

Heme
lab

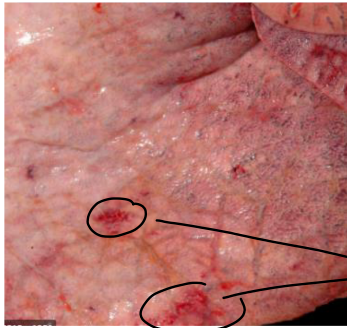
lecture 1



⇒ cyanosis due to congestion

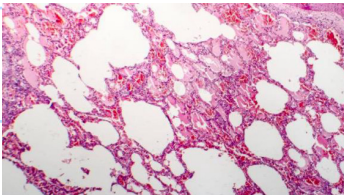


→ redness due to hyperemia.

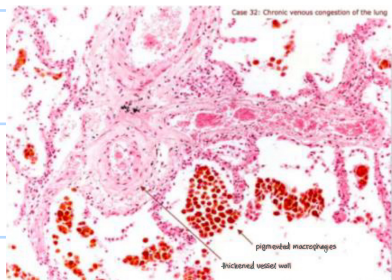


* Lung Congestion & wet tissue.

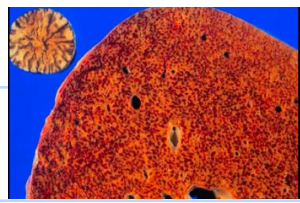
oozing blood.



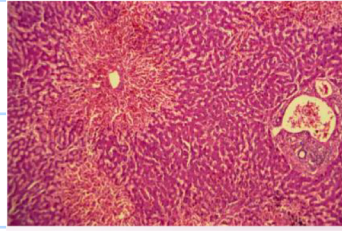
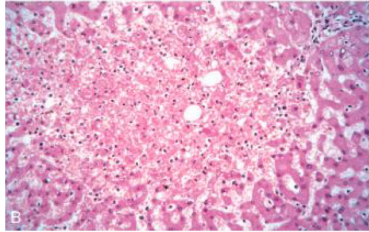
- * acute pulmonary congestion
- * blood-engorged alveolar capillaries
- * variable degrees of alveolar septal edema
- * intra-alveolar hemorrhage.



- * chronic pulmonary congestion
- * thickened & fibrotic septa
- * alveolar spaces contain macrophages



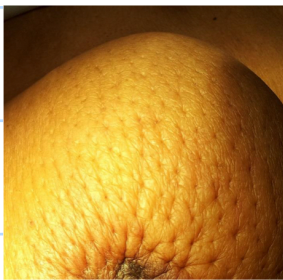
* hepatic congestion \Rightarrow Nutmeg liver



centrilobular hepatocyte necrosis. Hemorrhage.
hemosiderin-laden macrophages



\Rightarrow anasarca



\Rightarrow Lymphatic obstruction

Infiltration and obstruction of superficial lymphatics by breast cancer may cause edema of the overlying skin; the characteristic finely pitted appearance of the skin of the affected breast is called peau d'orange



\Rightarrow Lymphatic obstruction
& elephantiasis

the parasitic infection filariasis can cause massive edema of the lower extremity and external genitalia so called elephantiasis.



⇒ periorbital edema. Caused by renal dysfunction or nephrotic syndrome



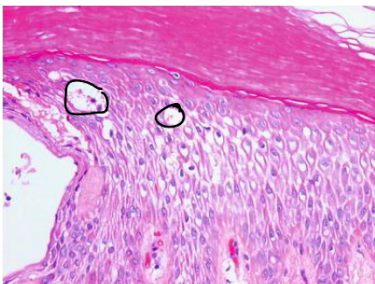
⇒ pitting edema



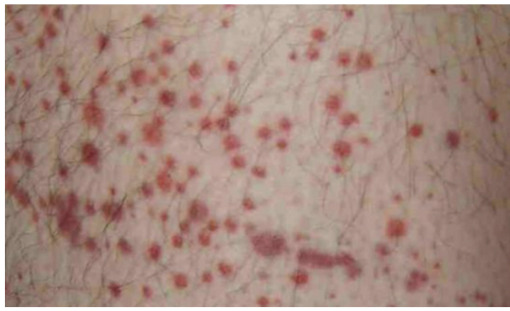
⇒ unilateral edema



⇒ Bilateral edema



* Subcutaneous edema
* clearing & separation of
ECM



⇒ Petechiae
(1-2 mm)



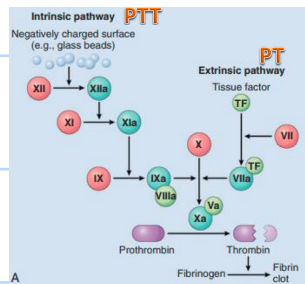
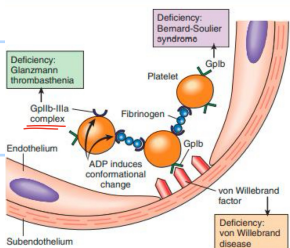
⇒ Purpura
(3-5 mm)



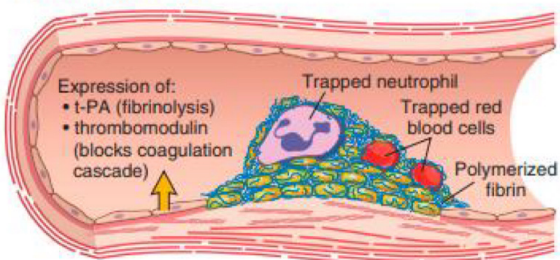
⇒ Ecchymoses
(1-2 cm)

lecture 2

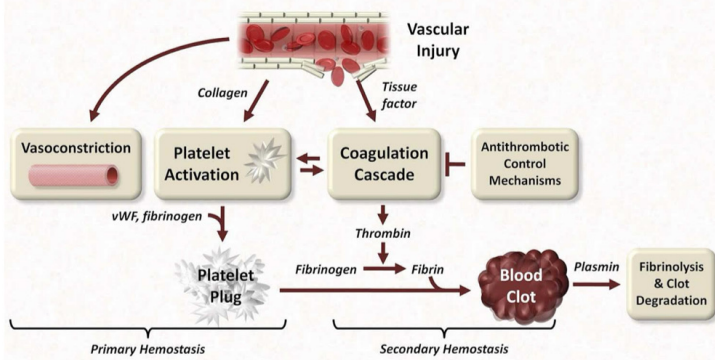
→ تنويه: لا يوجد مهور لاب، فقط مهور توضيحية للشرح *



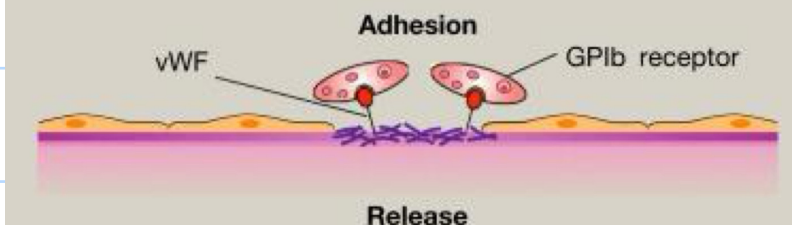
D. CLOT RESORPTION



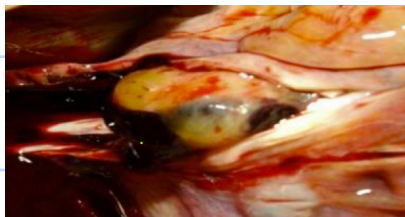
Major Components of Hemostasis



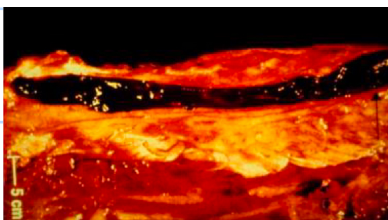
Role of platelets



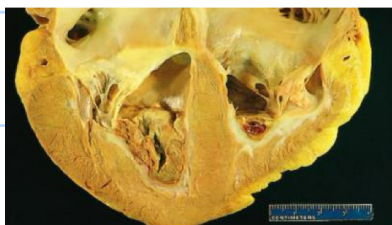
lecture 3

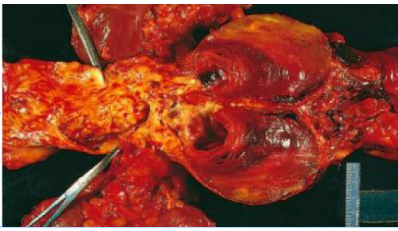


gelatinous & because of red cell settling they have a dark red dependent portion & a yellow "chicken fat" upper portion; they also are usually not attached to the underlying vessel

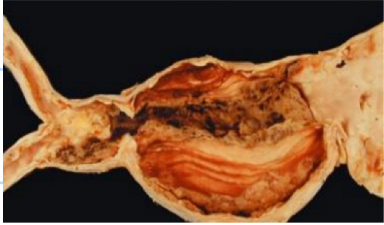


firm, focally attached to vessel, & they contain gray strands of deposited fibrin (lines of Zahn).

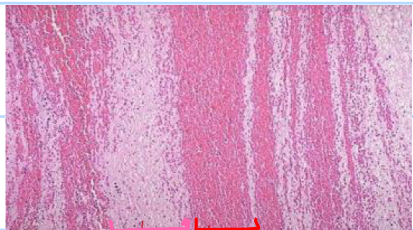




⇒ Aortic thrombi

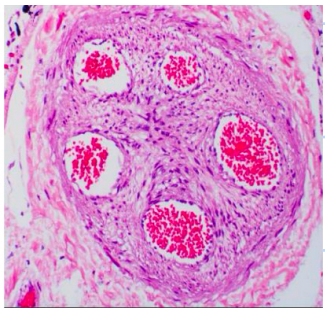


⇒ line of Zahn



⇒ line of Zahn

pale
↓
fibrin
dense
↓
platelets (clear)
: RBC



↳ organization & recanalization of thrombus

lecture 4

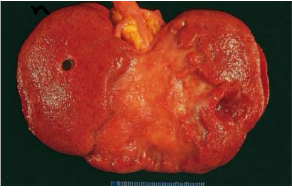


wedge shaped

white infarction



→ heart scar



→ intestinal infarction

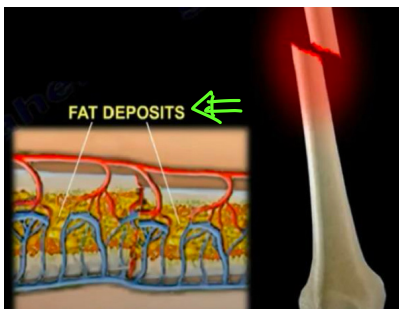


→ ovary torsion

RED infarction



⇒ saddle embolus



1) soft tissue crush

2) rupture of marrow

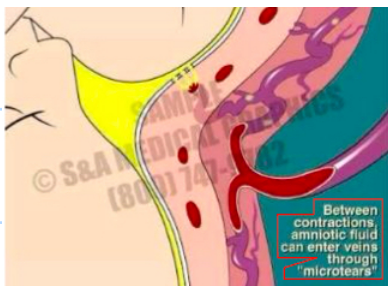
3) long bone fracture

⇒ all cause

release fat deposits into the circulation

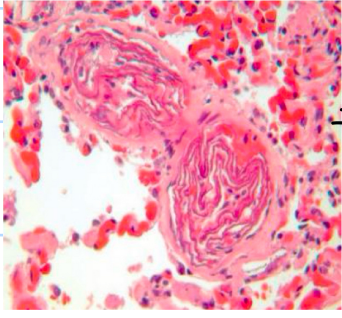
So

Fat embolism

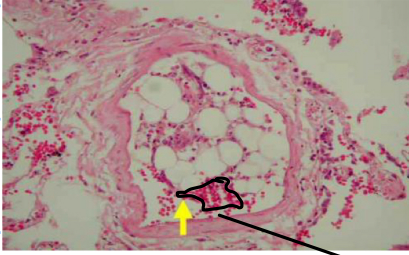


Between contractions, amniotic fluid can enter veins through "microtears"

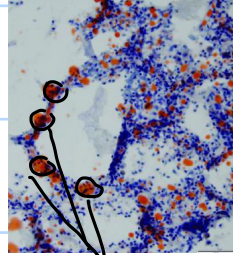
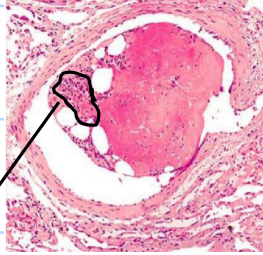
entry of amniotic fluid (and its contents) into the maternal circulation via tears in the placental membranes and/or uterine vein rupture.



⇒ amniotic fluid embolism



marrow elements

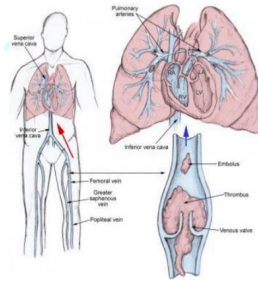


Fat globules

*technique:

frozen section
↓
Fat stain

*Fat embolism



* DVT

lecture 5

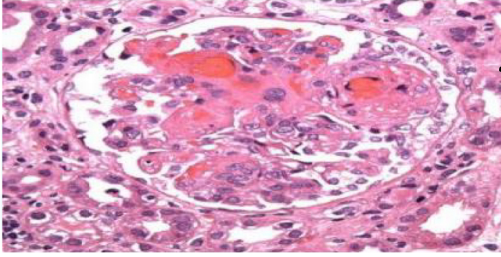


⇒ shock (flushed skin, warm)
due to cutaneous vasodilation

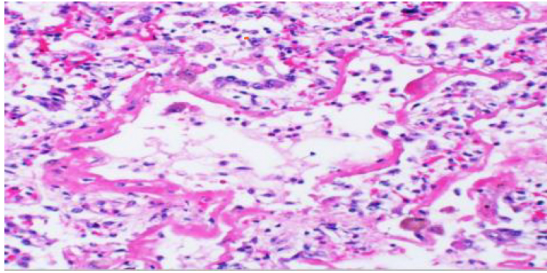


⇒ Cutaneous vasoconstriction

* coolness
* pallor] ⇒ shocky characteristics



⇒ Fibrin thrombi in kidney glomeruli



⇒ alveolar damage due to sepsis shock or trauma

