1. **A blood clot recently formed in a varicose vein and is still stationary is known as::**
2. embolus
3. thrombus
4. thromboembolus
5. infarction
6. plaque

**2. What is the term for extravasation of water into the interstitial space:**

1. hyperemia
2. hemorrhage
3. edema
4. embolism
5. infarction

**3. Which of the following types of edema is more commonly known as ascites:**

1. hydrothorax
2. hydrocephalus
3. hydrosalpinx
4. hydropericardium
5. hydroperitoneum

**4. In congestive heart failure (CHF) of the left ventricle, edema develops in the \_\_\_\_** circulation**. In CHF of the right ventricle, edema develops in the \_\_\_\_** circulation:

1. systemic; pulmonary
2. pulmonary; systemic
3. systemic; hepatic
4. hepatic; systemic
5. systemic; cerebral

**5. Which of the following are NOT parts of the Virchow thrombosis triad:**

1. abnormal blood flow
2. hypercoagulability
3. reduction of clotting factors
4. endothelial injury
5. hypocoagulability

**6. Which of the following is commonly associated with arterial thrombosis and not with venous thrombosis:**

1. inactivity
2. atherosclerosis
3. cardiac failure stasis
4. genetic mutations
5. hypercoagulation disorders

**7. Which of the following is the most likely to cause a fat embolism:**

1. reposition of shoulder luxation
2. healing of a chemical burn
3. healing of a heat burn
4. a broken femur
5. congestive heart failure

**8. What is the most common site of origin of pulmonary thromboemboli:**

1. cavity of the left ventricle.
2. deep veins of lower extremities.
3. cavity of the right ventricle.
4. mesenteric veins.
5. superficial veins of lower extremities.

**9. “Nutmeg Liver “occurs in:**

1. liver cirrhosis.
2. liver necrosis.
3. chronic passive congestion.
4. thrombosis of the portal vein.
5. hepatitis

**10. Lines of Zahn are seen in:**

1. venous thrombi.
2. pulmonary congestion.
3. postmortum clot.
4. arterial thrombi.
5. amniotic fluid embolism.

**11. Mural thrombi is the term used to define thrombi of:**

1. thrombi of the heart valve.
2. venous thrombi of the legs.
3. thrombi of atherosclerotic coronary arteries.
4. thrombi of the ovarian venous plexus.
5. thrombi occurring in the heart chambers.

**12. Hyperemia is characterized by the following:**

1. increased blood flow
2. impaired blood flow
3. develops during exercises
4. it is a passive process
5. it is an active process

**13. Congestion is characterized by the following:**

1. characterizes inflammation
2. develops due to impaired blood outflow
3. it is a passive process
4. it is an active process
5. develops during exercises

**14. Coughing with blood is named:**

1. hematochezia
2. melena
3. hematuria
4. hemoptysis
5. hematemesis

**15. Thrombus is characterized by the following:**

1. it is attached to the vascular wall
2. it is friable
3. it is formed during life
4. it is elastic
5. it is made after death

**16. Cloth is characterized by the following:**

1. It is not attached to the vascular wall
2. it is friable
3. it is formed during life
4. it is elastic
5. it is made after death
6. **Consequences of thrombosis are:**
7. resorption
8. organization
9. congestion
10. thromboembolism
11. cyanosis

**18. Ischemia may lead to:**

1. myocardial infarction
2. liver congestion
3. gangrene of lower extremities
4. stroke
5. acrocyanosis

**19. Tick** the ischemia causes:

1. arterial thrombosis
2. venous thrombosis
3. embolism
4. stroke
5. infarction

**20. Systemic venous congestion is consequence of:**

1. left heart failure
2. right heart failure
3. pulmonary congestion
4. atherosclerosis
5. arteriolosclerosis

**21.A thrombus is composed of:**

1. fibrin
2. platelets
3. red blood cells
4. leukocytes
5. Willebrand factor

**22. Which of the following is chronic congestion of spleen:**

1. brown induration
2. cyanotic induration
3. nutmeg spleen
4. fatty spleen
5. sago spleen

**23. Which of the following are the microscopic changes of nutmeg liver:**

1. selective congestion in the periphery of lobule
2. selective centrolobular congestion
3. centrolobular hemorrhage
4. centrolobular necrosis of hepatocytes
5. centrolobular hypertrophy of hepatocytes

**24. Which of the following refers to internal hemorrhage:**

1. melena
2. hemothorax
3. hemopericardium
4. hematuria
5. hemoperitoneum

**25. Blood in stool is called:**

1. epistaxis
2. hematemesis
3. hemoptysis
4. metrorrhagia
5. melena

**26. Tick the main causes of hemorrhages:**

1. exicosis
2. vascular wall erosion
3. vascular wall rupture
4. blood stasis in the vessels
5. thrombosis

**27. Identify types of generalized edema:**

1. cardiac
2. cerebral
3. renal
4. hepatic
5. pulmonary

**28. Chronic lymphatic stasis is followed by:**

1. elephantiasis
2. tissue hypoxia
3. hemomelanosis
4. sclerosis
5. amyloidosis

**29. Identify morphological variants of interstitial hemorrhages:**

1. hematoma
2. hemorrhagic infiltration
3. echimosis
4. apoplexy
5. petechia

**30. Which of the following are the changes of brown pulmonary congestion:**

1. hemomelanosis
2. hemosiderosis
3. sclerosis
4. amyloidosis
5. petechia

**31. Consequences of hemorrhages are:**

1. suppuration
2. encapsulation
3. chylothorax
4. cysts formation
5. melena

**32. Hepatic vein obstruction leads to:**

1. hyperemia
2. liver congestion
3. nutmeg liver
4. hemochromatosis
5. amyloidosis

**33. The types of external hemorrhage are:**

1. hemoptysis
2. petechia
3. hemoperitoneum
4. melena
5. hemothorax

**34. Femoral artery obstructive thrombosis leads to:**

1. ischemia
2. congestion
3. anemia
4. gangrene
5. lymphorrhea

**35. Interstitial accumulation of edematous liquid is called:**

1. ascites
2. anasarca
3. hydrocele
4. hydropericardium
5. hydrocephalus

**36. Air embolism develops in the following cases:**

1. carotid artery injury
2. neck vein injury
3. pneumothorax
4. jugular vein injury
5. carotid artery aterosclerosis

**37. The favorable consequences of thrombosis include:**

1. aseptic autolysis
2. septic autolysis
3. thromboembolism
4. thrombo-bacterial embolism
5. organization

**38. Colliquative necrosis is found in the following organs:**

1. myocardium
2. brain
3. spleen
4. kidneys
5. spinal cord

**39.Thrombus can be:**

1. paradoxical
2. parietal
3. occlusive
4. lipidic
5. tissular

**40.Paradoxical embolism may develop in the following cases:**

1. atrial septal defect
2. ventricular septal defect
3. arteriovenous shunts
4. well-developed collateral circulation
5. aortic wall defect

**41. As regards the localization of myocardial infarction in ventricular wall is classified into:**

1. subendocardial
2. chordal
3. intramural
4. transmural
5. atrial

**42. Lower extremity veins thrombus usually is delivered to:**

1. vena cava inferior
2. jugular vein
3. portal vein
4. right atrium
5. pulmonary artery

**43. A thrombus can be:**

white with red rim

white

mixed

postmortem

red

**44.Conical shaped infarcts are usually formed in the:**

1. brain
2. intestine
3. kidneys
4. lungs
5. spleen

**45. The favorable outcomes of thrombosis include:**

1. septic autolysis
2. thromboembolism
3. recanalization
4. vascularization
5. organization

**46. Most common location of hematogenous metastasis of intestinal carcinoma is into the:**

1. lungs
2. heart
3. liver
4. spleen
5. kidneys

**47. Which of the following are thromboembolism sources of the systemic circulation:**

1. left ventricle parietal thrombi
2. right ventricle parietal thrombi
3. auricular thrombi of left atrium
4. auricular thrombi of right atrium
5. aortic thrombi

**48. Which of the following are bacterial embolism sources:**

purulent thrombophlebitis

1. phlebothrombosis
2. septic endocarditis
3. septic autolysis of thrombus
4. aseptic autolysis of thrombus

**49. Fatty lung embolism develops in the following cases:**

1. fatty liver degeneration
2. fracture of the tubular bone
3. subcutaneous tissue crash
4. atherosclerotic plaque ulceration
5. alimentary obesity

**50. Which of the following diseases are leading in myocardial infarction development:**

1. rheumatic fever
2. atherosclerosis
3. syphilis
4. hypertension
5. liver cirrhosis

**51. Thrombobacterial embolus is also called:**

1. organized
2. white
3. mixed
4. septic
5. aseptic

**52. Gas embolism develops in:**

1. vein injury
2. ammoniac intoxication
3. rapid decompression
4. carbon monoxide poisoning
5. pneumothorax

**53. Acute congestion of the pulmonary circulation develops in:**

decompensated myocardial hypertrophy

1. cardiac defects
2. cardiosclerosis
3. myocardial infarction
4. atherosclerosis

**54. Arterial obscuration by thrombus may lead to:**

1. atherosclerosis
2. collateral hyperemia
3. congestion
4. anemia
5. ischemia

**55. Thrombosis is caused by the followings:**

1. vascular wall injury
2. increased blood viscosity
3. slowing of blood flow
4. slowing of lymphatic flow
5. accelerating arterial flow

**56. What is the cause of oncotic edema:**

a. congestive heart failure

b. acute inflammation.

c. neurohumoral dysregulation

d. malnutrition

e. renal hypoperfusion

**57. What is the cause of hydrostatic edema:**

a. congestive heart failure

b. acute inflammation.

c. neurohumoral dysregulation

d. malnutrition

e. renal hypoperfusion

**58. Which kind of cells are "heart failure cells":**

a. macrophages

b. lymphocytes

c. leukocytes

d. cardiomyocytes

e. histiocytes

**59. Which sign is characteristic for the left cardiac insufficiency:**

a. hepatomegaly

b. splenomegaly

c. ascites

d. inferior limbs edema

e. dyspnea

**60. All the listed clinical signs are characteristic for the right cardiac insufficiency, EXCEPT for:**

a. pulmonary edema

b. ascites

c. nutmeg liver

d. chronic venous stasis of the spleen

e. chronic venous stasis of kidneys

**61. Which of the pathological processes listed below usually associate with mitral insufficiency:**

a. thrombosis of pulmonary veins

b. thromboembolism of pulmonary artery

c. pulmonary edema

d. fibrinous pleuritis

e. cardiac tamponade

**62. Which of the listed signs is characteristic for the infarction caused by venous occlusion:**

a. it can be white or red

b. it occurs only in the lungs

c. it is always red (hemorrhagic)

d. it is always white (ischemic)

e. it is white with hemorrhagic border

63. As a rule, the pulmonary infarction is:

a. white

b. liquefied

c. bilateral

d. septic

e. hemorrhagic

63. What pathological process may develop in the liver during the progress of cardiac insufficiency:

a. Complete recovery

b. subtotal necrosis

c. stasis cirrhosis

d. chronic hepatitis

e. biliary stasis