## VOLGOGRAD STATE MEDICAL UNIVERSITY Department of Pathological Anatomy

Acute inflammation. The morphology of exudative inflammation.

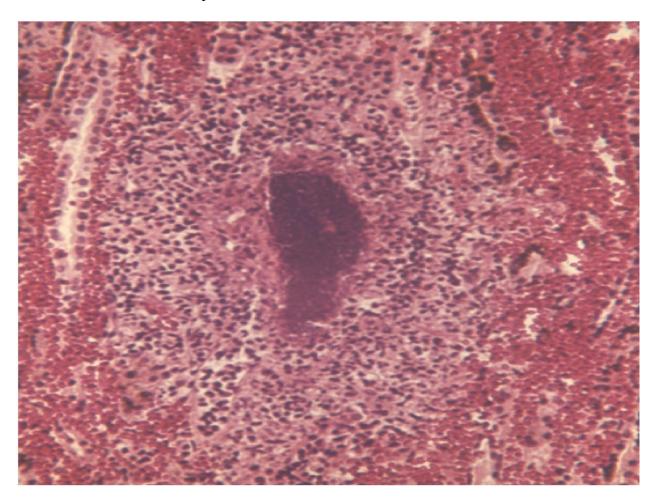
# Lesson plan.

### Explore and describe:

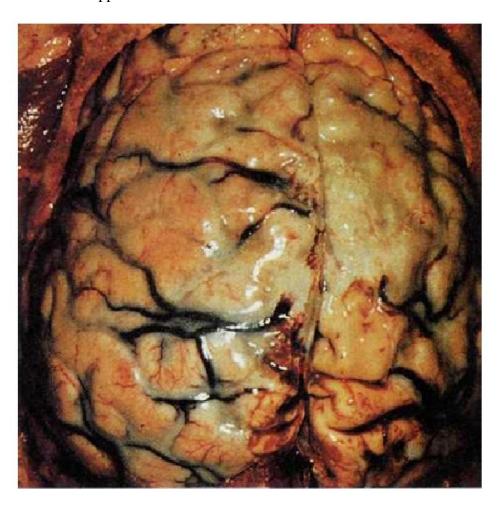
1. To study focal purulent inflammation according to the macroscopic picture. Describe the **macropreparation** "Embolic purulent nephritis". Pay attention to the size and consistency of the kidney, the number, color, shape, size and localization of lesions.



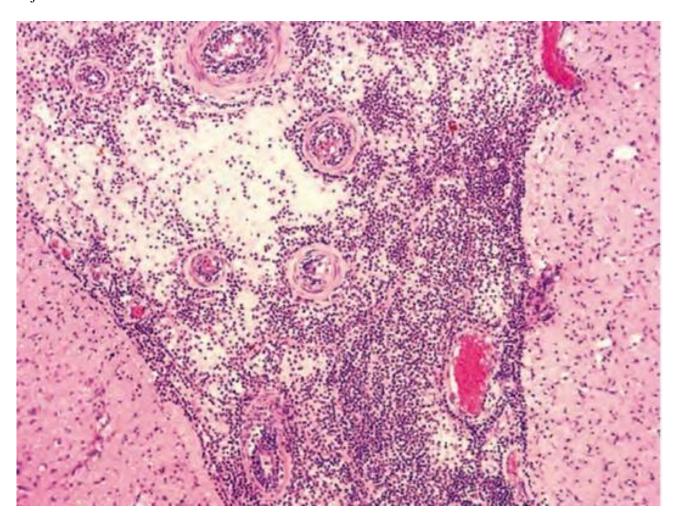
2. To study focal purulent inflammation in a microscopic picture. Describe the **micropreparation** "Embolic purulent nephritis" (staining with hematoxylin and eosin). Pay attention to the cellular composition of the infiltrate and the state of the kidney tissue in the lesion focus, as well as in the zone of demarcation inflammation, the localization of microbial colonies and their relationship with the vessel.



3. To study diffuse purulent inflammation according to the macroscopic picture. To describe the **macropreparation** "Purulent leptomeningitis". Pay attention to the appearance, color, thickness, state of the vessels of the pia mater, the contents of the subarachnoid space, the state of the brain tissue, as well as the appearance of the convolutions and furrows.



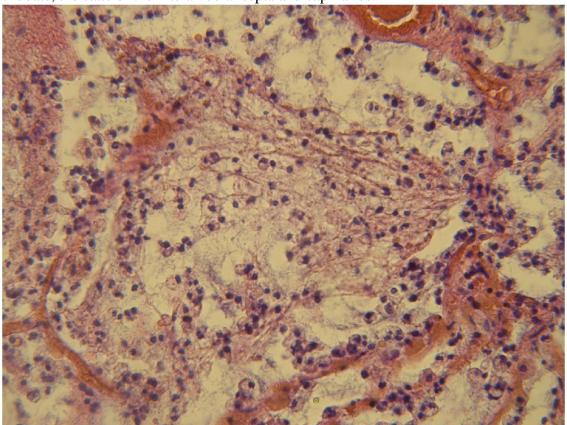
4. To study diffuse purulent inflammation in a microscopic picture. Describe the **micropreparation** "Purulent leptomeningitis" (staining with hematoxylin and eosin). Pay attention to the thickness of the pia mater, the location, prevalence and composition of the infiltrate, the state of the vessels, as well as the tissues of the membranes in the affected area and adjacent brain tissue.



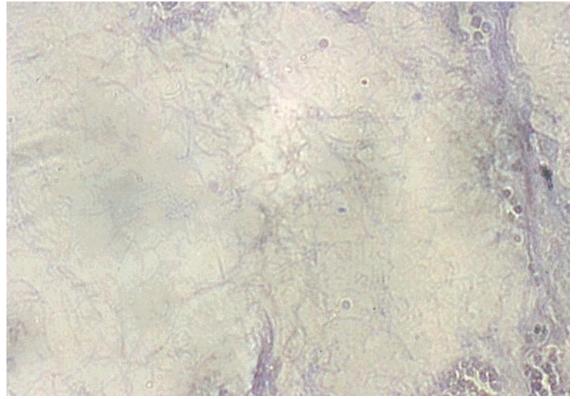
5. To study croupous inflammation according to the macroscopic picture. Describe the **macropreparation** "Fibrinous pericarditis". Pay attention to the thickness, transparency, color of the pericardium and the features of the fibrinous film on its surface - the color, appearance and density of connection with the underlying tissues.



6. To study croupous inflammation on a microscopic picture. Describe the **micropreparation** "Croupous pneumonia" (staining with hematoxylin and eosin, for fibrin - according to Shueninov). Pay attention to the prevalence of the lesion, the localization and composition of the exudate, the state of the interalveolar septa and capillaries.



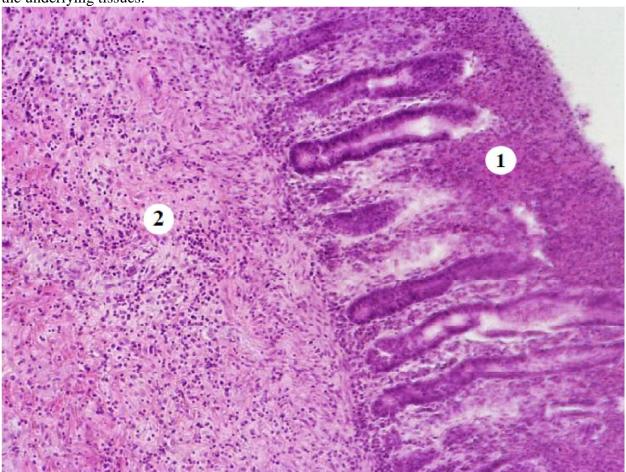
When staining according to Shueninov, pay attention to the localization and color of fibrin filaments in the exudate.



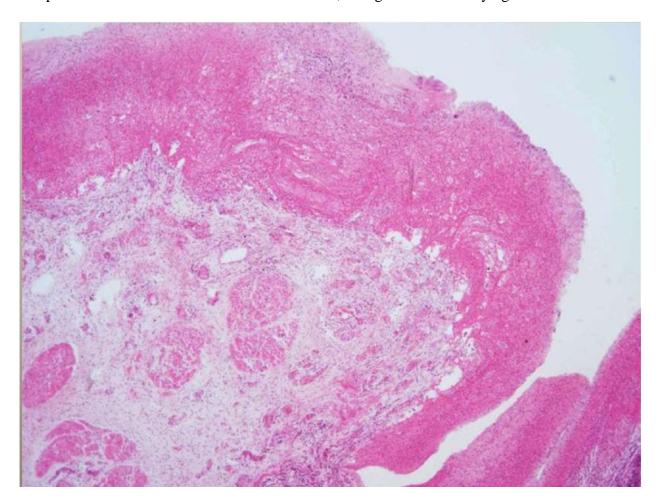
7. To study diphtheria inflammation in the macroscopic picture. Describe the **macropreparation** "Diphtheritic colitis". Pay attention to the color, surface, thickness and nature of the attachment of the film replacing the mucous membrane of the large intestine.



8. To study diphtheria inflammation in a microscopic picture. Describe the **micropreparation** "Diphtheritic colitis" (staining with hematoxylin and eosin). Pay attention to the condition of the intestinal mucosa, the thickness, composition and localization of the fibrinous film, changes in the underlying tissues.

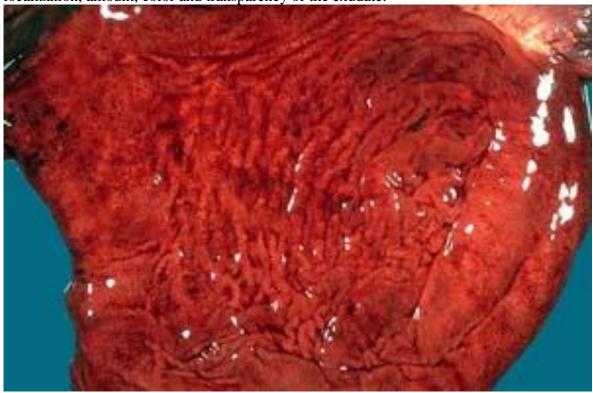


9. To study diphtheria inflammation in a microscopic picture. Describe the **micropreparation** "Diphtheritic inflammation of the throat in diphtheria" (staining with hematoxylin and eosin). Pay attention to the condition of the mucous membrane in the area of crypt, the thickness, composition and localization of the fibrinous film, changes in the underlying tissues.

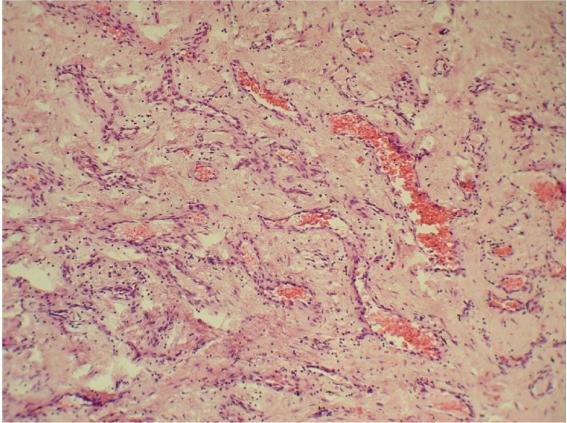


10. To study catarrhal inflammation in the macroscopic picture. Describe the **macropreparation** "Catarrhal gastritis". Pay attention to the thickness, color and appearance of the gastric mucosa,

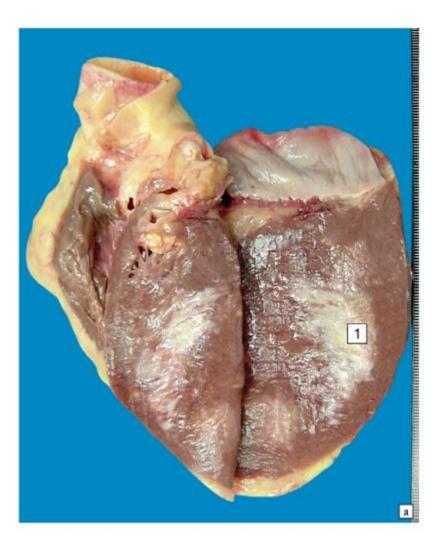
localization, amount, color and transparency of the exudate.



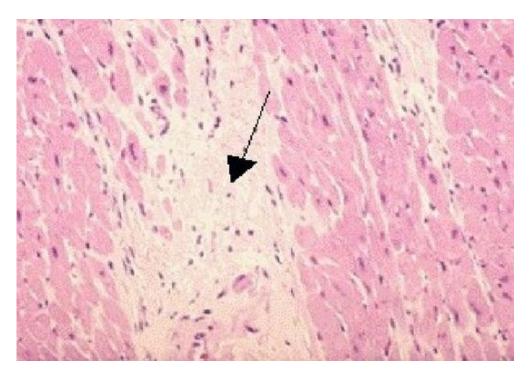
11. Examine the granulation tissue on a microscopic picture. Describe the **micropreparation** "Granulation tissue" (staining with hematoxylin and eosin). Pay attention to the number and characteristics of blood vessels, name the cells of granulation tissue.



12. To study large-focal cardiosclerosis on a macroscopic picture. Describe the **macropreparation** "Large focal cardiosclerosis". Pay attention to the localization, size, color and shape of the lesion, wall thickness and the state of the surrounding myocardium.



13. To study large-focal cardiosclerosis by microscopic picture. Describe the **micropreparation** "Large focal cardiosclerosis" (staining with hematoxylin and eosin, picrofuchsin). Pay attention to the shape and structure of the lesion, the state of adjacent myocardiocytes, as well as the difference in the color of the lesion and myocardiocytes.



# 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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