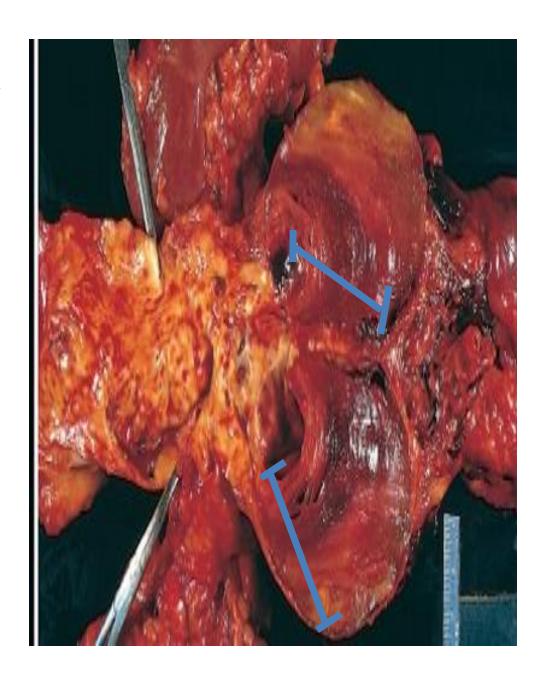
# Cardiovascular System-Pathology Lab

3<sup>rd</sup> year medical students

Dr. Nisreen Abu Shahin

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?

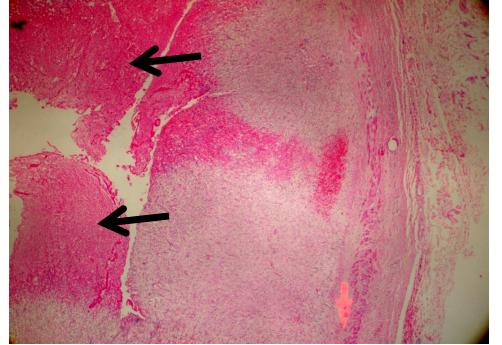


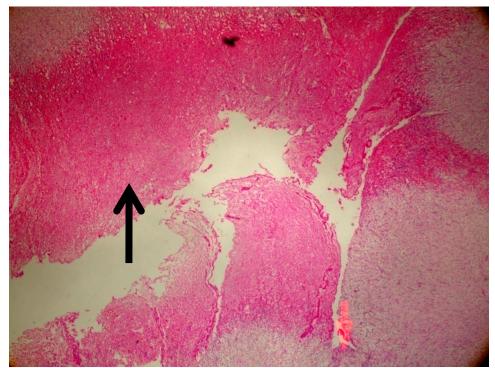
## **Organizing thrombus**

**slide # BB69:** 

1- describe the changes you see in the vessel wall.

2- what does the pink material (black arrows) represent?





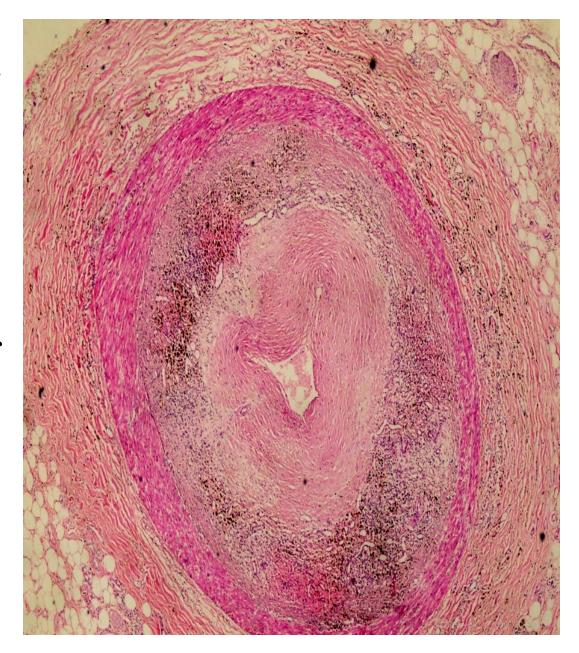
# advanced atherosclerotic lesions

slide # BB224:

• name the structures with the black arrows



- •This is an artery was the site of an old thrombus that is complicated by:
- •Describe the changes you see in the lumen and wall of the artery



#### **Infarction**

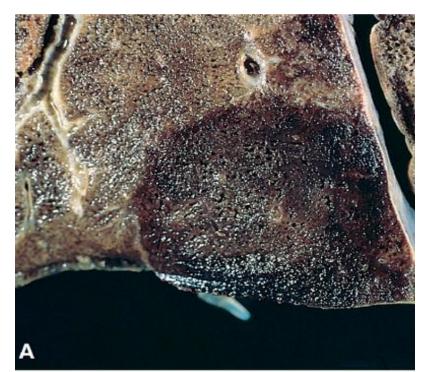
These are examples of lung infarction (A), and spleen infarction (B).

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.





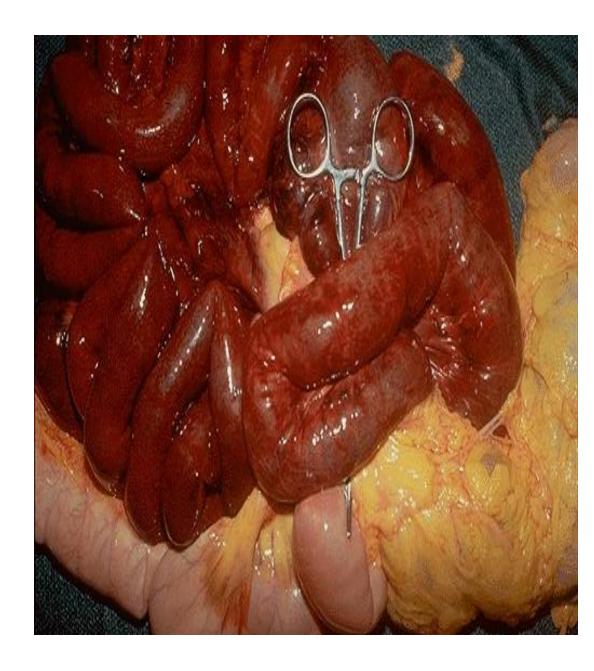
Elsevier. Kumar et al: Robbins Basic Pathology 8e - www.studentconsul

#### Infarction

A 70 year old man presents to ER with severe abdominal pain and rectal bleeding. Investigations had lead to a suspicious sudden mesenteric artery occlusion. This is a picture of his small intestines upon surgery.

1- what is your diagnosis?

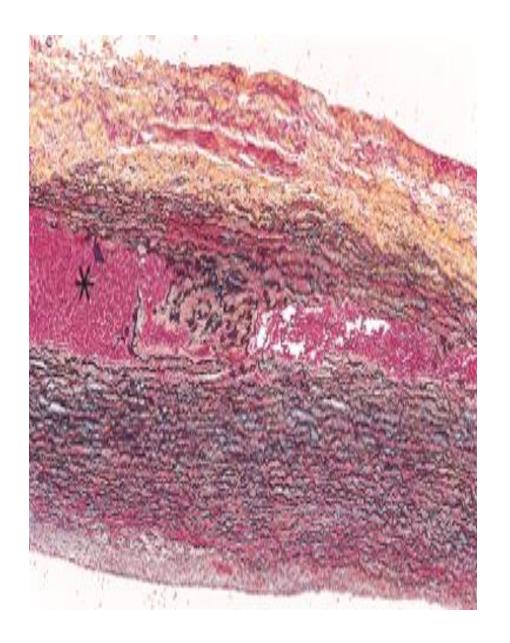
2- what type of infarcts is it? Why?



- •This is the inside of the aorta taken at autopsy of a 56 year old man who died with malignant hypertension.
- •The white arrow indicates the site of....
- •Name 2 risk factors for this disorder
- Name 2 complications



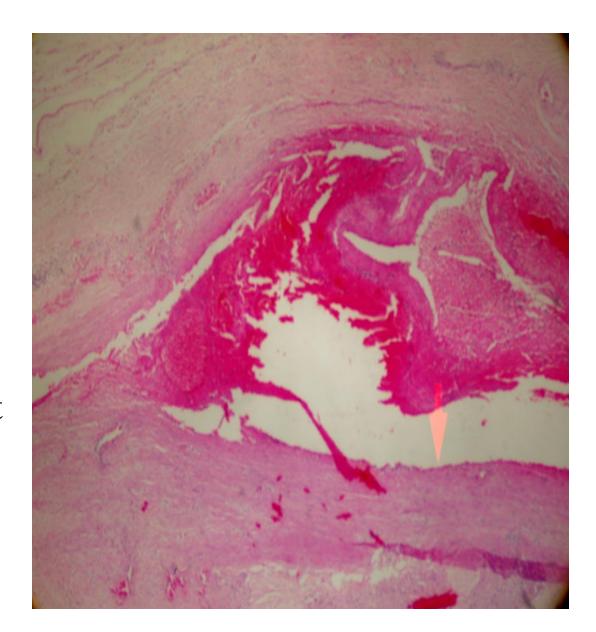
This microscopic picture is representative of the white arrow in the previous slide, from a whole thickness section of the aorta. What does the asterisk represents?



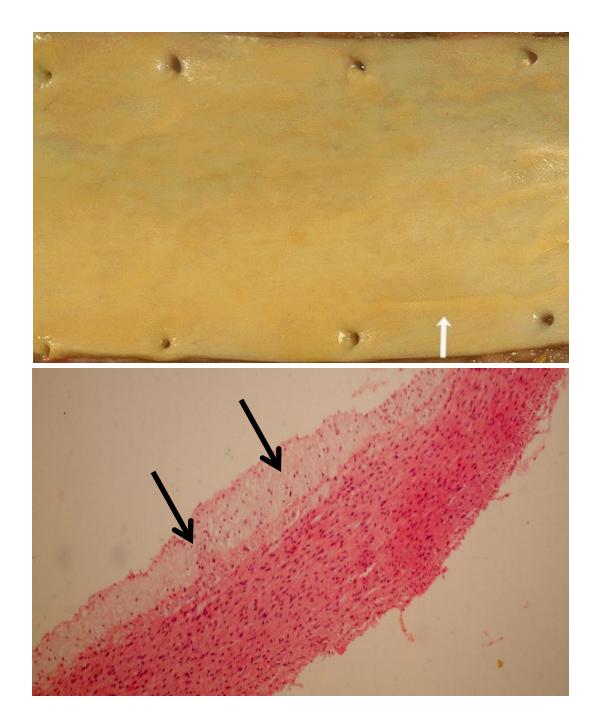
#### slide # BB17:

1- what is the most common precipitating cause of this disease?

2- name an autosomal dominant connective tissue disease that can be associated with it?



- •This is a section from the aorta of a 5 year old boy:
- •Name the structure with the white arrow.
- •The lower picture is the microscopic view of the white arrow. Name the cells with the black arrows.
- •What is the foamy material engulfed by these cells?

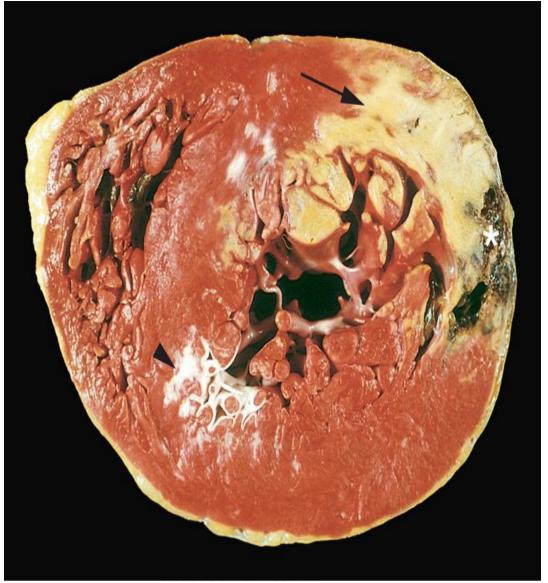


### **Myocardial infarct**

1- what does the arrow represent?

2- what does the arrowhead represent?

3- what does the *asterisk represent?* 



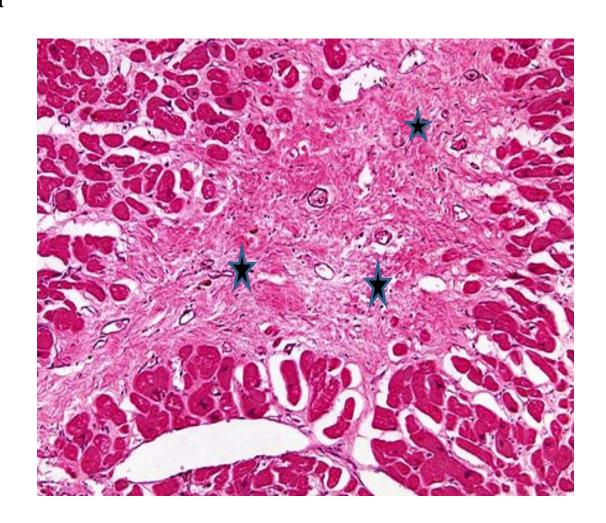
Kumar et al: Robbins Basic Pathology, 9e. Copyright © 2013 by Saunders, an imprint of Elsevier Inc.

#### Myocardial infarction

slide # BB208:

1- in old myocardial infarcts (black stars), what is the type of tissue that replaces the myocytes?

2- name 3 possible complications of MI.



# Please examine the following jars in pathology lab:

- 22/18→ lung infarction
- 32/14→ bowel infarction
- 21/17→ early atherosclerosis (fatty streaks)
- 27/17 **\rightarrow** advanced atherosclerosis
- $46/17 \rightarrow$  a ortic dissection
- $25/17 \rightarrow$  lt ventricular hypertrophy
- 4/17→ old myocardial infarction