

The Cardio-

VASCULAR

System

- Anatomy
- Histology
- Pathology
- Pharmacology
- Physiology
- Microbiology

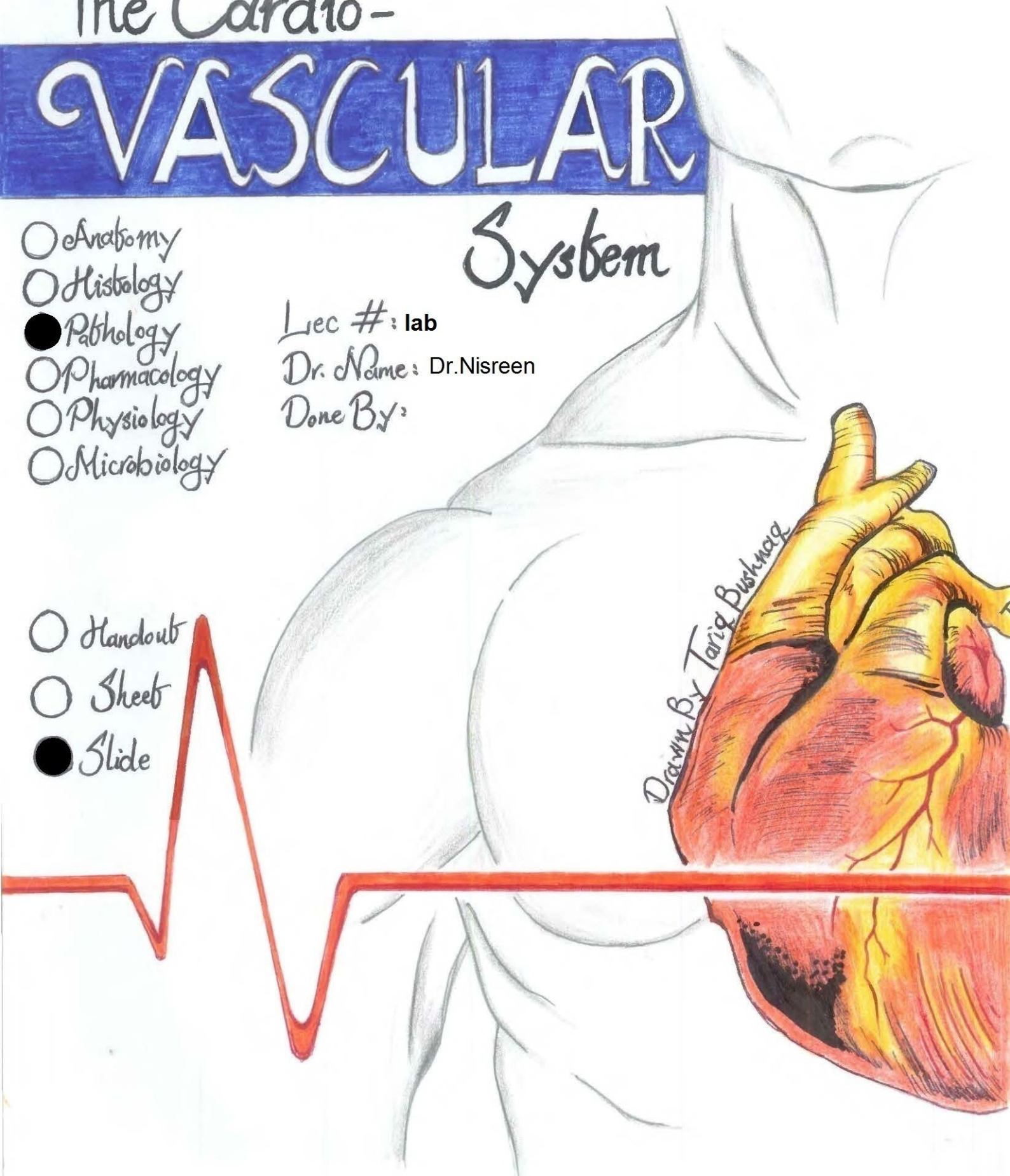
Lec #: lab

Dr. Name: Dr. Nisreen

Done By:

- Handout
- Sheet
- Slide

Drawn by Tariq Bushnaq

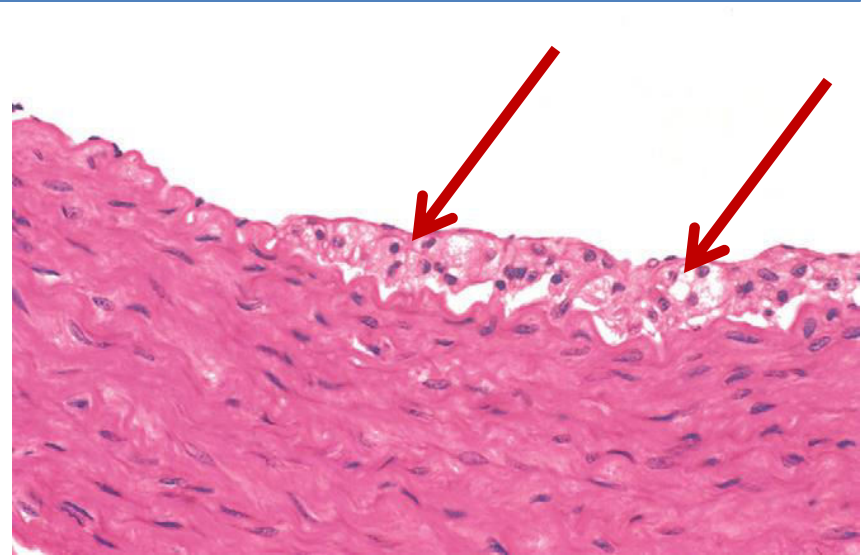
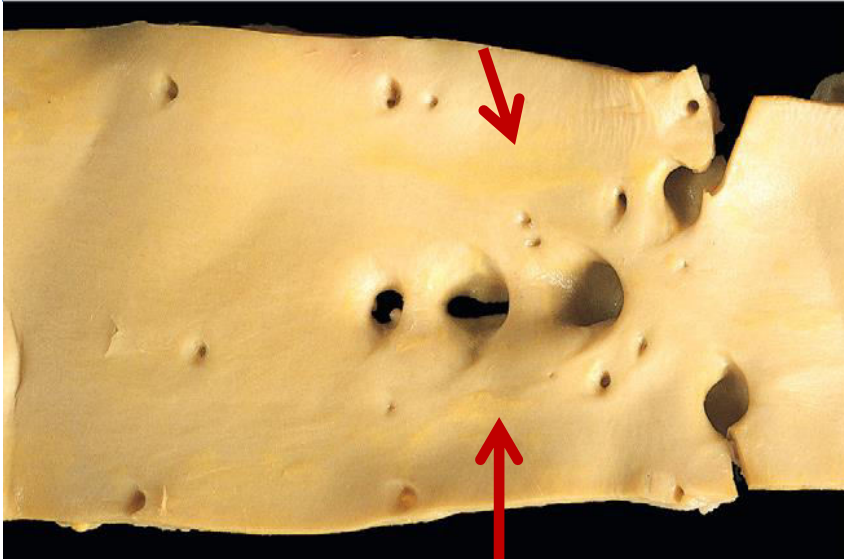


Cardiovascular System- Pathology Lab

3rd year medical students

Dr. Nisreen Abu Shahin

Fatty Streaks



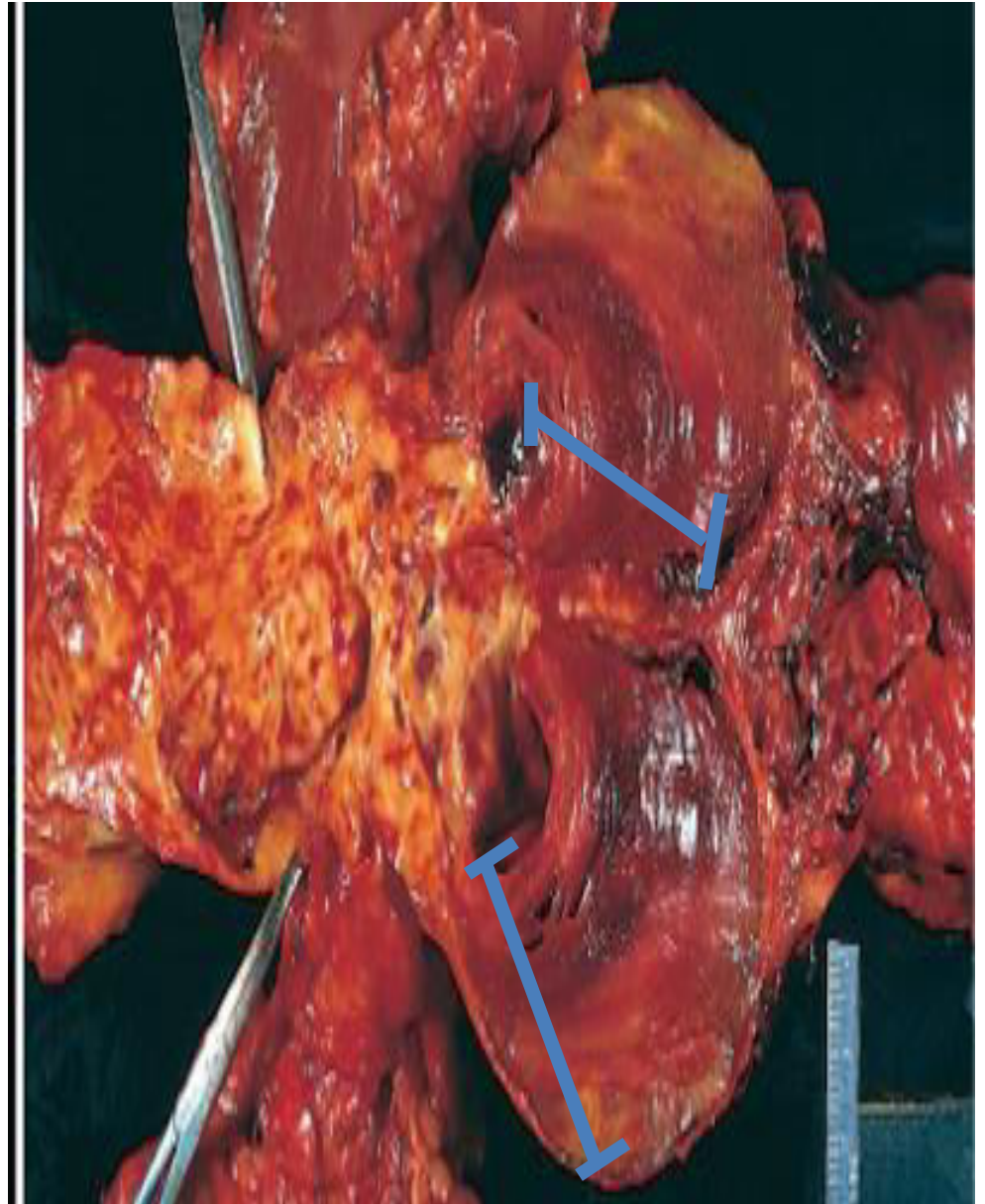
- Fatty streaks begin as minute yellow, flat macules that coalesce into elongated lesions, 1 cm or more in length.
- composed of lipid-filled foamy macrophages but are only minimally raised and do not cause any significant flow disturbance
- Fatty streaks can appear in the aortas of infants younger than 1 year of age and are present in virtually all children older than 10 years

Thrombosis

This picture represents a bisected abdominal aorta with advanced atherosclerosis complicated by thrombosis. The blue lines highlight a characteristic color pattern in the thrombus.

1- what are these color changes called?

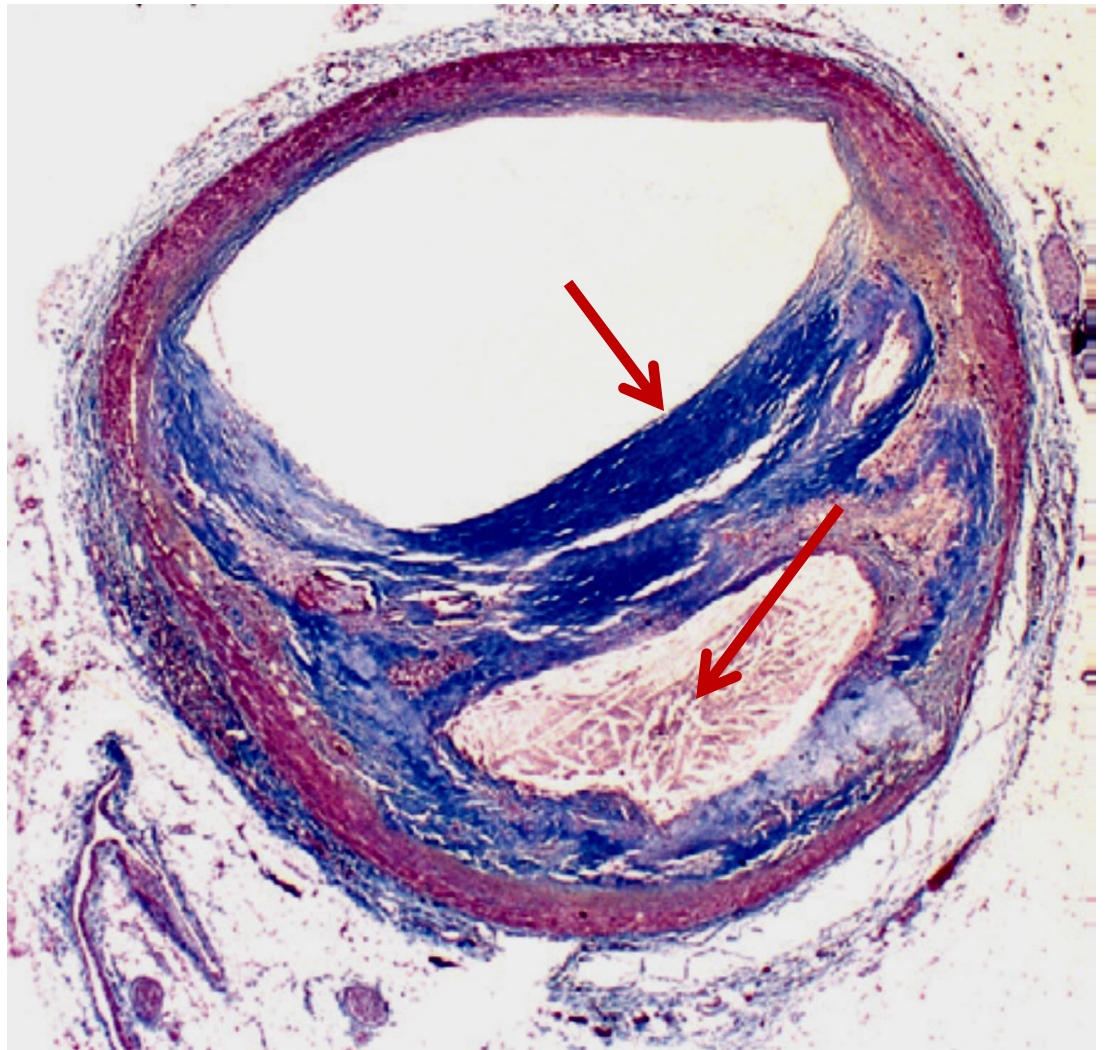
2- what is the clinical significance of these lines?



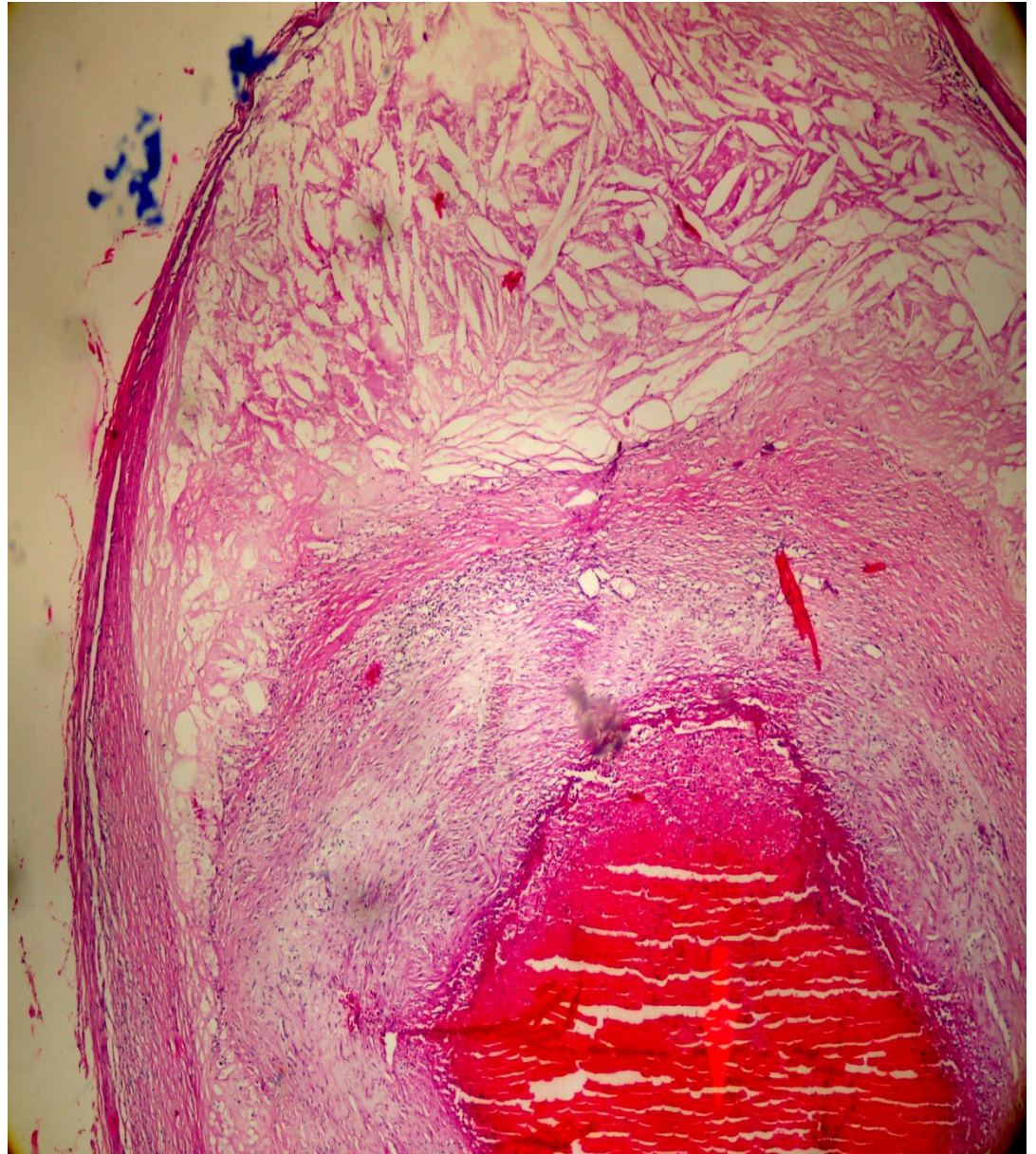
Advanced Atherosclerosis

Name the parts
of this well
formed
atheroma.

Describe the
composition of
each part.



Atherosclerosis



Infarction

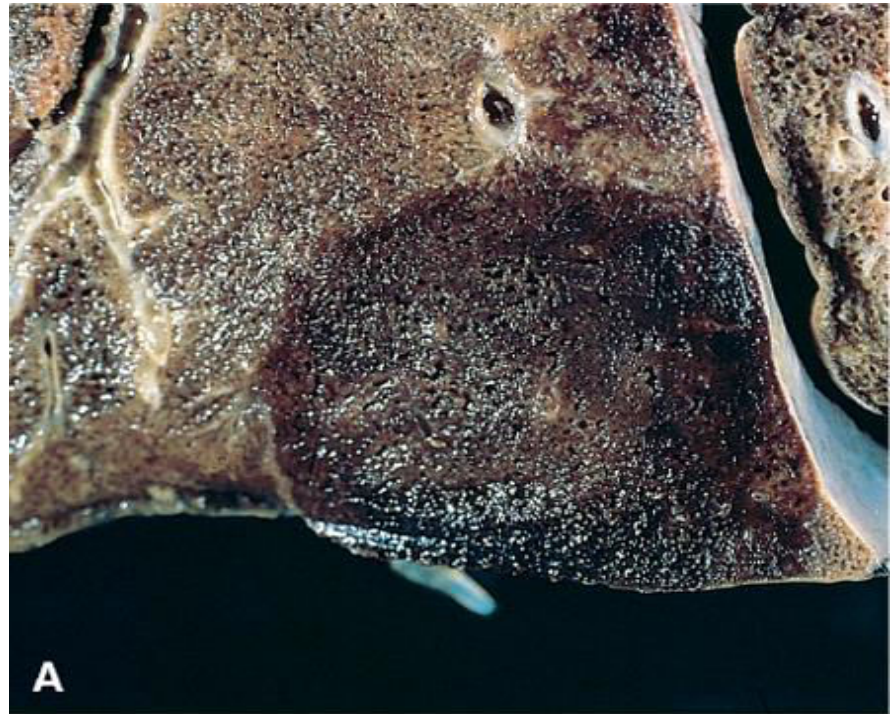
These are examples of lung infarction (A), and spleen infarction (B).

1- what is the type of the lung infarct?

2- what is the type of the splenic infarct?

3- what are the differences between them?

4- describe the microscopic features you expect to see in A and B.



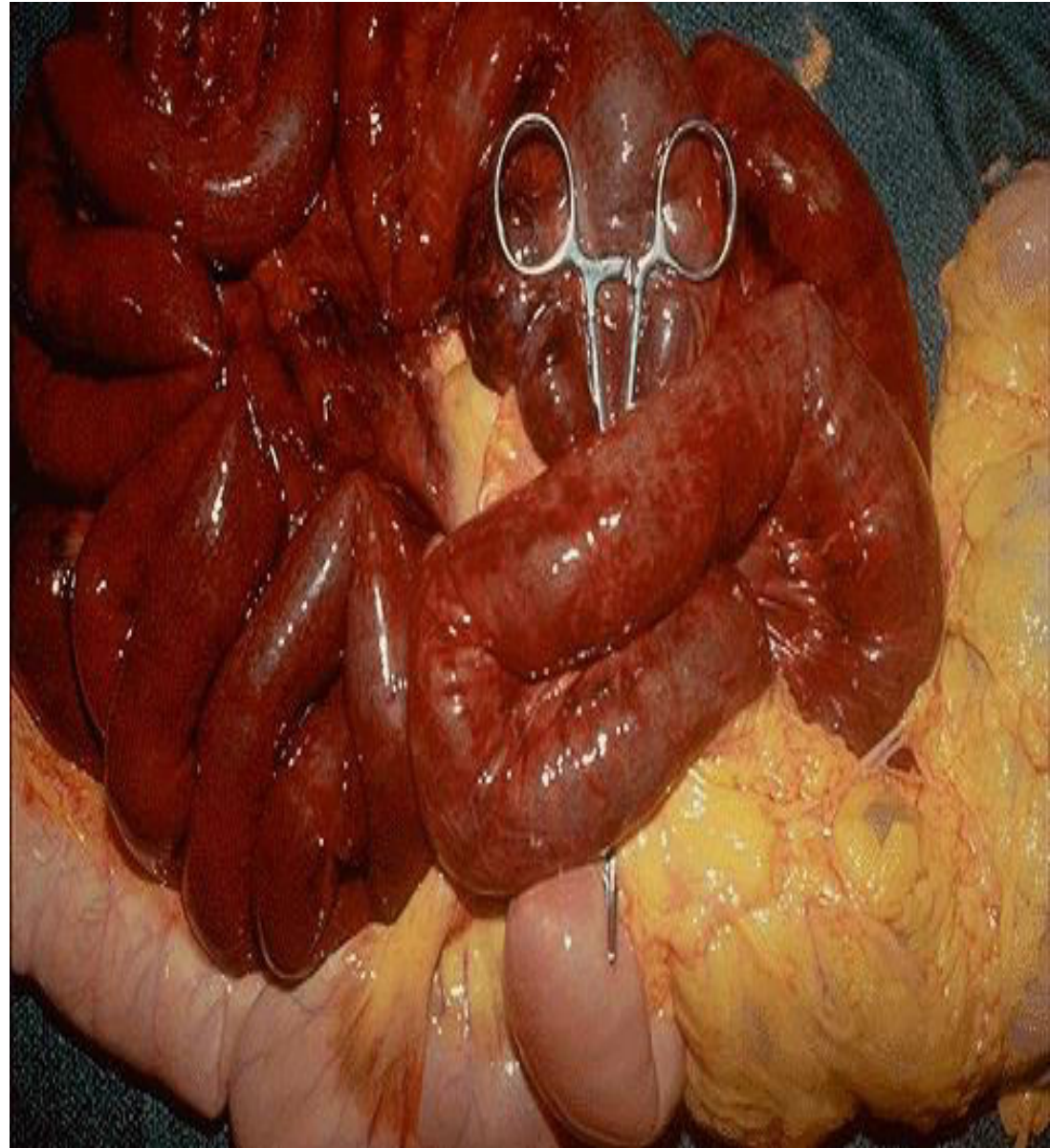
Infarction

A case of sudden mesenteric artery occlusion.

This is a picture of the small intestines upon surgery.

1- what is your diagnosis?

2- what type of infarcts is it? Why?

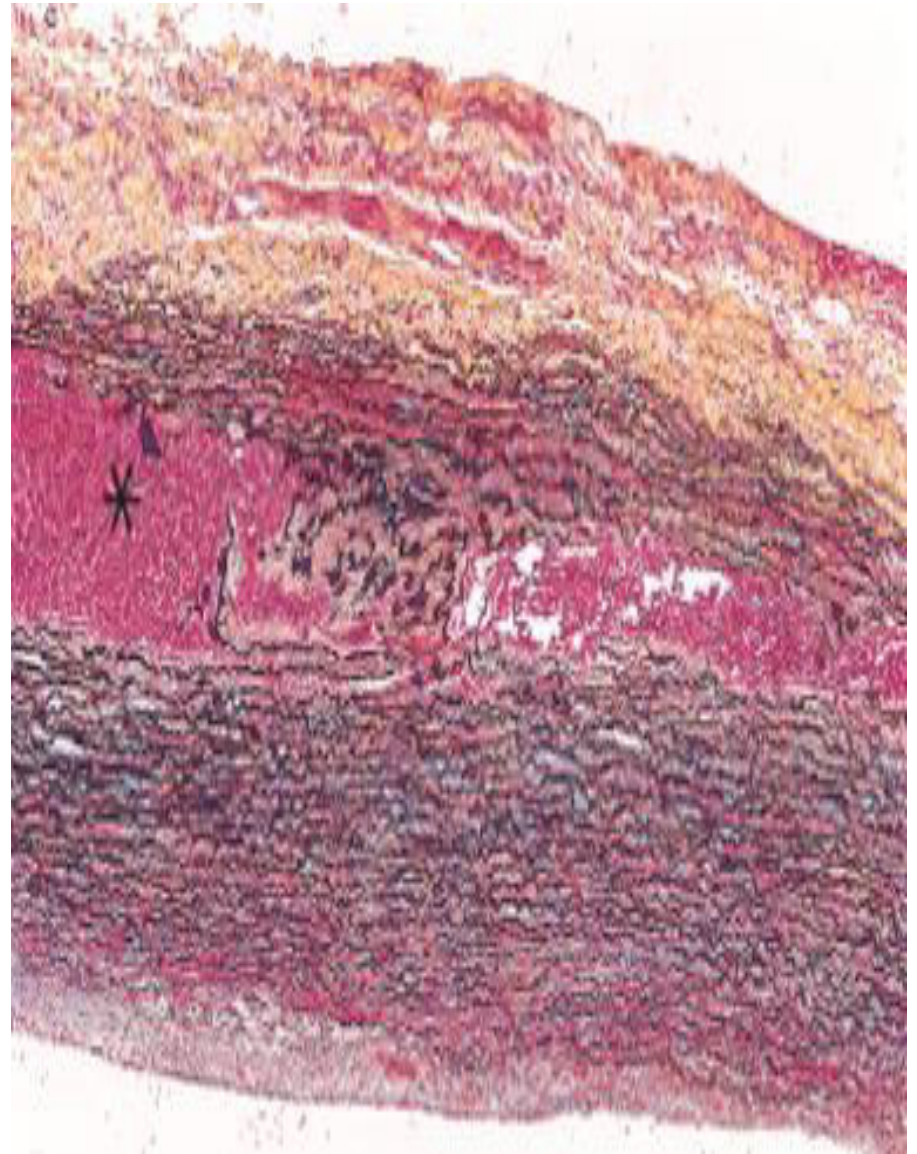


Aortic dissection

This microscopic picture is from a whole thickness section of the aorta. The special histochemical stain used here shows elastic fibers in black color.

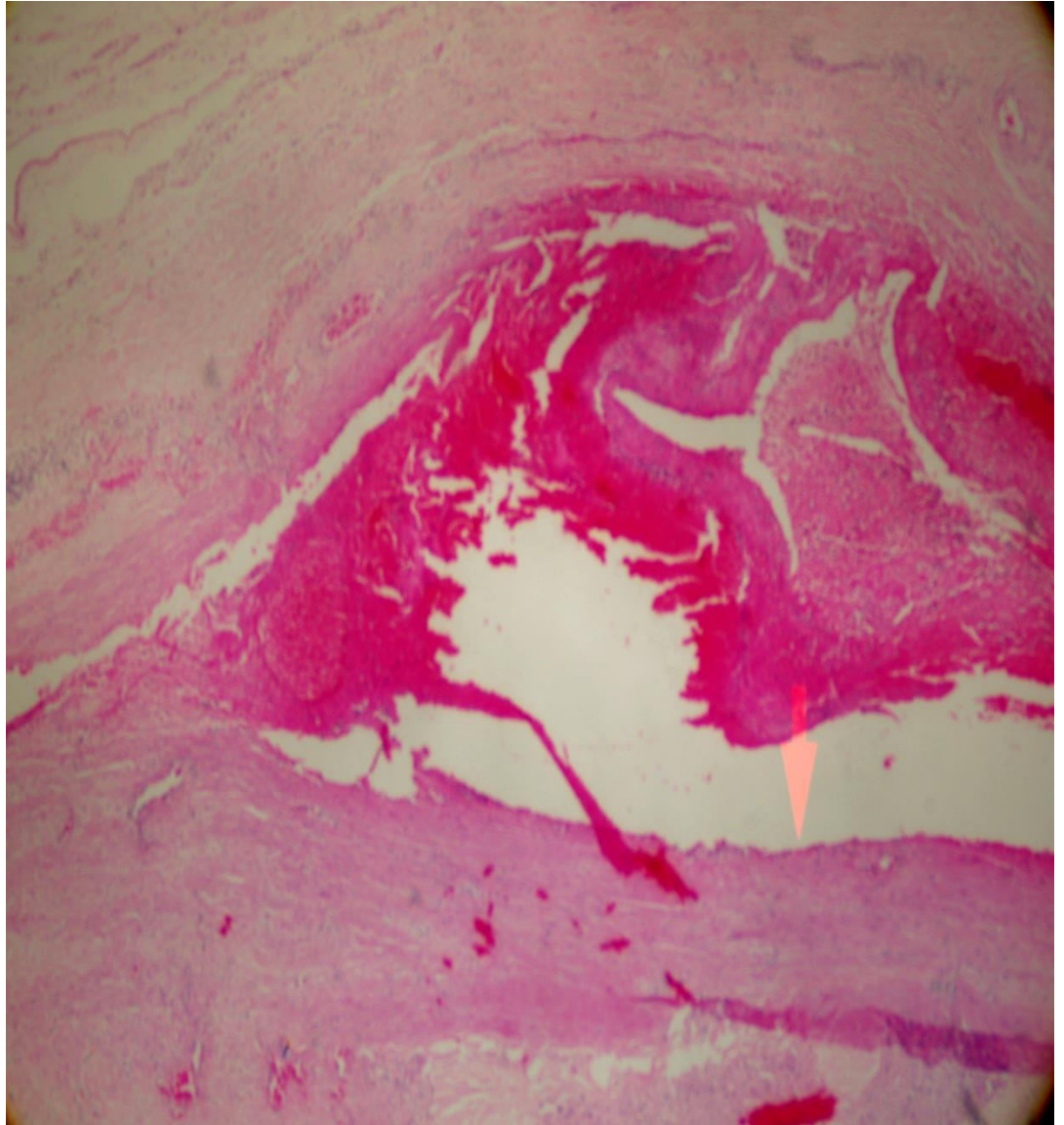
-What does the black star represents?

- Name a major precipitating factor of this condition.



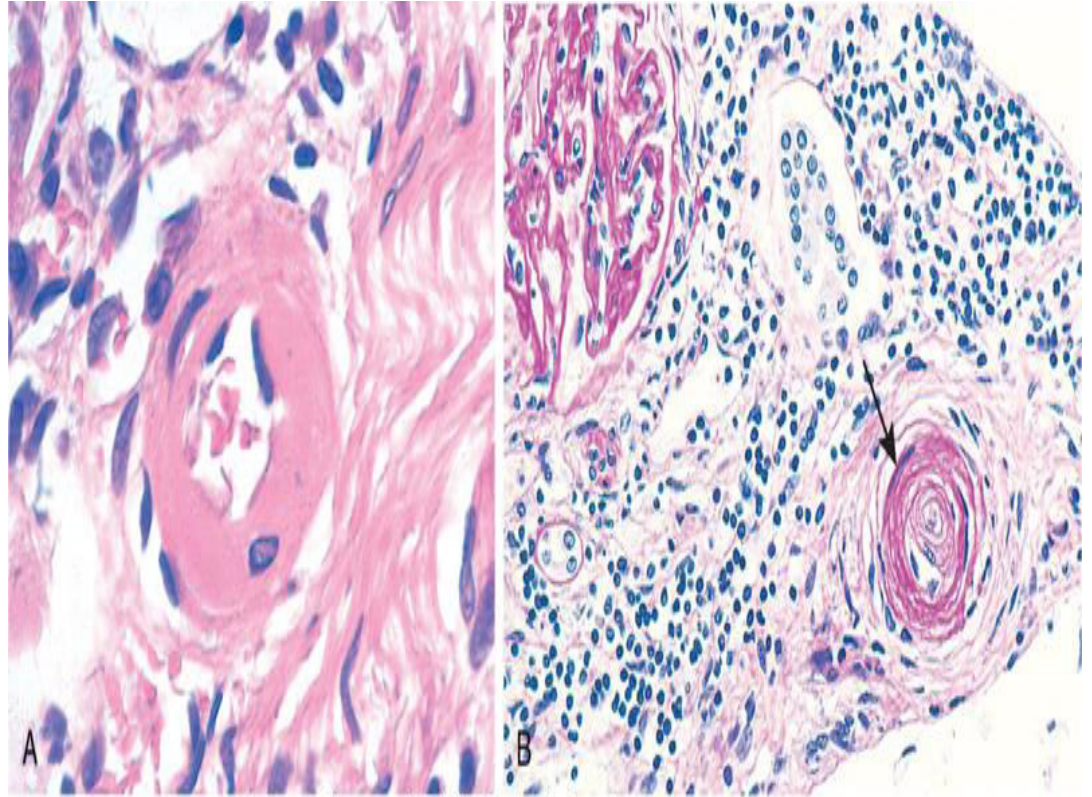
Aortic dissection

Name other disorders that can be associated with it?



Arteriolosclerosis

- List 3 differences between pictures A and B regarding nomenclature; pathogenesis; and the constituents of the deposits within the arteriolar wall.



Kumar et al: Robbins Basic Pathology, 9e.
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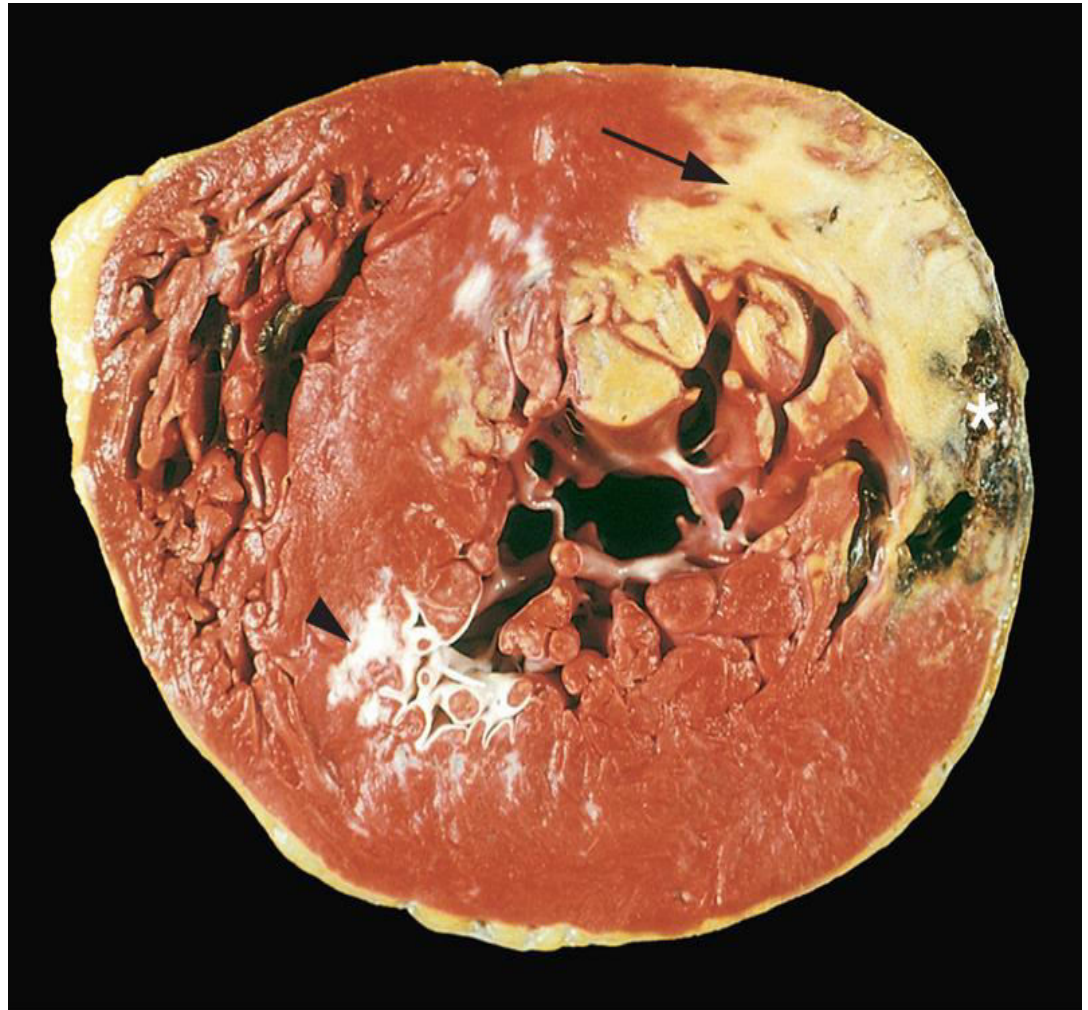
Myocardial infarct

1- what does the arrow represent? recent MI

2- what does the arrowhead represent? site of old MI.

- in old myocardial infarcts, what is the type of tissue that replaces the myocytes? Fibrous scar

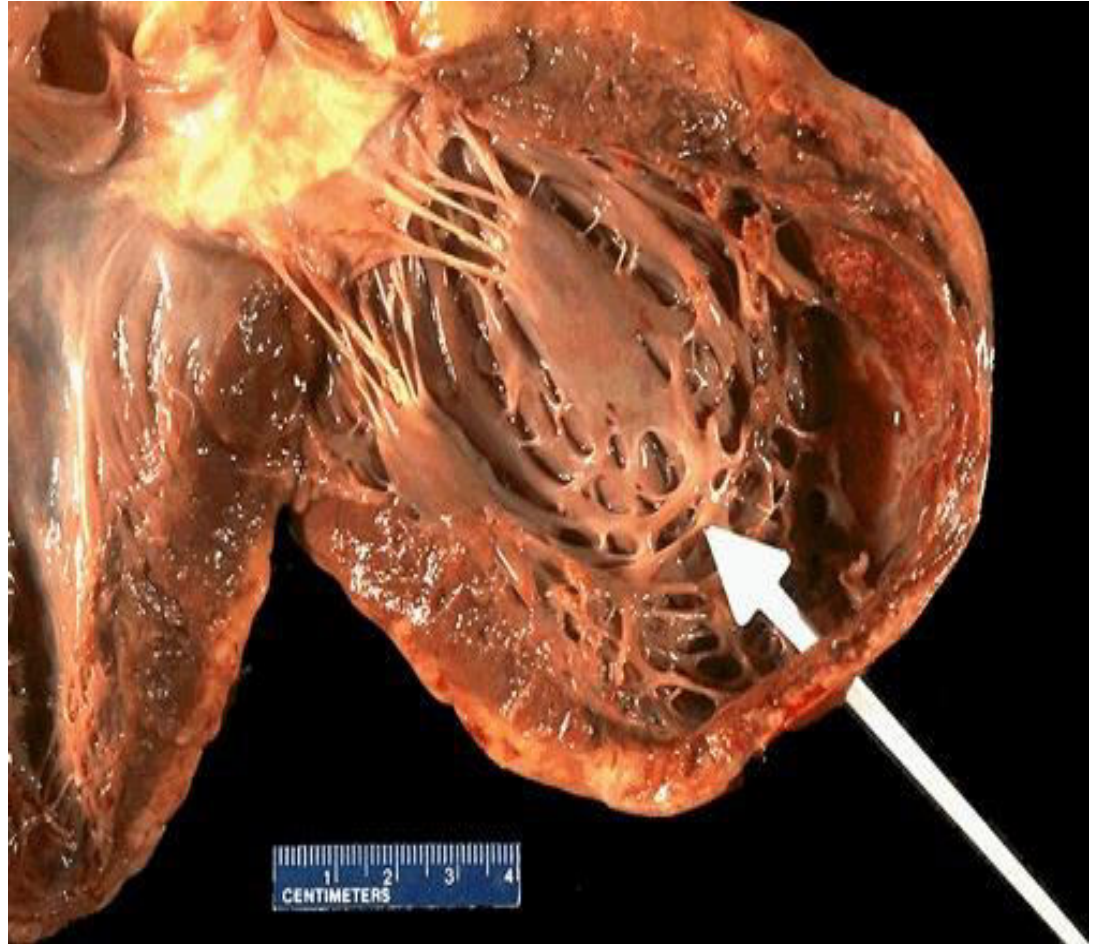
3- what does the asterisk represent? myocardial hemorrhage due to ventricular rupture, a complication of MI



Complications of MI

-what type of complication is seen in this picture (white arrow).

-Mention the consequences that may follow this.

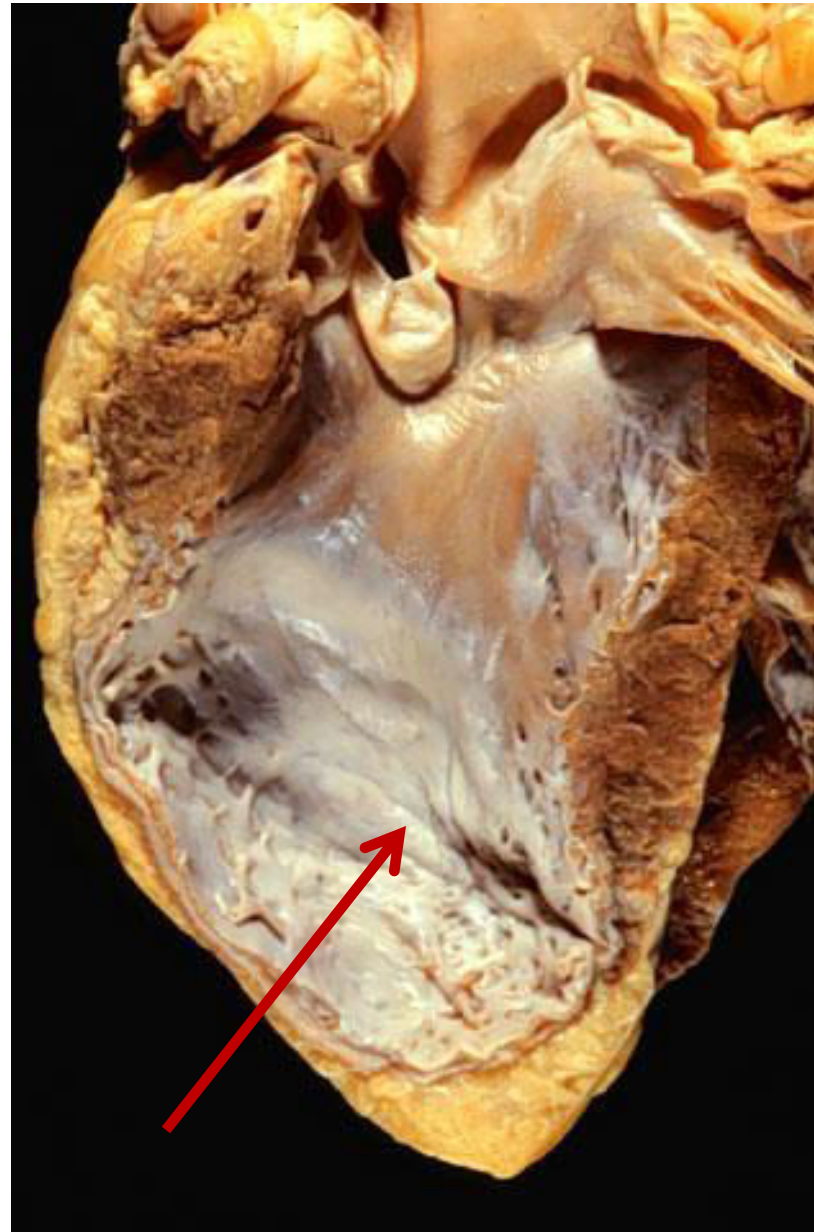


Complications of MI

-How old is this MI? (red arrow).

- describe the evolution of this MI complication.

-Mention 3 potential clinical consequences that may follow



Complications of MI

This picture shows one significant complication of acute myocardial infarction. Name it.

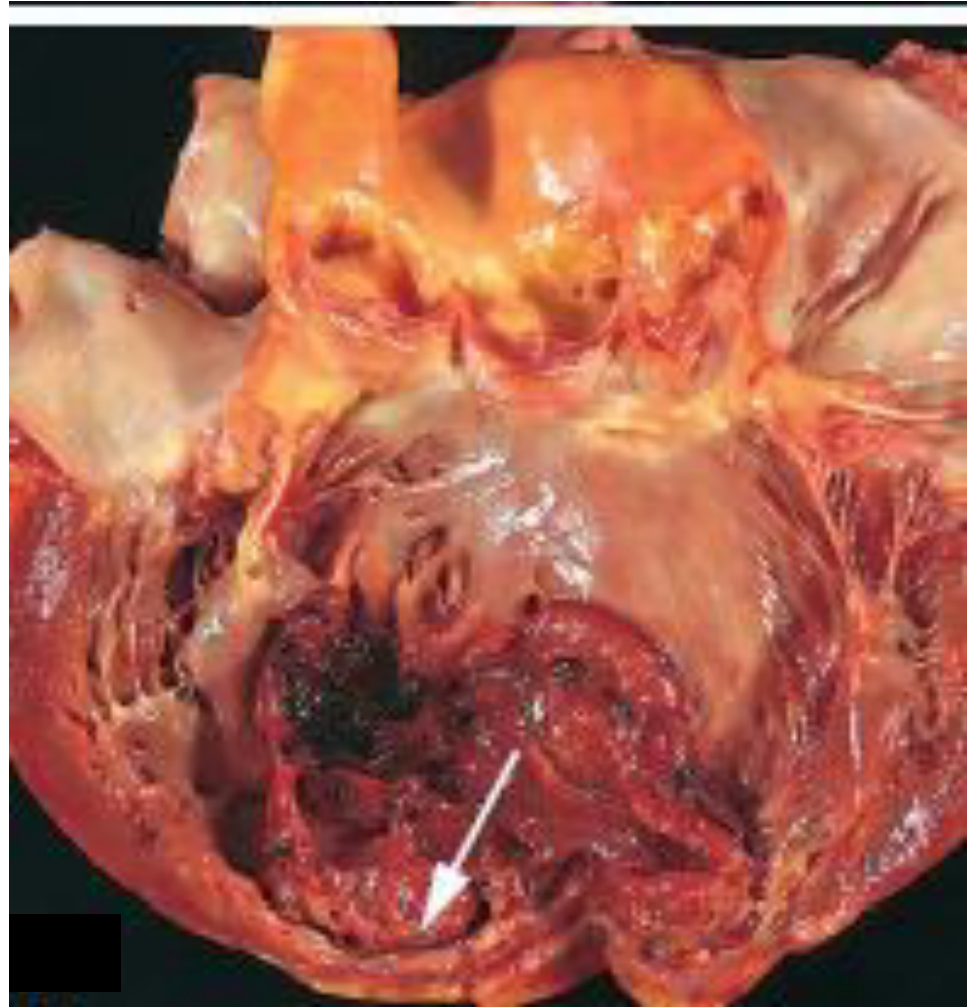
What are the potential adverse effects of this complication



Complications of MI

-This picture shows one significant complication of acute myocardial infarction. Name it.

-What are the potential adverse effects of this complication.



Aortic aneurysm

-What part of the aorta is involved ?

-What is the complication that is highlighted with the white arrow?

- picture B displays another significant complication of aortic aneurysm, name it.

