

## Disorders of blood flow

① 45 year old woman work while standing for long periods, at the end of 8 hrs shift she noticed that her lower legs and feet are swollen, although there is no swelling at the beginning of the day. Laboratory test reveal normal renal and liver functions, which of the following mechanisms explain this phenomena.

- (a) hypoalbuminemia
- (b) ↑ hydrostatic pressure
- (c) lymphatic obstruction
- (d) ↑ aldosterone

② 56 year old woman diagnosed with cancer in her left breast underwent mastectomy with axillary LN dissection, post operative she develops marked swelling in ll arm, not tender, not erythematous, not painful on touch or movement, no fever. what's the most common mechanism of these findings?

- (a) cellulitis
- (b) congestive heart failure
- (c) lymphedema
- (d) phlebotrombosis

③ 37 year-old woman has noticed a lump in her lt breast over the past 2 month, on examination the skin overlying the lt breast is thickened, pitted.

biopsy revealed that the lump (mass) is carcinoma.

which of the following explains the gross appearance of skin on her lt breast

- (a) chronic inflammation
- (b) ischemic necrosis
- (c) Lymphatic obstruction
- (d) venous thrombosis.

④ a superficial puncture from an insect stick injury lead to small amount of bleeding, seconds after injury the bleeding stop

which of the following Mechanism is the most likely to stop small arteriolar blood loss from this injury

- (a) Fibrin polymerization.
- (b) platelet aggregation.
- (c) Neutrophil chemotaxis.
- (d) vasoconstriction.

⑤ 55 years old woman following major abdominal surgery has had discomfort and swelling of her lt leg for fast walk with tenderness and difficult movement. doppler shows thrombosis of deep left leg vein.

which of the following mechanisms contribute to her condition.

- a) hypercalcaemic
- b) immobilization.
- c) NO release.
- e) turbulent blood flow

⑥ 75 years old man is hospitalized after falling and fracturing his lt femoral tractarler 2 weeks later the lt leg is swollen & pain and difficult movement. which of the following complication is most likely to occur in this man? (will occur not present now)

- a) DIC
- b) thigh hematoma
- c) foot gangrenous necrosis.
- d) pulmonary thromboembolism

7) 32 years old man is involved in vehicular accident and sustains fracture of Rt femur and tibia and Lt humerus  
2 days later he develops a sudden onset of dyspnea  
which of the following is the most likely cause of his respiratory difficulty?

- (a) Cardiac tamponade
- (b) Fat embolism
- (c) pulmonary infarction
- (d) pulmonary edema

8) 22 year old woman in uncomplicated pregnancy develop sudden dyspnea, cyanosis and hypoxia during delivery

Which of the following findings is most likely to be present in her peripheral pulmonary arteries.

- (a) aggregates of platelets
- (b) amniotic fluid
- (c) fat globules
- (d) gas bubbles

9) 31-year old man is on scuba diving trip and descends to a depth of 50m. After 30 min he has malfunction in his equipment and quickly returns to the boat on the surface. He develops dyspnea, chest pain, painful myalgias (muscle pain)

Which of the following occluding his arterioles is most likely to cause this finding?

- a) Fat globules
- b) Fibrin clots
- c) Nitrogen gas bubbles
- d) Platelet thrombi

10) 63 year old woman has had a fever, faint Temp  $\rightarrow$  38.4,  $\uparrow$  Resp. Rate,  $\uparrow$  Pulse Rate, hypotension, marked peripheral vasodilation,  $\bar{e}$   $\uparrow$  serum lactic acid

Which of the following laboratory finding is most likely related to the cause of her clinical condition?

- a) blood culture positive for bacteria
- b) Increased blood urea nitrogen
- c) elevated serum creatinine kinase

(11) 30 year old man is deep cutting wound  
he loses large amount of blood

a marked increase in which of the following  
blood analytes is most likely to indicate  
that he reached an irreversible stage of shock

- (a) bicarbonate
- (b) prothrombin
- (c) lactate dehydrogenase.
- (d) catecholamine.

(12) the most common underlying cause of fat  
embolism is

- (a) enzymatic fat necrosis
- (b) fractures of long bones
- (c) steatosis.
- (d) atherosclerosis

(13) hemorrhagic (red infarction) occur in.

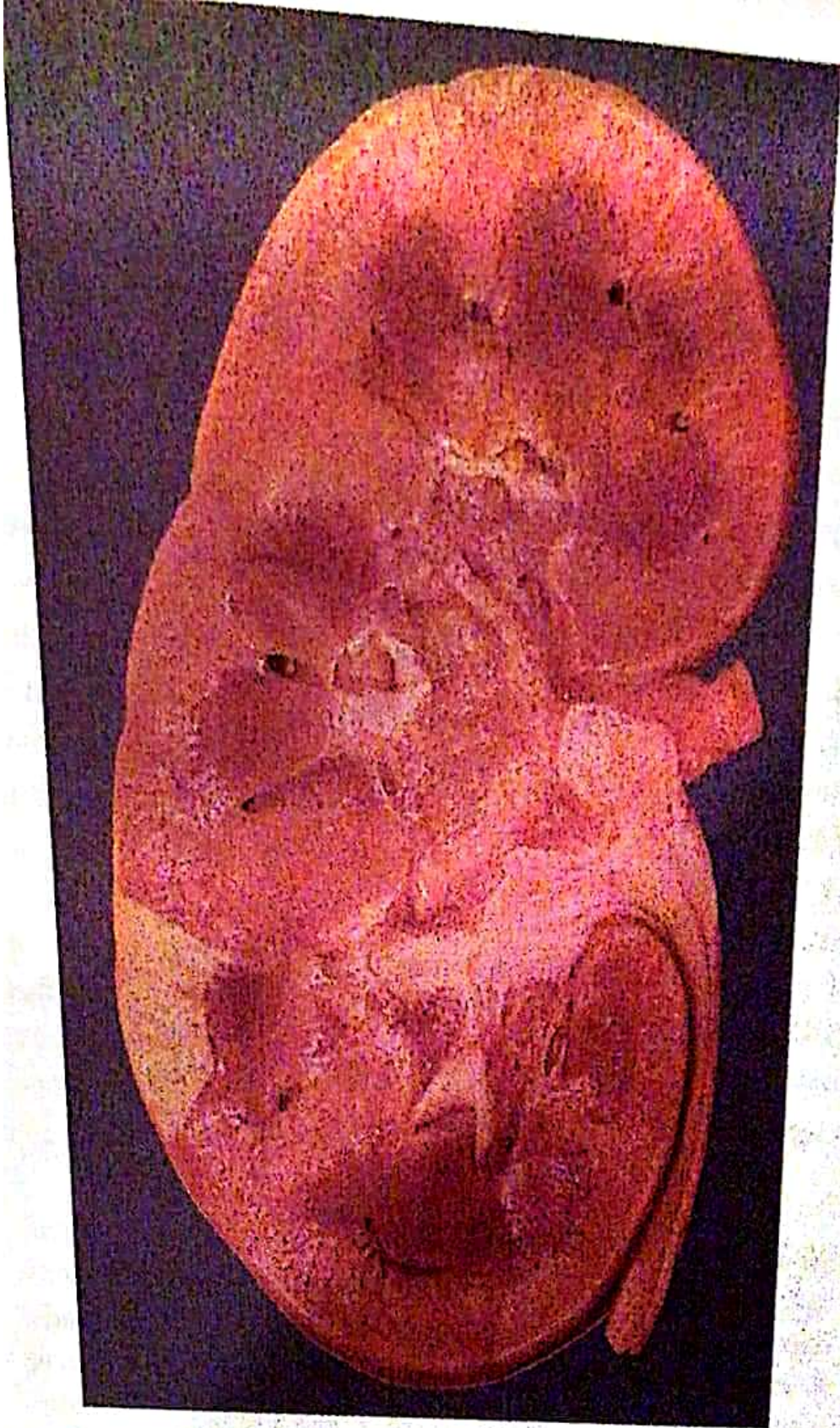
- (a) brain
- (b) intestines
- (c) kidney
- (d) spleen.

14)

955 year old woman had a spine surgery, on 3rd day she developed discomfort in leg swelling duplex US revealed deep leg thrombosis

Which of the following not a feature of this condition

- (a) Recanalization
- (b) Calcification
- (c) Pyemia
- (d) Propagation.



**33** A 44-year-old man with dilated cardiomyopathy and heart failure develops left atrial mural thrombosis. He develops the complication shown in the figure, manifested by hematuria. Which of the following is the best term for this complication?

- A Abscess
- B Ischemic infarct
- C Liquefactive necrosis
- D Multiorgan failure
- E Venous thrombosis





9 An autopsy study is performed to correlate patterns of hemorrhage with underlying causes. Patients with the gross appearance of hemorrhage shown in the figure had minimal blood volume loss, but an appearance similar to this in many other organs. Which of the following terms best describes this pattern?

- A Congestion
- B Ecchymosis
- C Hematoma
- D Petechiae
- E Purpura

10 A superficial punctum wound from a needlestick injury