# VOLGOGRAD STATE MEDICAL UNIVERSITY

Department of Pathological Anatomy

Blood circulation disorders. Venous congestion. Arterial hyperemia. Bleedings. Hemorrhages.

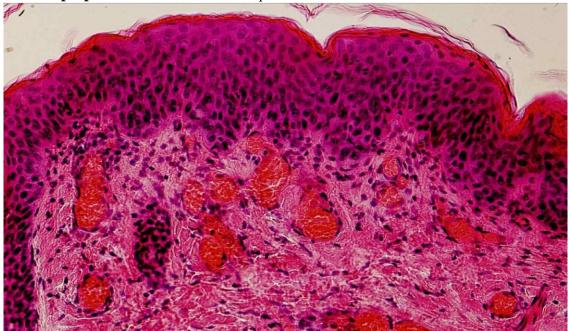
### Lesson plan.

### 1. Macropreparation "Cyanotic induration of the spleen".



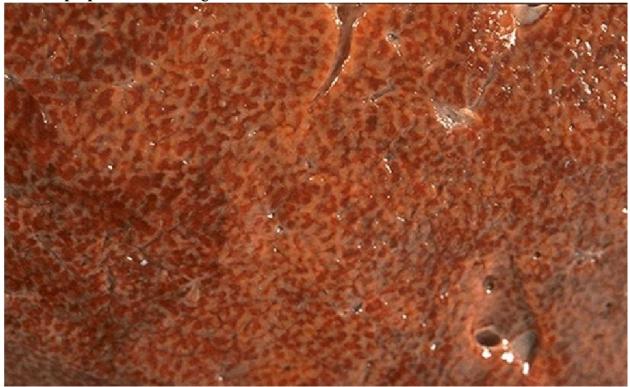
To study chronic venous plethora of the kidney and spleen by the macroscopic picture. Describe the macro-preparations 'Cyanotic induration of the kidneys' and "Cyanotic induration of the spleen". Pay attention to the size, consistency and color of the organs.

2. Micropreparation "Chronic venous plethora of the skin".



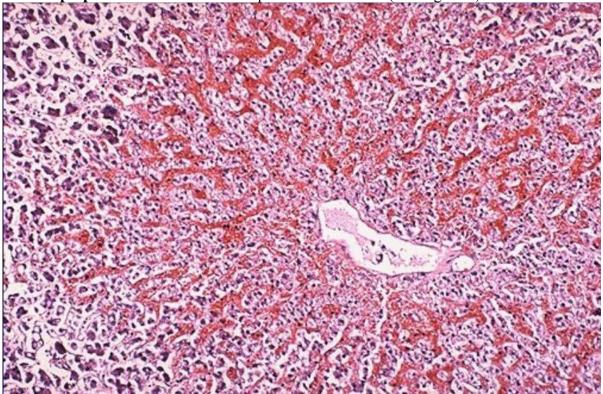
To study chronic venous plethora of the skin on a microscopic picture. Describe the micropreparation "Chronic venous plethora of the skin" (staining with hematoxylin and eosin). Pay attention to the condition of the veins, capillaries and lymphatic vessels, as well as the connective tissue of the dermis, epidermis.

3. Macropreparation "Nutmeg liver".



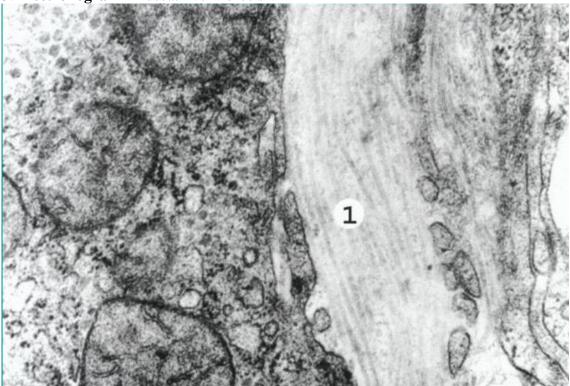
To study chronic venous plethora of the liver according to the macroscopic picture. Describe the macropreparation "Nutmeg liver". Pay attention to the size, consistency, color of the liver in the section.

4. Micropreparation "Chronic venous plethora of the liver (nutmeg liver)".



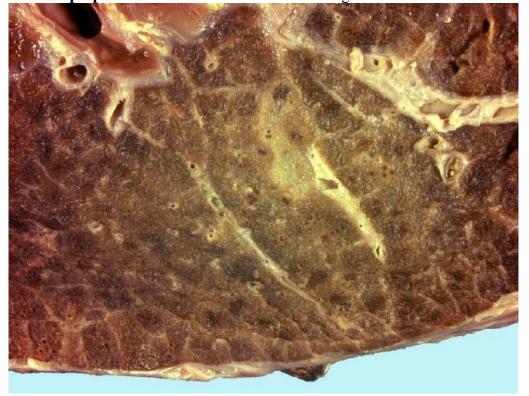
To study chronic venous plethora of the liver by a microscopic picture. Describe the micropreparation "Chronic venous plethora of the liver (nutmeg liver)" (staining with hematoxylin and eosin). Pay attention to the blood filling of the central vein and sinusoids of the centers of the lobules, the state of hepatocytes in these parts of the lobules, as well as the blood filling of the sinusoids and the state of hepatocytes of the peripheral parts of the lobules.

5. Electronogram "Muscat liver fibrosis".



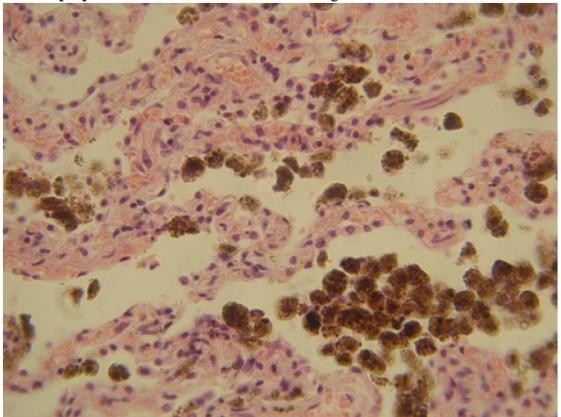
To study the mechanism of sclerosis in the development of muscat liver fibrosis using electron microscopy. Describe the electronogram 'Muscat liver fibrosis'. Pay attention to the localization of collagen fibers (1), the state of fibroblasts and stellate macrophages (Kupffer cells).

6. Macropreparation "Brown induration of the lung".

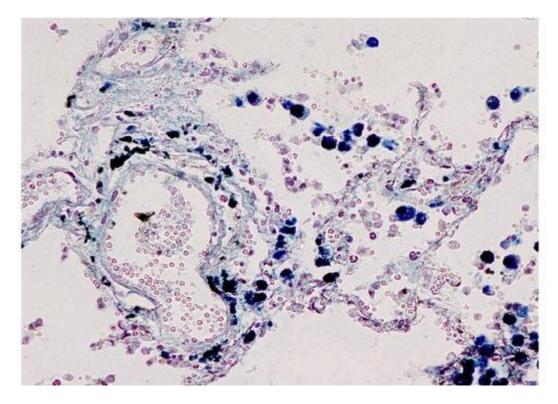


To study chronic venous congestion of the lungs on the basis of the macroscopic picture. Describe the macropreparation "Brown induration of the lung". Pay attention to the size, consistency and color of the lung tissue.

## 7. Micropreparation "Brown induration of the lung".

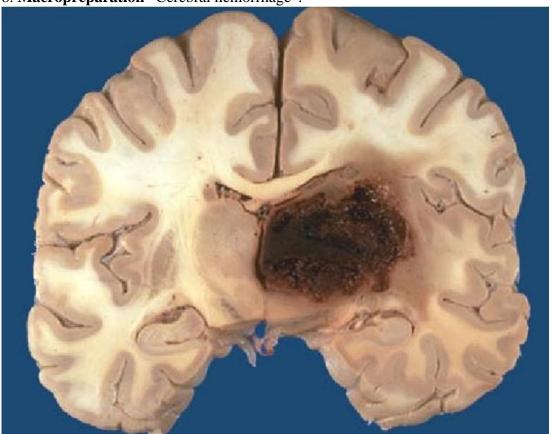


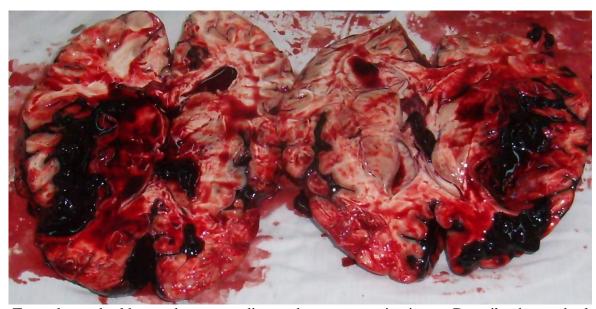
To study chronic venous plethora of the lungs on a microscopic picture. Describe the micropreparation "Brown induration of the lungs" (staining with hematoxylin and eosin,



Perls reaction). Pay attention to the localization of sideroblasts and siderophages, the color of the pigment in the Perls reaction, the thickness of the interalveolar septa.

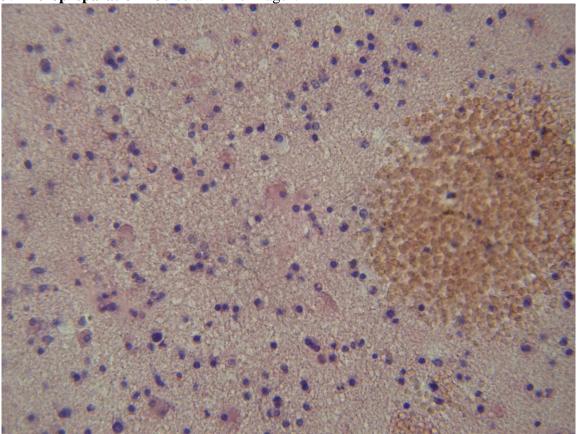
8. Macropreparation "Cerebral hemorrhage".





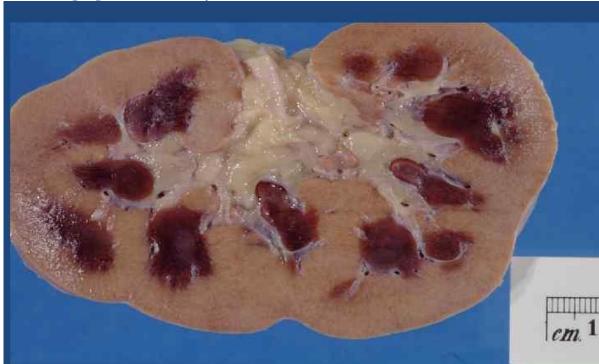
To study cerebral hemorrhage according to the macroscopic picture. Describe the cerebral hemorrhage macropreparation. Pay attention to the location and form of hemorrhage, the color of coagulated blood, the state of the brain tissue in the area of hemorrhage.

9. Micropreparation "Cerebral hemorrhage".



To study the hemorrhage in the brain according to the microscopic picture. Describe the micropreparation 'Hemorrhage in the brain' (staining with hematoxylin and eosin). Pay attention to the localization of erythrocytes in the brain tissue, note the state of erythrocytes and brain tissue in and around the hemorrhage zone, the state of the arteriole walls.

10. Macropreparation "Kidney ischemia".



To study ischemia of the kidney on a macroscopic picture. Describe the macropreparation "Kidney ischemia". Pay attention to the size, consistency and color of the organ.

### 5. List of recommended literature:

#### **Basic literature:**

1. "Basic pathology" Vinay Kumar, Ramzi S. Cotran, Stanley L. Robbins, 1997.

#### **Additional literature:**

- 1. "Pathology. Quick Review and MCQs" Harsh Mohan, 2004.
- 2. "Textbook of Pathology" Harsh Mohan, 2002.
- 3. "General and Systemic Pathology" Joseph Hunter, 2002.
- 4. "General and Systematic Pathology" Ed. J.C.E. Underwood Edinburgh: Churchill Livingstone, 1996 (2<sup>th</sup>).
- 5. "Histology for Pathologist" Ed. S.S.Sternberg Philadelphia: Lippincott Raven Publ, 1997 (2<sup>th</sup>).
- 6. "Histopathology. A Color Atlas and Textbook" Damjanov I., McCue P.A. Baltimore, Philadelphia, London, Paris etc.: Williams and Wilkins, A Waverly Co., 1996.
- 7. "Muir's Textbook of Pathology" Eds. R.N.M. MacSween, K. Whaley London: ELBS, 1994 (14<sup>th</sup>).
  - 8. "Pathology" Eds. Rubin, J.L. Farber Philadelphia: Lippincott Raven Publ, 1998 (3<sup>th</sup>).
- 9. "Pathology Illustrated" Govan A.D.T., Macfarlane P.S., Callander R. Edinburgh: Churchill Livingstone, 1995 (4<sup>th</sup>).
- 10. "Robbins Pathologic Basic of Disease" Eds. R.S.Cotran, V.Kumar, T.Collins Philadelphia, London, Toronto, Montreal, Sydney, Tokyo: W.B.Saunders Co., 1998 (6<sup>th</sup>).
- 11. "Wheater's Basic Histopathology. A Color Atlas and Text" Burkitt H.G., Stevens A.J.S.L., Young B. Edinburgh: Churchill Livingstone, 1996 (3<sup>th</sup>).
- 12. "Color Atlas of Anatomical Pathology" Cooke R.A., Steward B. Edinburgh: Churchill Livingstone, 1995 (10<sup>th</sup>).
- 13. "General Pathology" Walter J.B., Talbot I.C. Edinburgh: Churchill Livingstone, 1996 (7<sup>th</sup>).
  - 14. "Concise Pathology" Parakrama Chandrasoma, Glive R. Taylor.
- 15. "Pathology" Virginia A. LiVolsi, Maria J. Merino, John S. J. Brooks, Scott H. Saul, John E. Tomaszewski, 1994.
  - 16. "Short lectures on pathology" Zagoroulko A., 2002
  - 17. "Robbins pathologic basis of diseases" Cotran R., Kumar V., Collins T.
  - 18. "General pathology" Dr. Fatma Hafez, 1979.
  - 19. "Anderson's Pathology" Damjanov I., Linder J. St. Louis: Mosby Inc., 1995 (10<sup>th</sup>).

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