



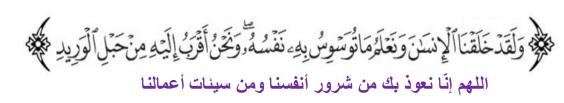


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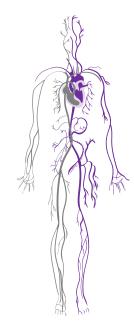
Pathology Labs

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Reviewed by: Salwa Alawi







وَلِلَّهِ الْأَسْمَاءُ الْحُسْنَى فَادْعُوهُ بِهَا

المعنى: الموصوف بالجلال وكبر الشأن، العظيم في ذاته وصفاته وأفعاله، الذي لا شيء أعظم منه.

الورود: ورد في القرآن (٦) مرات.

الشاهد: ﴿ عَالِمُ ٱلْغَيْبِ وَٱلشَّهَادَةِ ٱلْكَبِيرُ ٱلْمُتَعَالِ ﴾ [الرعد:٩].







Cardiovascular System Pathology Lab 2025-26

3rd year medical students

Dr. Nisreen Abu Shahin

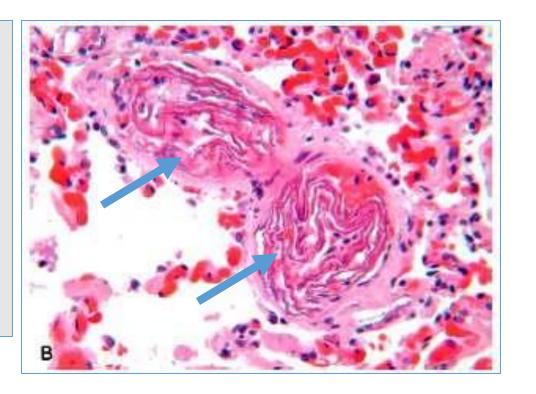
Before we start, nothing in the file is new[©]
We added only a few points **from the lectures** and noted which lecture each image came from to help you recall them, and we also highlighted the questions that were mentioned in **past** papers. Good luck!

Q: A 26 years old pregnant woman had a complicated C/S. 4 hours following her Caesarian section, she started to develop shortness of breath, decreased consciousness, and seizures before she died. This is a microscopic section from her lung.

A: Amniotic fluid embolus:

contains keratin and fetal squamous cells in pulmonary arterioles

Fetal cells are shed in the amniotic fluid

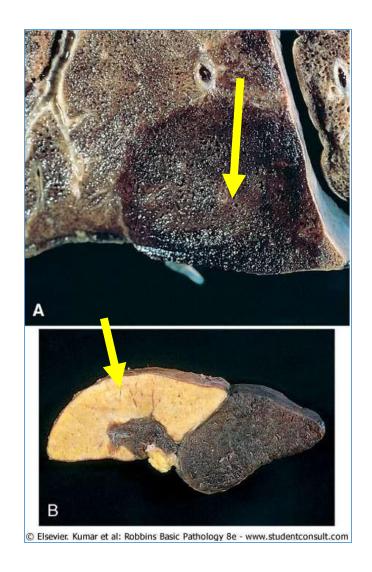


Lecture 2

Infarction

- lung (A), and spleen (B) infarcts
- 1 what type of infarct do you see in A & B (yellow arrows)?
- A: red infarct in lung
- B: white infarct in spleen
- 2- microscopic features you expect to see in A & B?

Coagulative necrosis

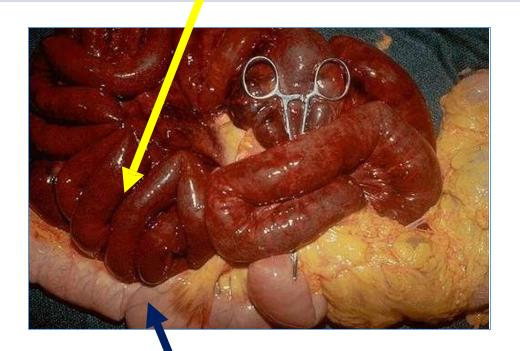


A 74 years old man was brought to ER with severe abdominal pain and rectal bleeding. Laparotomy was performed. This is a picture of his small intestines during surgery.

Tissues with dual circulations

Infarction

- A case of mesenteric artery occlusion.
- Q: What type of infarcts is it?
- A: Red infarct



Normal looking bowel for comparison

الله أكبر

Lymphedema

- Q: Name major types.
- Q: Give examples on causes

A:

1 Primary: congenital (example: cystic hygroma).

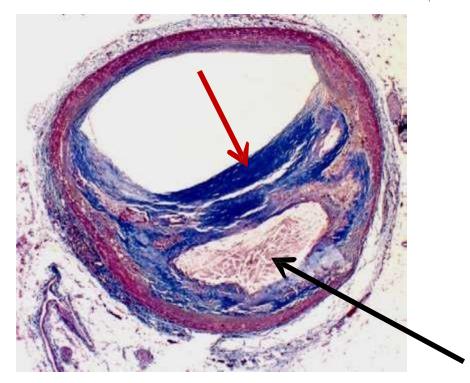
2 Secondary: (Examples: neoplasms; filariasis; fibrosis; postradiotherapy effect ...).



A **cystic hygroma** is a form of lymphatic malformation. It is an abnormal growth that usually appears on a baby's neck or head.

Atherosclerosis

- Name parts of this lesion?
- Red arrow: fibrous cap
- Black arrow: lipid core
- Remember the composition of each part

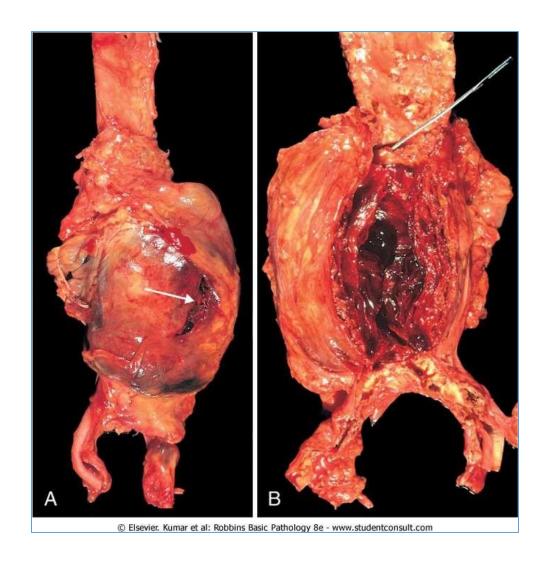


Fibrous cap: smooth muscle cells, macrophages, foam cells, lymphocytes, collagen, elastin, proteoglycans, and areas of neovascularization

Lipid core(necrotic center): cell debris, cholesterol crystals, foam cells, calcium and cholesterol esters

Aortic aneurysm

- -What part of the aorta is involved?
- -Abdominal aorta
- -A complication that you recognize in Picture A, white arrow? Rupture, this case resulted in death
- picture B? thrombus

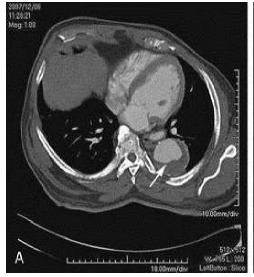


Aortic aneurysm

- -What part of the aorta is involved? thoracic
- -white arrows represents?

 Aneurysm with a mural thrombus

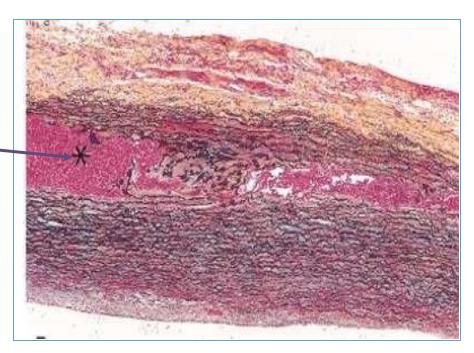
The diameter of the aorta is large





Aortic dissection

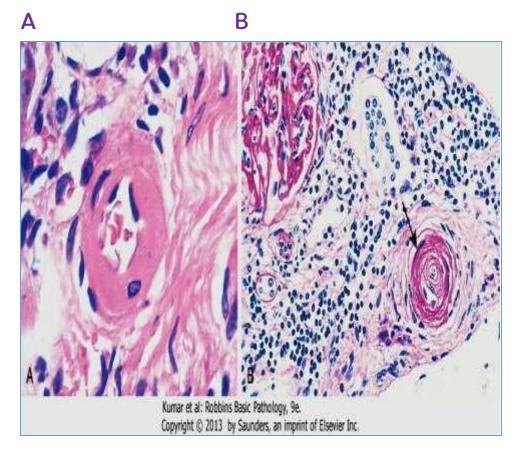
- The special histochemical stain in this microscopic section of aorta shows elastic fibers in black color.
- What does the black starrepresents? Blood collection at site of dissection
- -Name a major precipitating factors? Hypertension, Marfan syndrome, etc...



Silver stain

Arteriolosclerosis

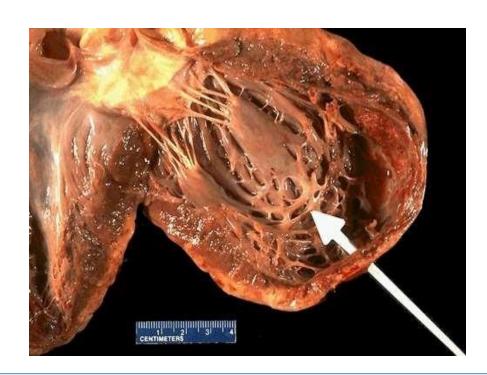
- types?
- -A: hyaline
- -B: hyperplastic
- causes?
- -A: DM, benign HTN,
- Aging
- -B: malignant HTN



> A: homogeneous pink hyaline thickening of arteriolar walls

- > B:
- · onion skin appearance
- · reduplicated basement membrane
- fibrinoid vessel wall necrosis (necrotizing arteriolitis)

Complications of MI



- -what complication is seen in this picture (white arrow)? ventricular wall rupture
- -Mention the possible consequences that may follow.
- -Cardiac tamponade



-what complication of acute MI do you see?

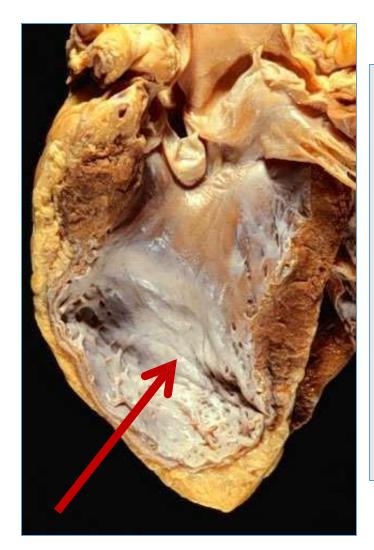
Ruptured papillary muscle

potential adverse effects? severe mitral or tricuspid regurgitations

identify?Mural thrombus

- loss of contractility (causing stasis) + endocardial damage
- \rightarrow thromboembolism

Complications of MI



- -A recent or old MI? (red arrow)
- -An old MI
- -What post-MI complication is seen?
- -Ventricular Aneurysm
- -potential clinical consequences?
- congestive heart failure
- -Arrythmias
- -Mural thrombus

A lady is bringing her 1- year old baby girl to a paediatrics clinic. She is worried about a reddish lesion that is present posterior to the baby's ear. The mother describes the lesion as a blood colored plaque, present since birth, and its colour is fading as the baby grows up. What is the most likely diagnosis?

Strawberry hemangioma of newborn

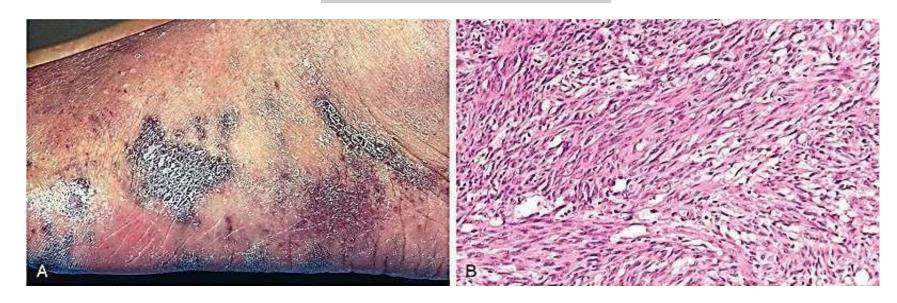
(Juvenile Hemangioma)

➤ It most commonly occurs in the head and neck region, appears at birth, and regresses spontaneously over time.



A 38 years old (HIV +) man is going to a dermatologist complaining of multiple red-purple skin plaques and nodules on his feet; he said that the skin lesions increased in size and number and spread proximally overtime. Below are pictures of the lesions (A) and microscopic features (B). What is the most likely diagnosis?

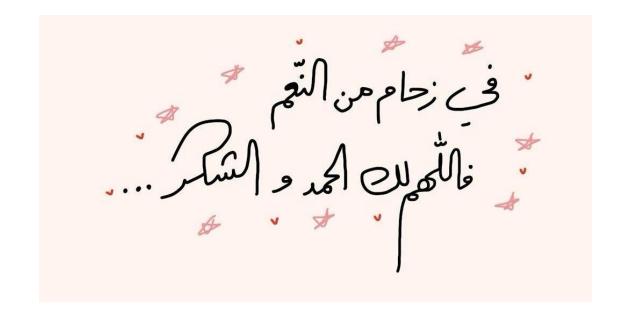
Kaposi sarcoma



- > A. Multiple red-purple skin plaques or nodules
- > B. These look like spindle-shaped cells that are quite crowded and do not form well-organized vascular channels

رسالة من الفريق العلمي





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Corrections from previous versions:

Versions	Slide # and Place of Error	Before Correction	After Correction
V0 → V1			
V1 → V2			