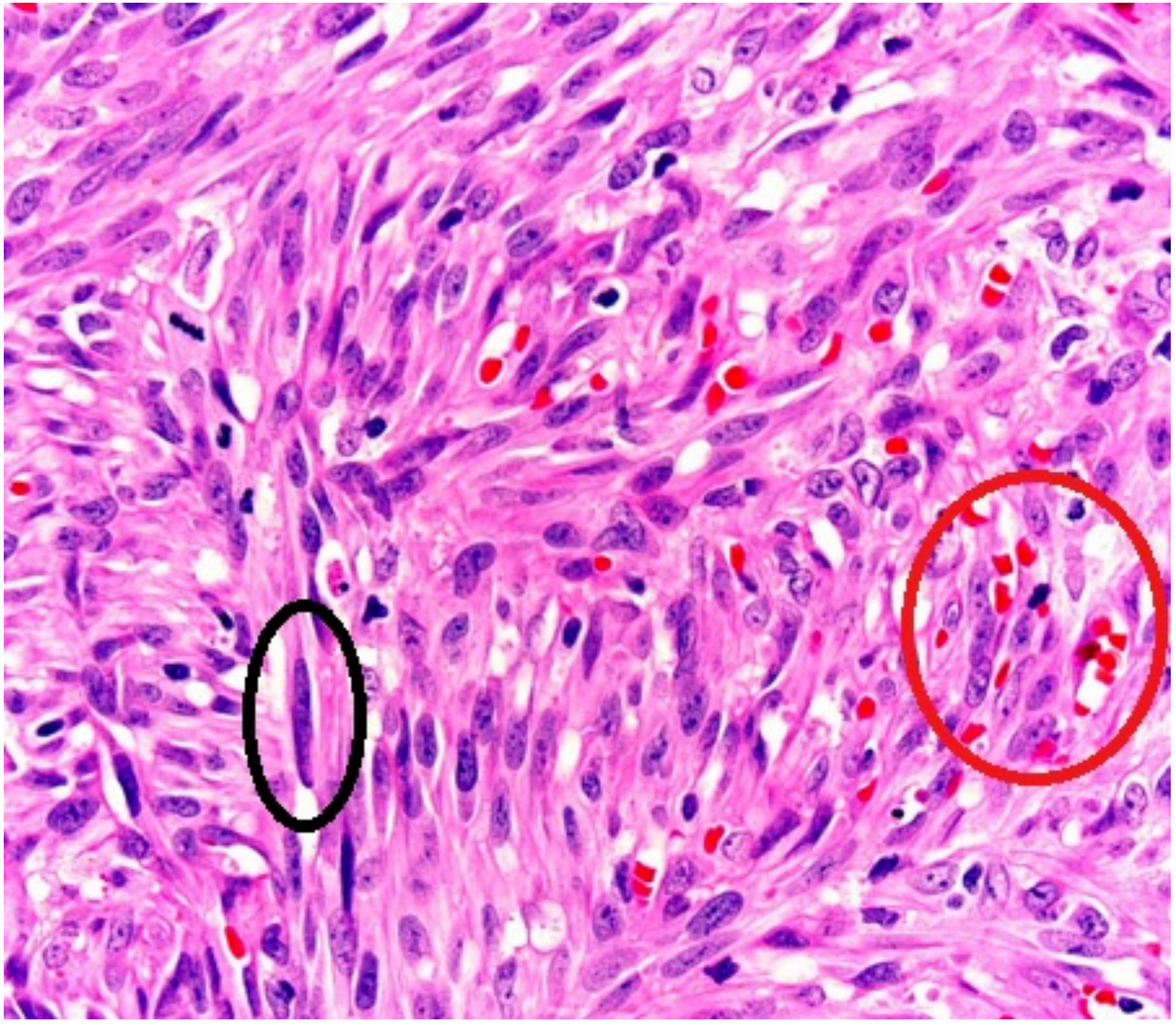
- a) what is the most likely diagnosis? Myocardio Infarction

- b) what is the cause?

- c) what other signs would you look for during your examination of the patient?

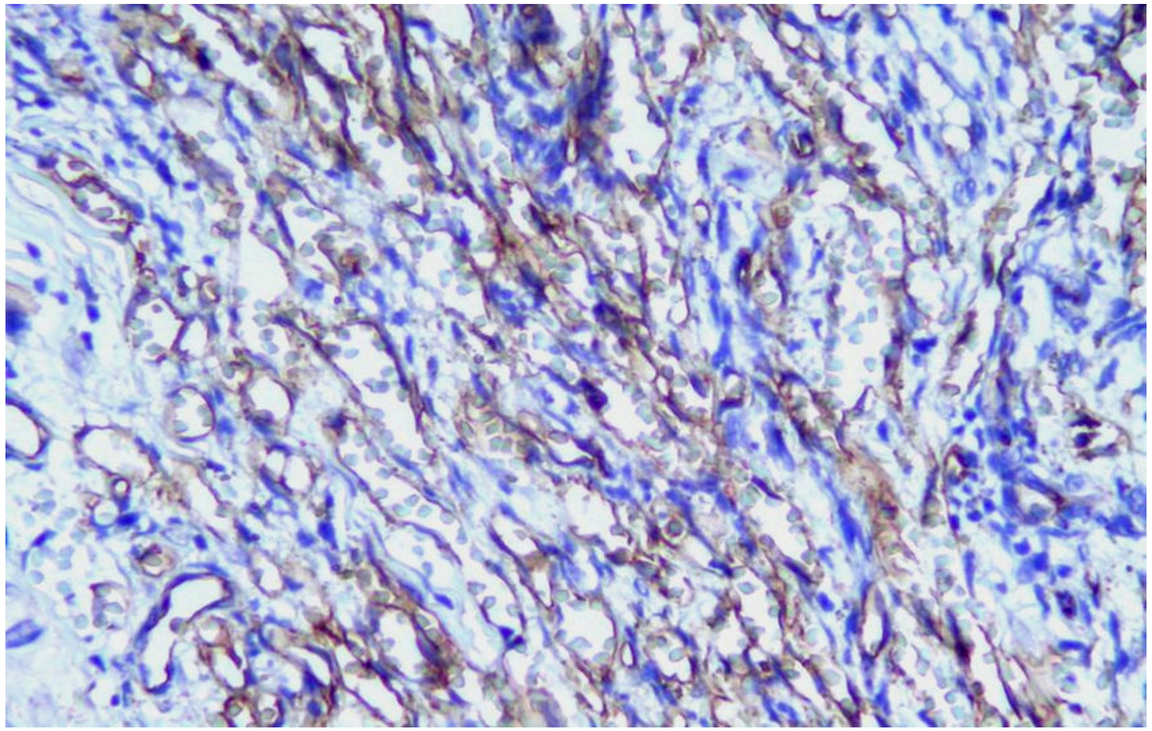
- **Question 3**

- **A 10 year old boy presents to University Teaching Hospital with enlarged cervical and axillary lymph node. At examination, a low grade fever is also found. An HIV test is negative. A biopsy is taken of one of the cervical lymph nodes and is highlighted in the diagram below;**

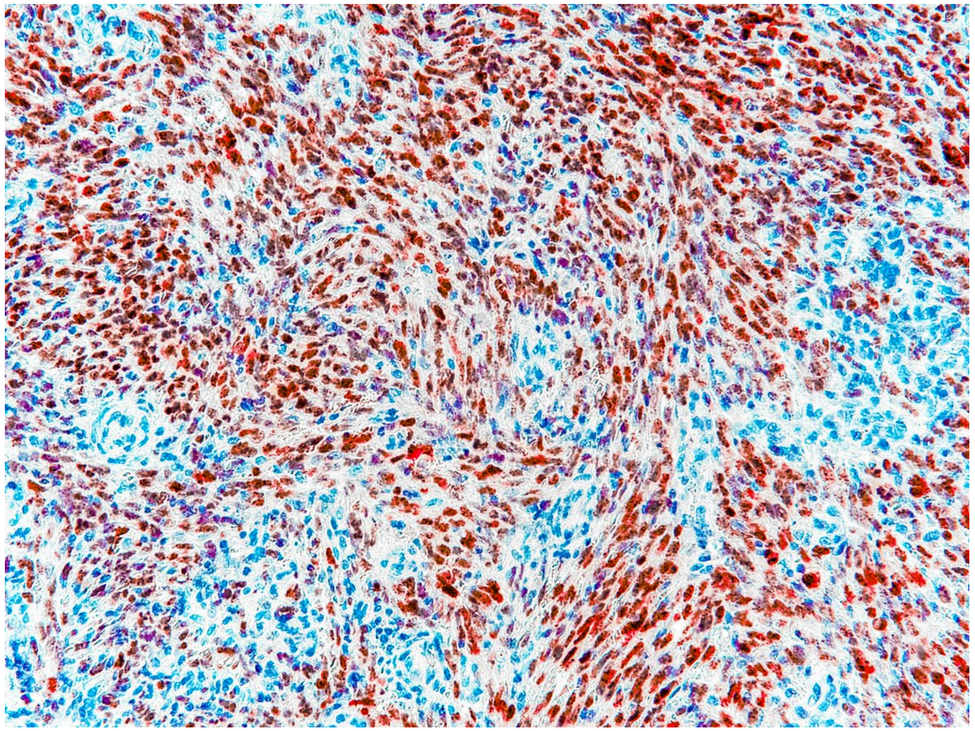


- a) What is the diagnosis?
- b) What is the cell of origin for this lesion?
- c) What immunohistochemical stain can be used to define the cell of origin of this lesion?
- b) What is the cause of this lesion?
- e) What immunohistochemical stain can be used to define or highlight the cause of this lesion (what stain can be used to confirm this diagnosis)?

- CD 34/31



- HHV 8



- **Question 4**

- **A 60 year old male who collapsed suddenly in UTH emergency department presented with upper back pain. At autopsy**

    - **500mls blood in pericardial sac**

    - **significant narrowing of each major coronary artery**

    - **occlusive thrombus in proximal third of right coronary artery**

- a) What primary lesion did the patient have in their coronary artery?

M.I.

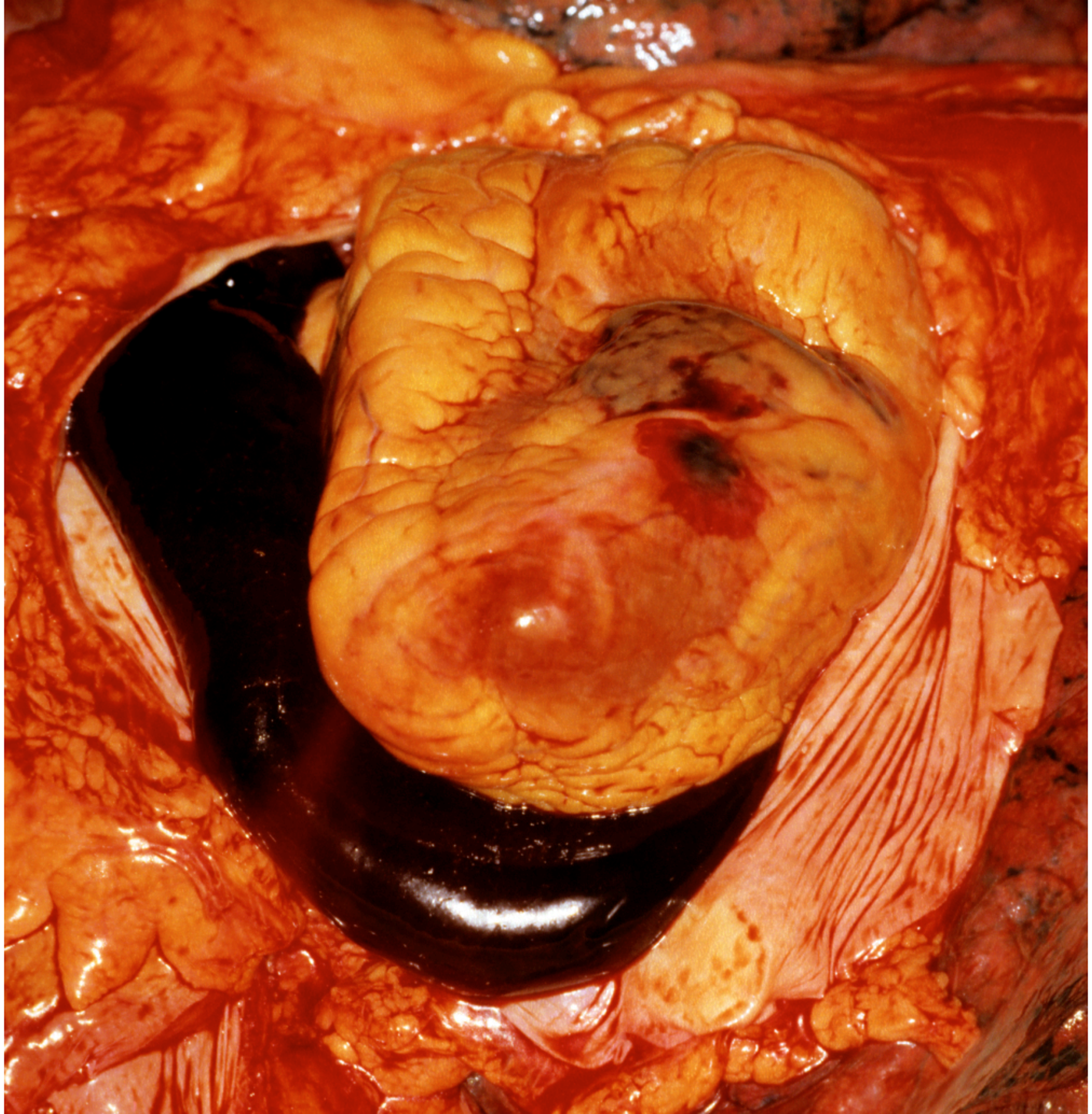
- b) What complication of the lesion (in a) did the patient have?

Ventricular Rupture

- c) Explain the pathogenesis of the formation of this complication?

- Reduced blood flow to area causes tissue necrosis due to ischaemic
- this part of tissue then forms scar tissue which cannot withstand the pressure of a normal beating heart causing a deadened results in the rupture

What do you see in this photo?



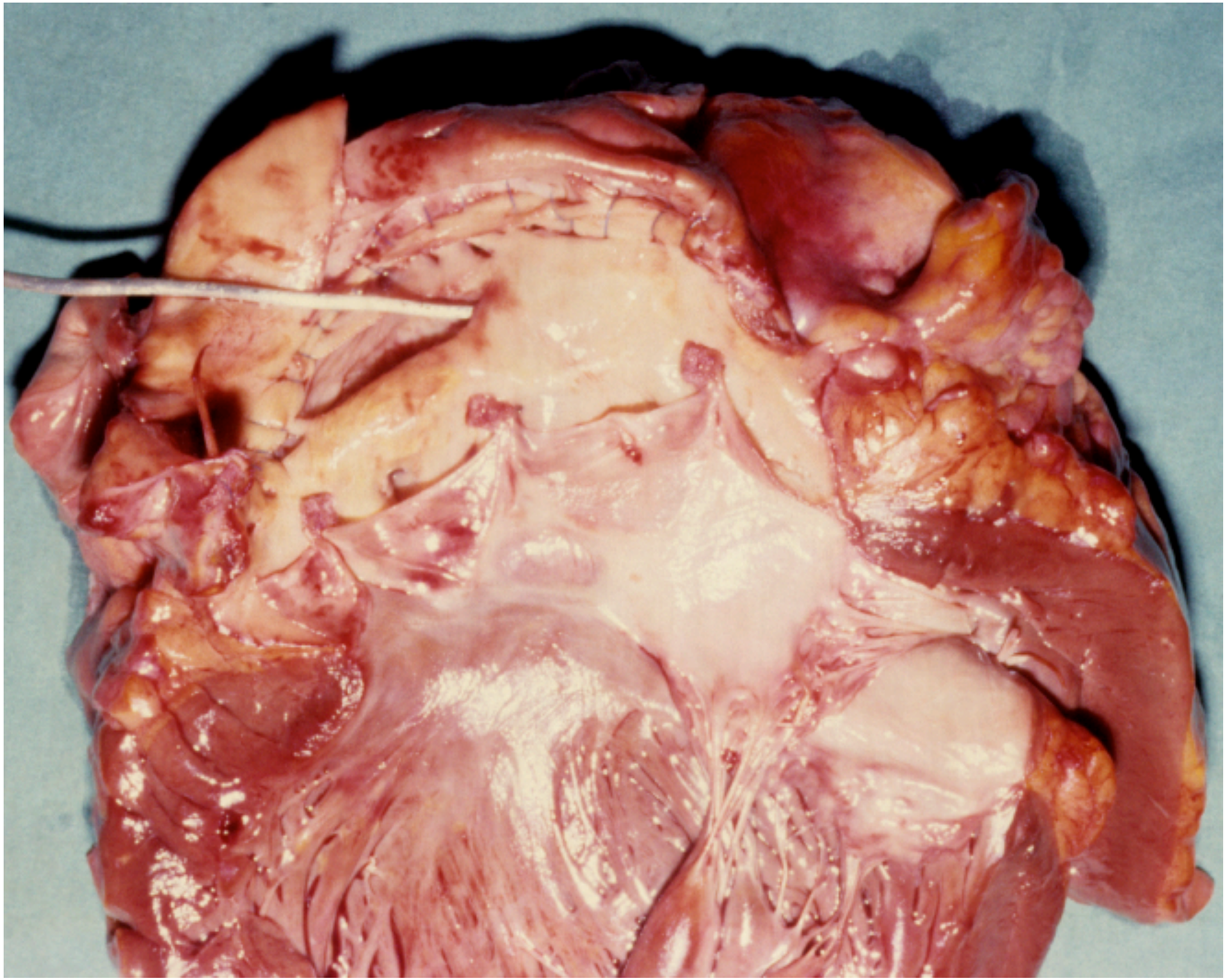
- d) What has happened to the heart to explain the findings in the previous photo? Vesicular Rupture

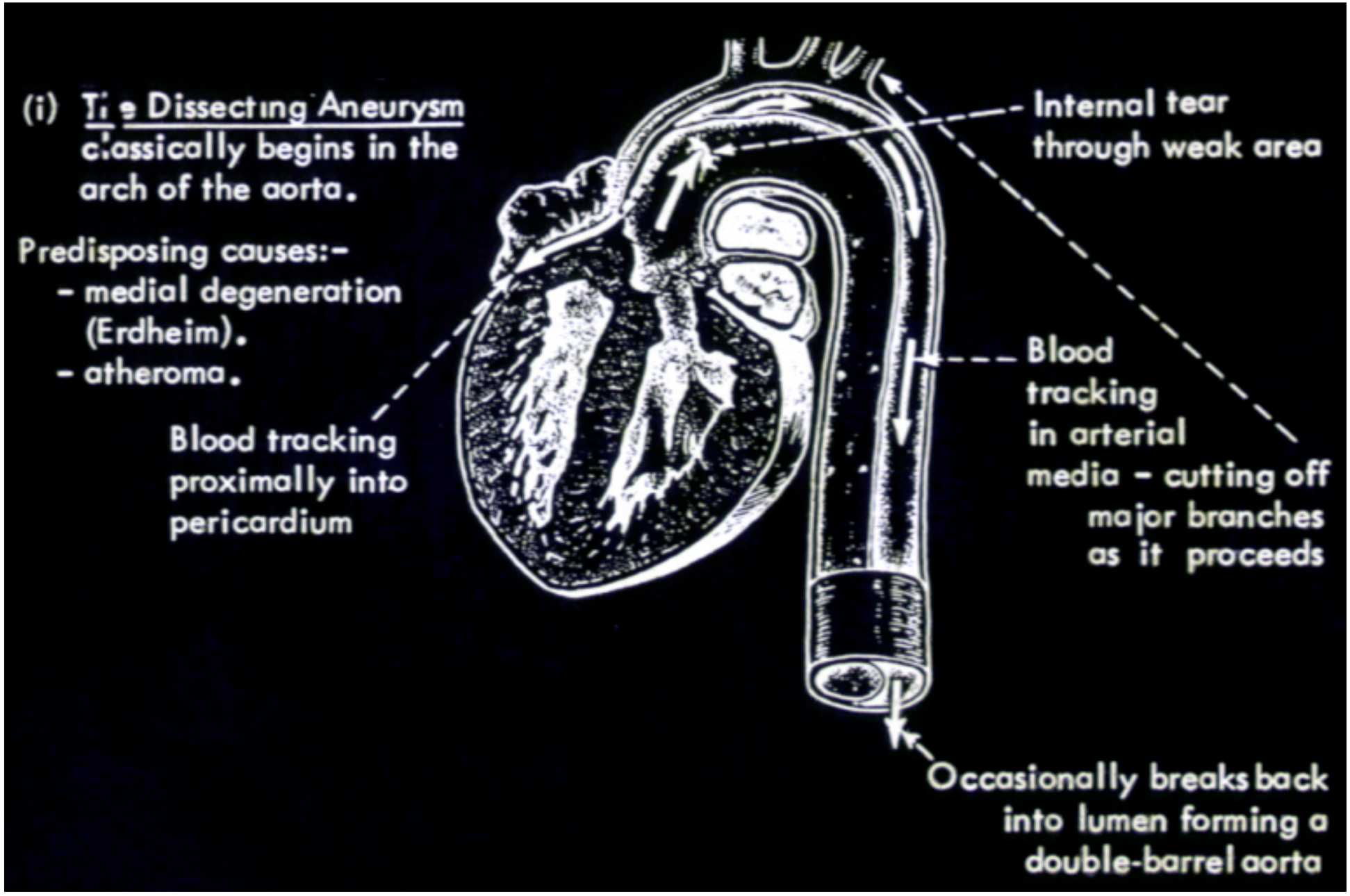
- e) What else can cause these findings?

Angina

What do you see?

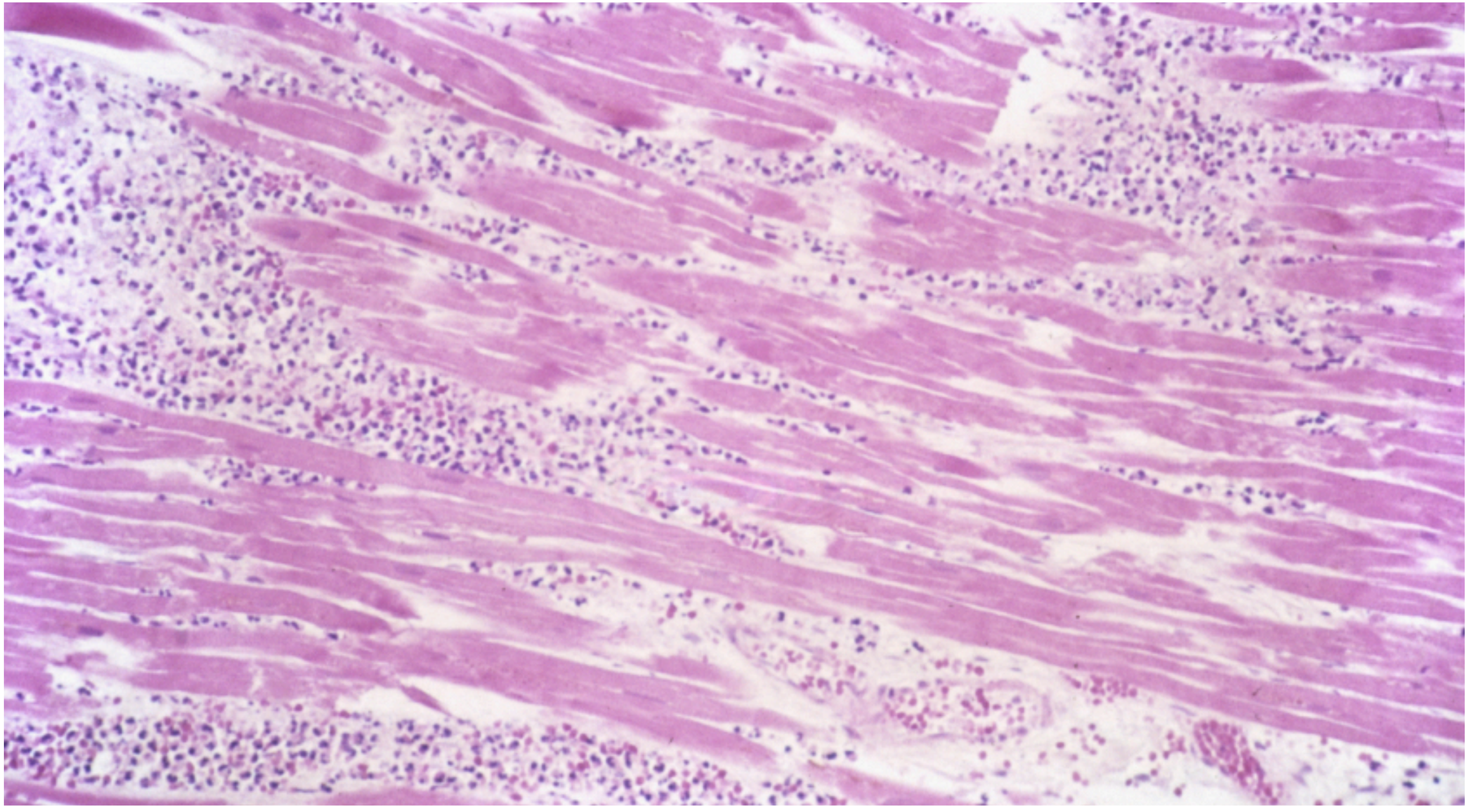
Aortic Rupture




(i) The Dissecting Aneurysm classically begins in the arch of the aorta.
Predisposing causes:-
- medial degeneration (Erdheim).
- atheroma.
Blood tracking proximally into pericardium
Internal tear through weak area
Blood tracking in arterial media - cutting off major branches as it proceeds
Occasionally breaks back into lumen forming a double-barrel aorta

What does the photograph show?

Leukocyte infiltration of myocardium



f = Reduced blood flow = Ischemia — Necrosis
— Scar formation

g = 2 - 3 days

- f) Explain the mechanism of injury to the cells seen in previous photo
- g) how many days post injury does the biopsy show?

END