

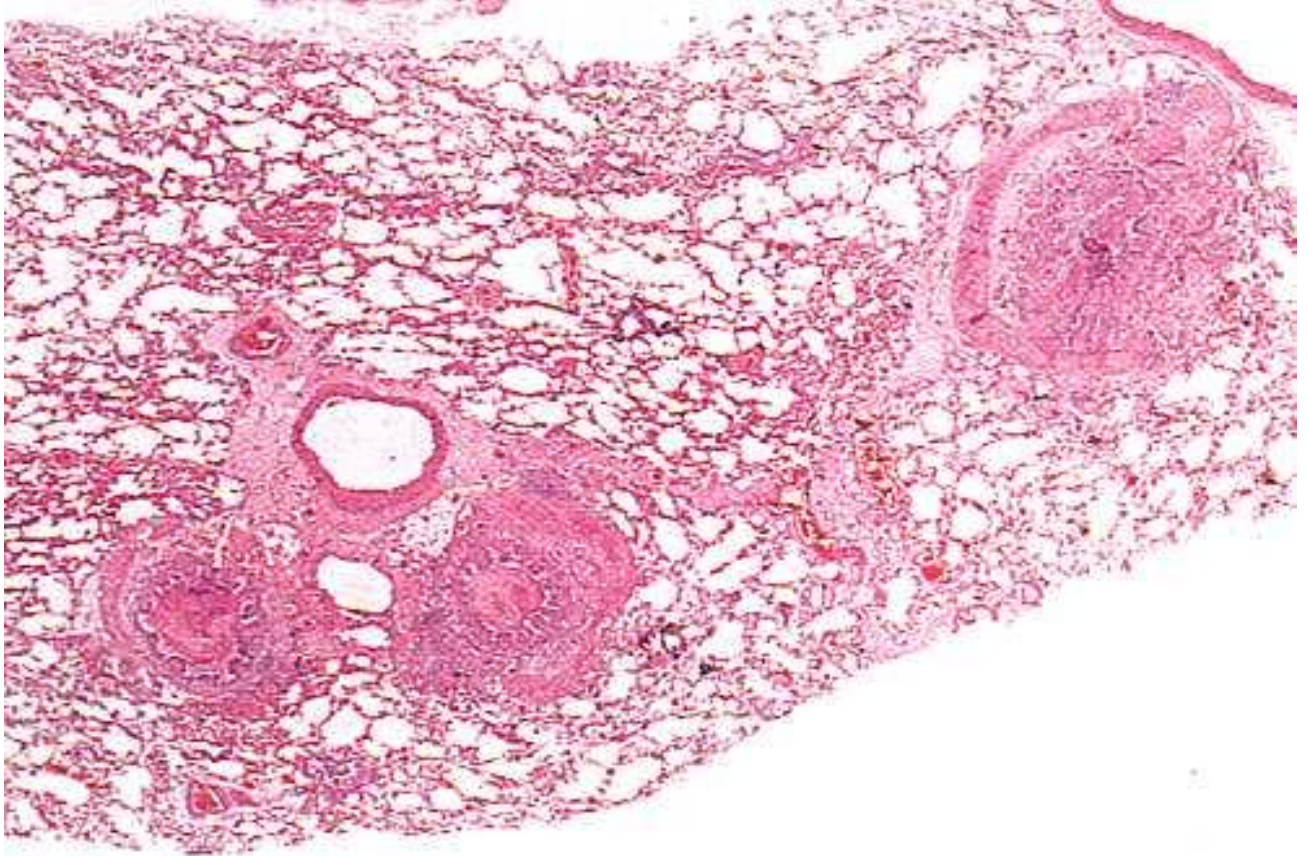
VOLGOGRAD STATE
MEDICAL UNIVERSITY
Department of Pathological Anatomy

Immunopathological processes.

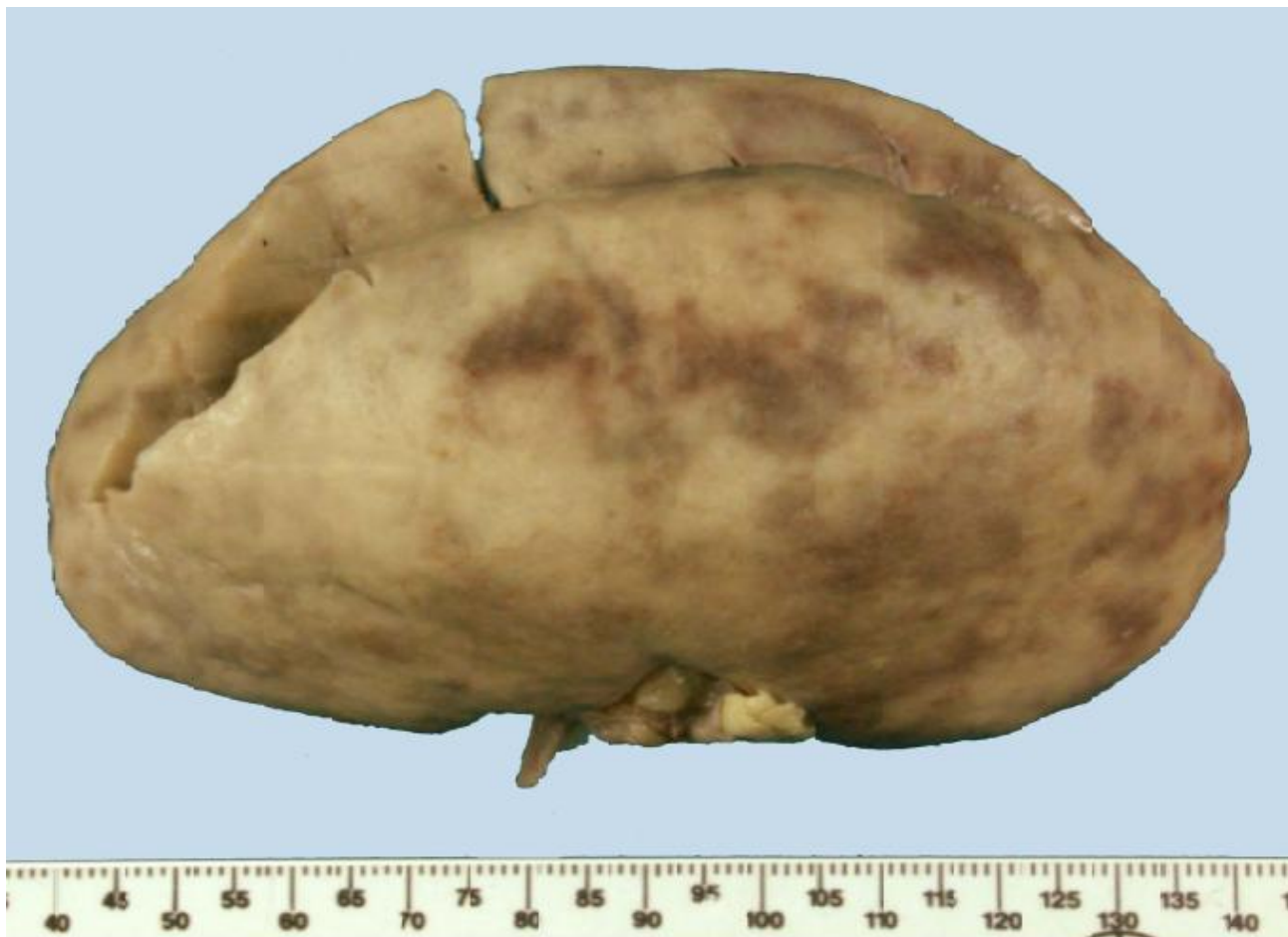
Lesson plan.

Explore and describe:

1. . To study the reaction of type I hypersensitivity according to the microscopic picture. Describe the micropreparation "Bronchial biopsy in bronchial asthma" (staining with hematoxylin and eosin). Pay attention to the blood filling and permeability of the vessels of the mucous membrane, the basement membrane of the epithelium, the mucous glands, the composition and localization of the cellular infiltrate, the contents of the bronchus.



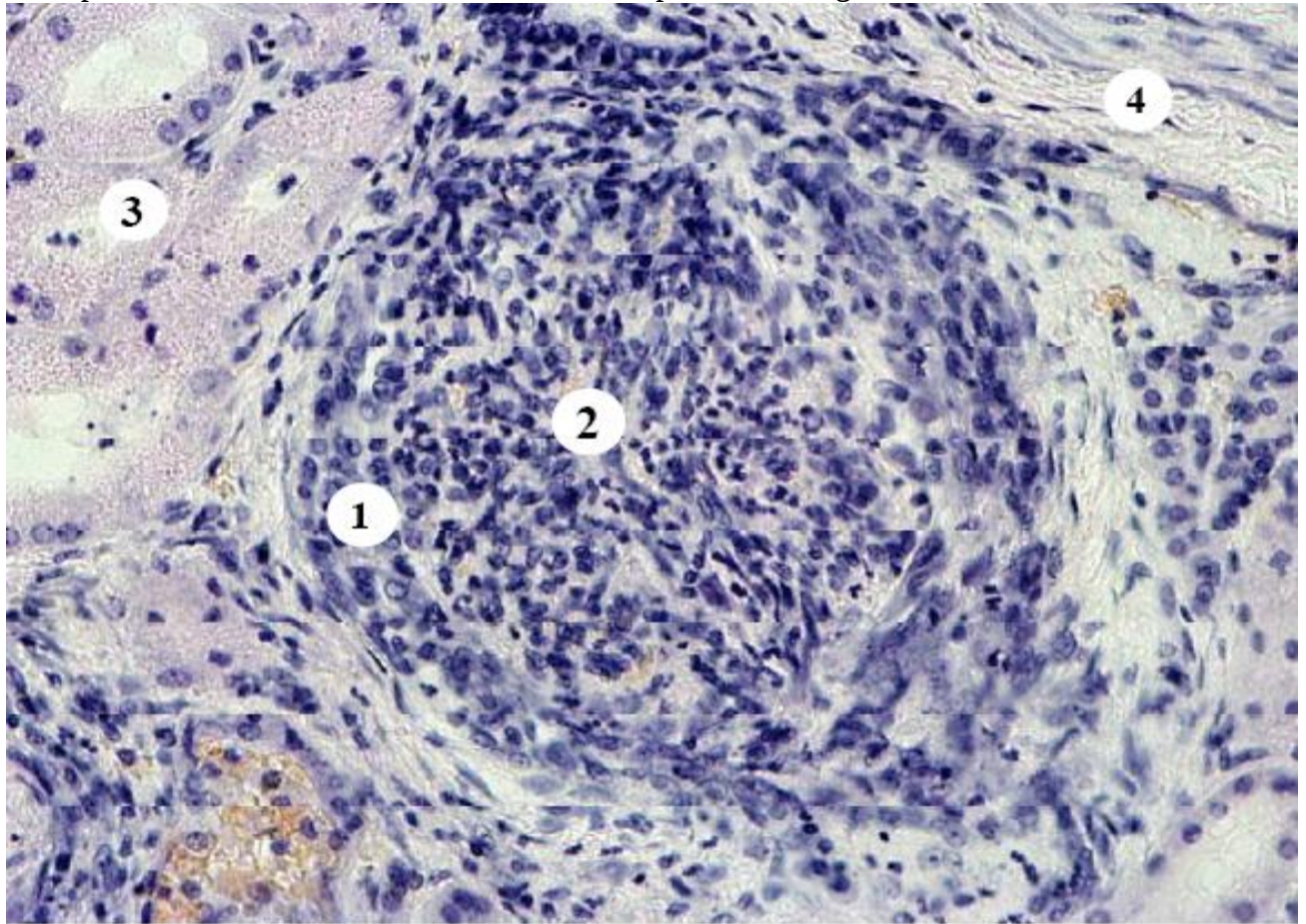
2. To study the reaction of hypersensitivity II mupa according to the macroscopic picture.
Describe the macro-preparation "Large variegated kidney". Pay attention to the size, consistency, color of the kidney surface and on the cut.



15.3. Подострый гломерулонефрит (большая пестрая почка).

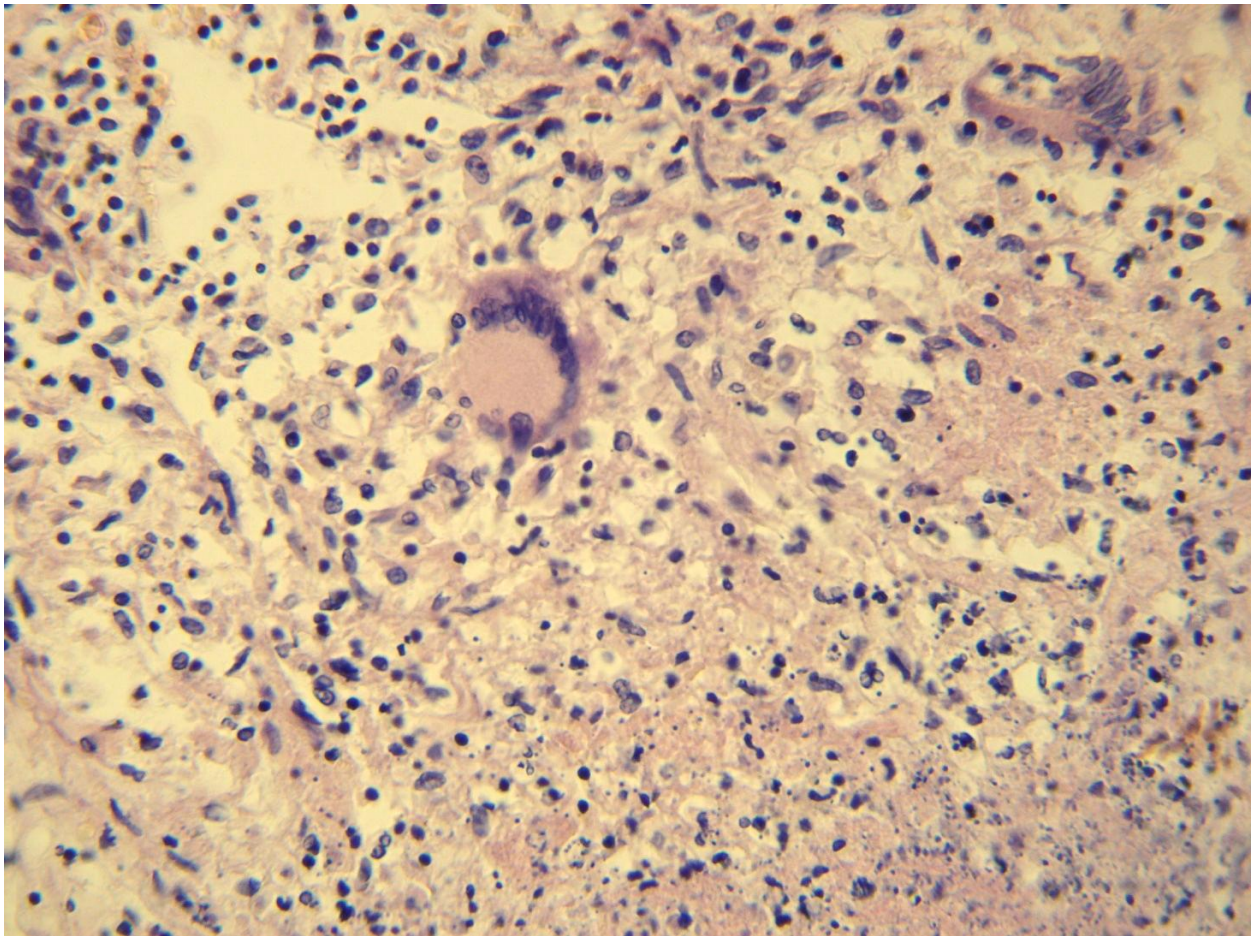
Почка увеличена в размерах, бледная, с петехиальными кровоизлияниями на поверхности.

3. To study the reaction of type III hypersensitivity in the microscopic picture. Describe the micropreparation "Glomerulonephritis" (staining with hematoxylin and eosin). Pay attention to the necrosis of the vascular loops of the glomeruli, the thickness of the basement membranes of the capillaries, blood clots in the lumen of some capillaries, changes in cell nuclei.



15.4. Экстракапиллярный продуктивный гломерулонефрит. Видны полулуния, образованные за счет пролиферации эпителия наружного листка капсулы Шумлянского – Боумена и миграции моноцитов и макрофагов в пространство между капсулой и капиллярным клубочком (1). Между слоями клеток в полулуниях – скопления фибрина. Клубочки сдавлены (2). В них отмечаются фокальный некроз, диффузная или очаговая пролиферация эндотелия, пролиферация мезангия. Часть канальцев атрофична, в эпителии некоторых извитых канальцев – гидропическая или гиалиново-капельная дистрофия (3). В строме очки – склероз, лимфомакрофагальный инфильтрат (4).

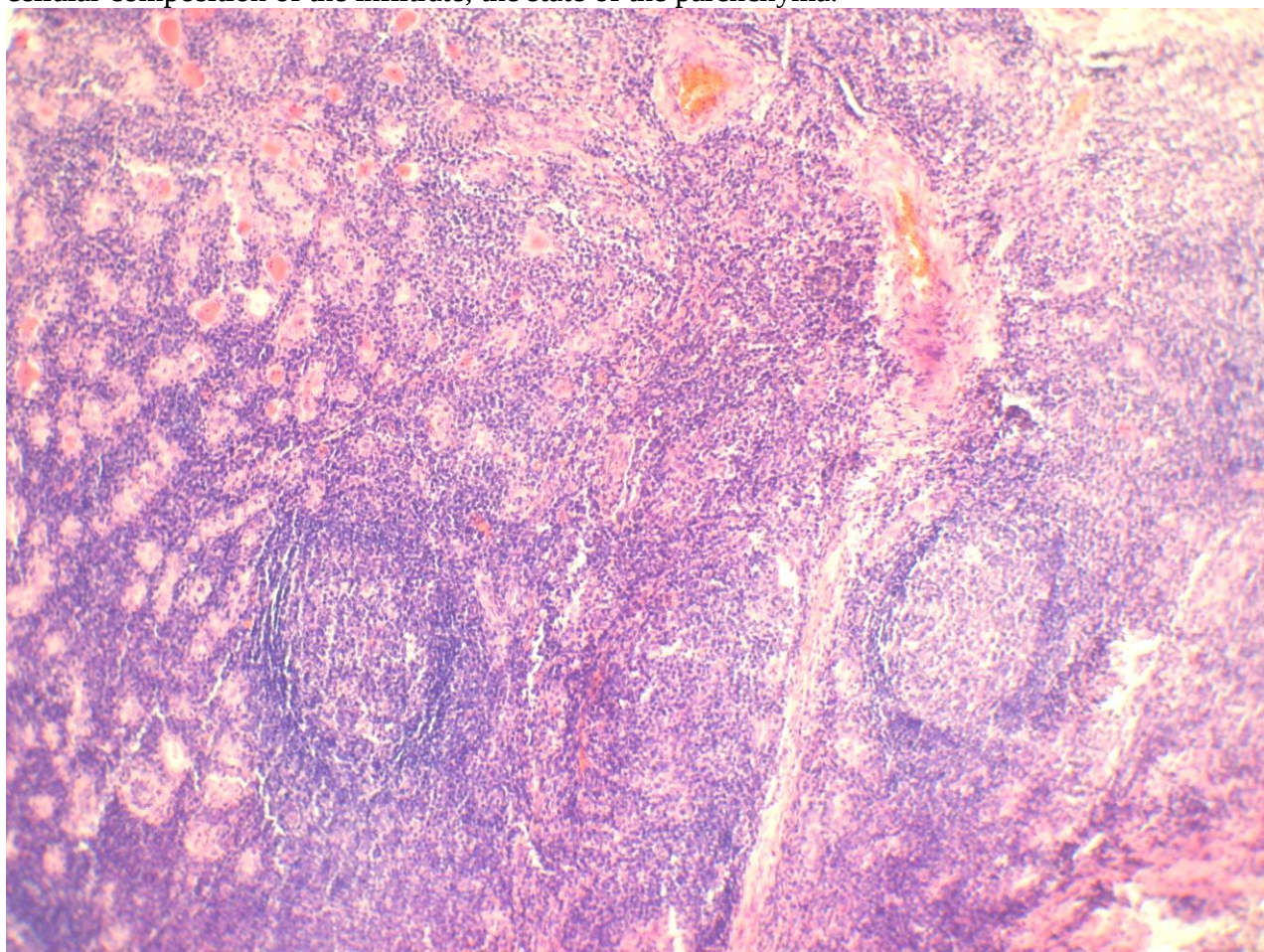
4. To study the reaction of hypersensitivity of the delayed type on the microscopic picture. Describe the micropreparation "Tuberculous productive tubercles in the intestine." Pay attention to the focus of caseous necrosis and the composition of the cellular infiltrate.



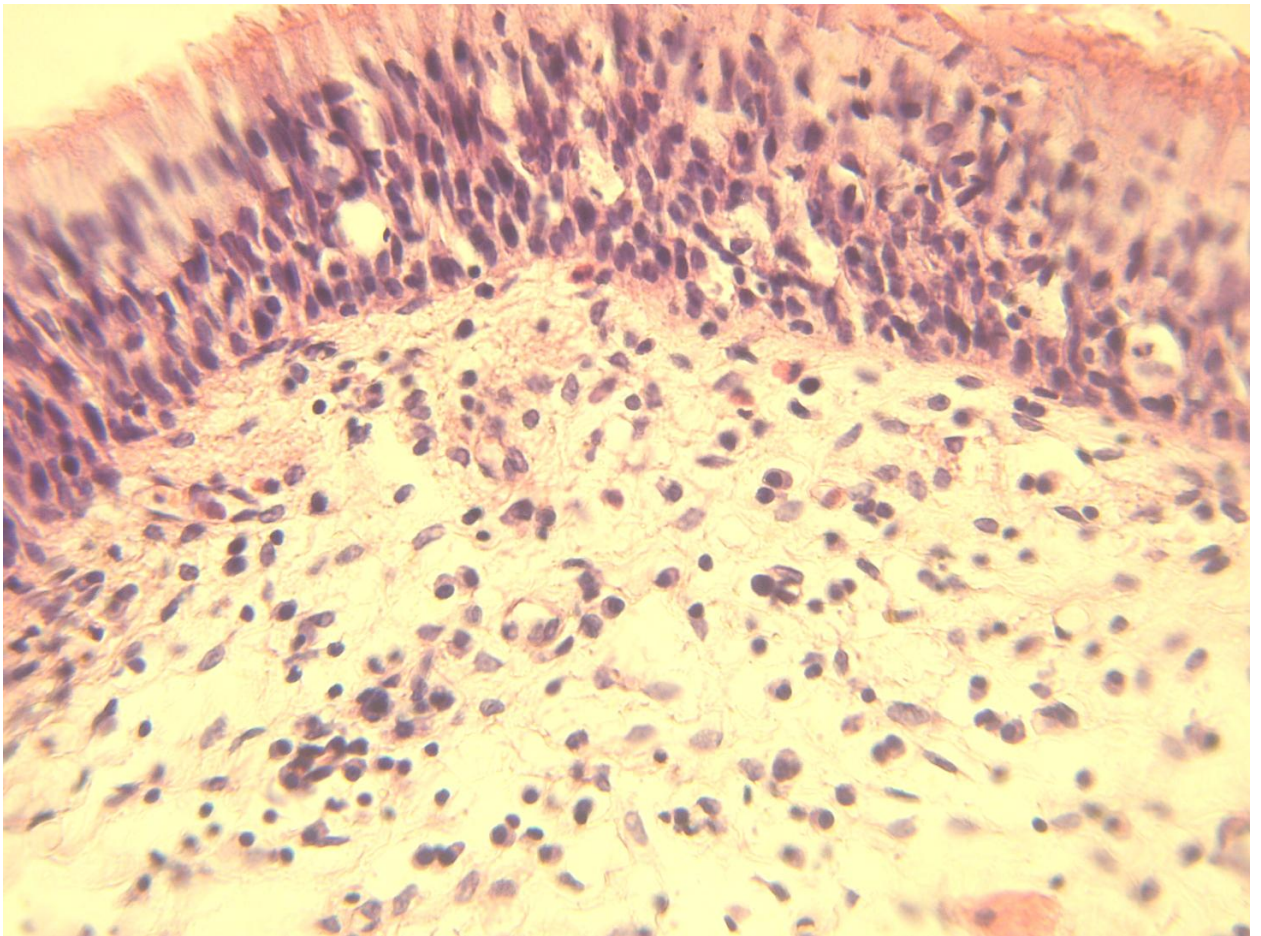
5. Examine Hashimoto's goiter in a macroscopic picture. Describe the Hashimoto's Goiter macro-preparation. Pay attention to the size, surface of the gland, consistency, type of tissue in the section.



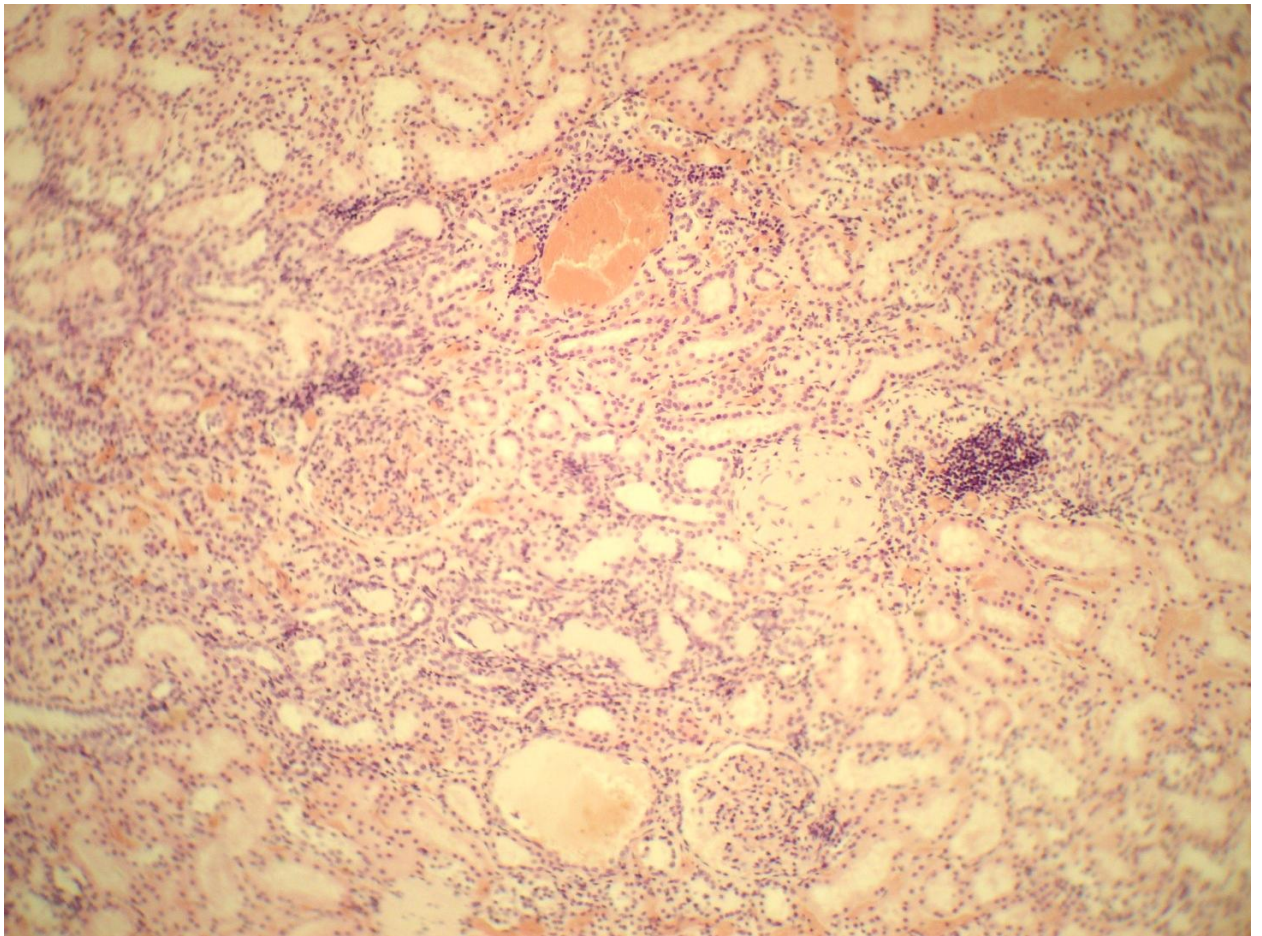
6. Examine Hashimoto's goiter by a microscopic picture. Describe the micropreparation "Hashimoto's Goiter" (staining with hematoxylin and eosin). Pay attention to the localization and cellular composition of the infiltrate, the state of the parenchyma.



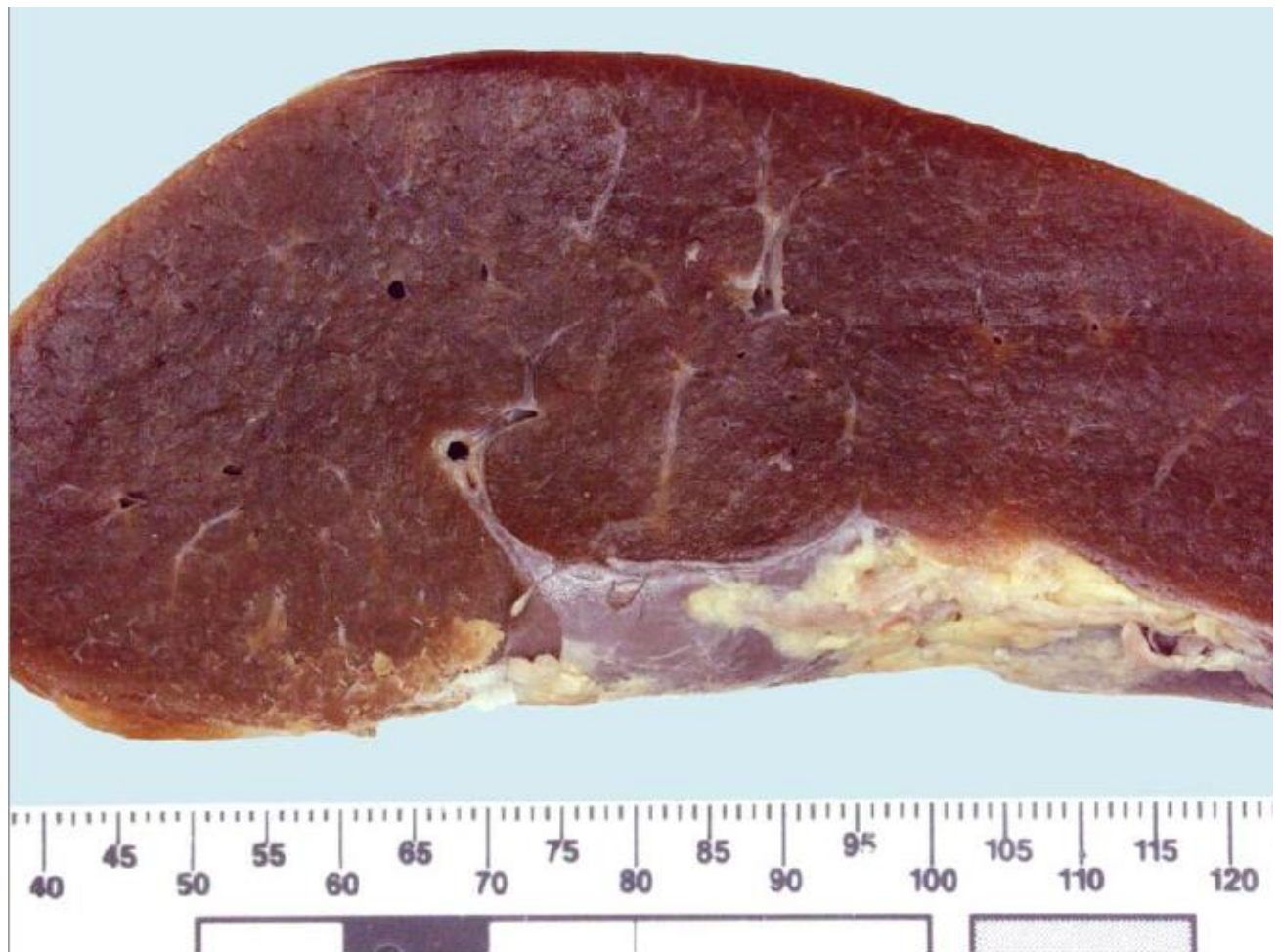
7. To study the micropreparation "Fibro-edematous polyp of the nose". Pay attention to dilated, full-blooded vessels, edema of connective tissue, inflammatory infiltration with a predominance of eosinophils.



8. To study the micropreparation "Kidney with periarteritis nodosa". Pay attention to the fibrinoid necrosis of the inner and middle membranes of the arterial wall, the cellular reaction in the adventitia and the surrounding connective tissue.

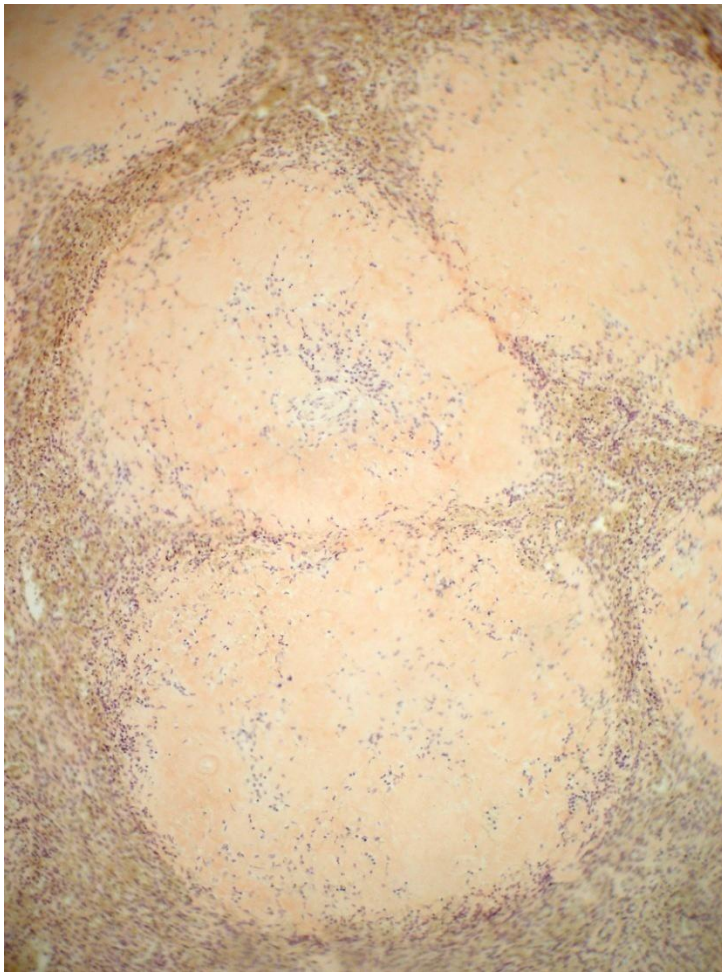


9. To study the spleen amyloidosis according to the macroscopic picture. Describe the spleen amyloidosis macro-preparation. Pay attention to organ size, consistency, color and sectional view.



4.15. Амилоидоз селезенки, сальная селезенка.
Селезенка увеличена, плотная, ее поверхность гладкая, капсула напряжена.
На разрезе пульпа коричневатая, с салым блеском

10. To study the micropreparation "Amyloidosis of the spleen" on the microscopic picture. Describe the micropreparation "Spleen amyloidosis" (staining with hematoxylin and eosin, Congo red). Pay attention to the localization, structure and color of amyloid, the state of the cellular elements of the pulp. Mark the amyloid color when using Congo red.



11. To study the micropreparation "Pneumocystis pneumonia in HIV". To study Pneumocystis pneumonia in HIV, to describe the micropreparation "Pneumocystis pneumonia in HIV", to pay attention to mixed cell infiltration.

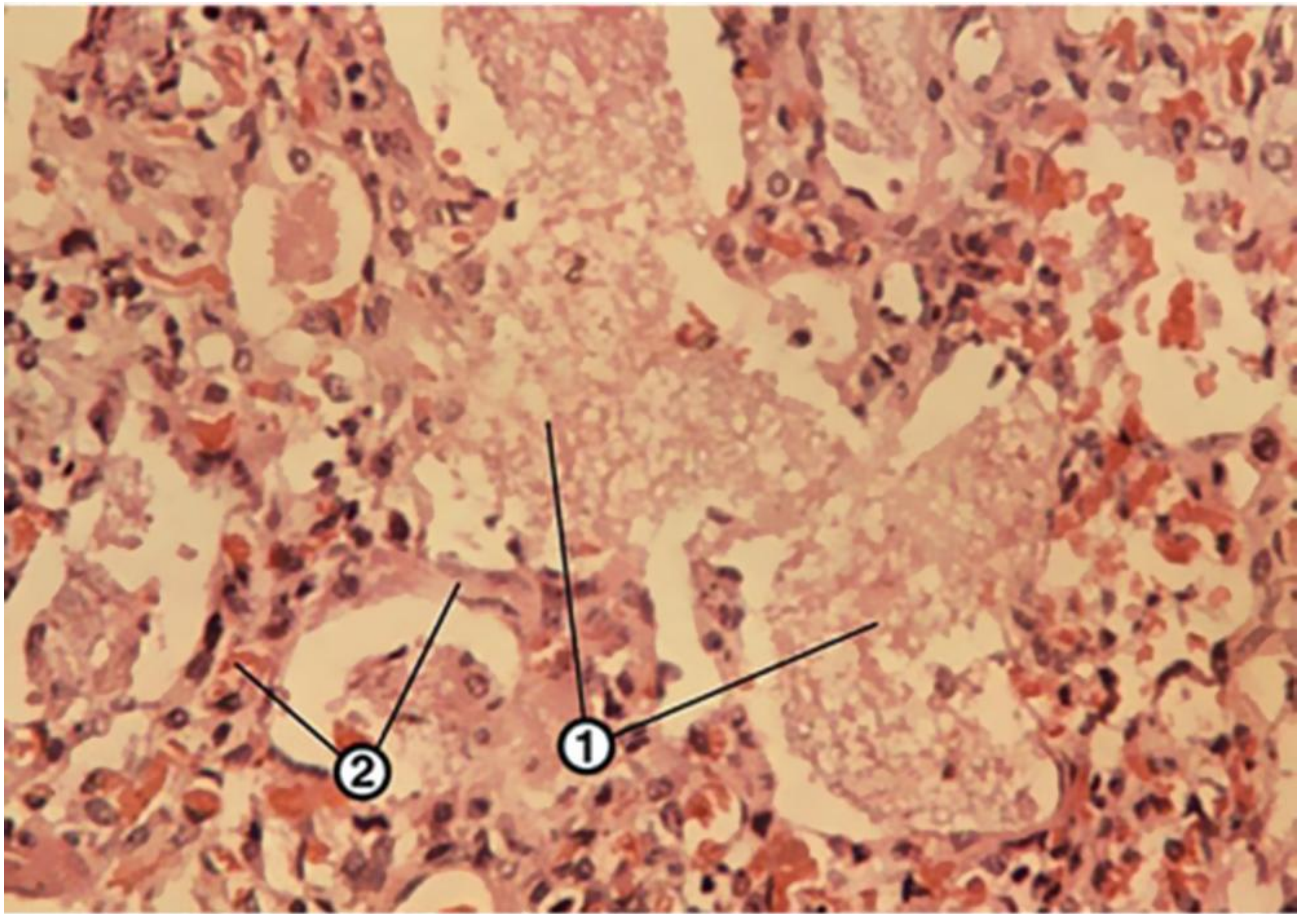
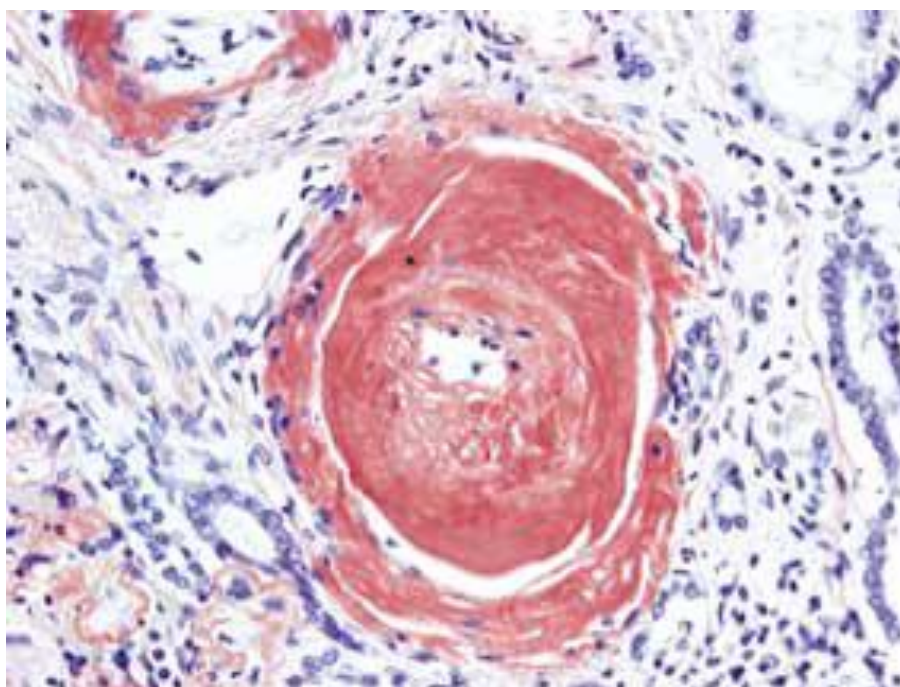


Рис. 1. Микропрепарат легкого при пневмоцистозе:
в просветах альвеол видны скопления пневмоцист (1),
межальвеолярные перегородки (2) несколько утолщены,
инфильтрированы лимфоцитами и плазмócитами;
окраска гематоксилином и эозином, x600

12. To study the micropreparation "Kidney amyloidosis". To study renal amyloidosis by microscopic picture. Describe the micropreparation "Kidney amyloidosis" (staining with hematoxylin and eosin, Congo red). Pay attention to the localization, structure and color of the amyloid. Mark the amyloid color when dyeing Congo red.



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 (2th).
5. "Histology for Pathologist" Ed. S.S.Sternberg – Philadelphia: Lippincott Raven Publ, 1997 (2th).
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 (14th).
8. "Pathology" Eds. Rubin, J.L. Farber – Philadelphia: Lippincott Raven Publ, 1998 (3th).

9. "Pathology Illustrated" Govan A.D.T., Macfarlane P.S., Callander R. – Edinburgh: Churchill Livingstone, 1995 (4th).
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 (6th).
11. "Wheater's Basic Histopathology. A Color Atlas and Text" Burkitt H.G., Stevens A.J.S.L., Young B. – Edinburgh: Churchill Livingstone, 1996 (3th).
12. "Color Atlas of Anatomical Pathology" Cooke R.A., Steward B. – Edinburgh: Churchill Livingstone, 1995 (10th).
13. "General Pathology " Walter J.B., Talbot I.C. – Edinburgh: Churchill Livingstone, 1996 (7th).
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 (10th).

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