

VOLGOGRAD STATE
MEDICAL UNIVERSITY
Department of Pathological Anatomy

**Pathological anatomy: content, tasks, objects and research methods.
Morphology of reversible and irreversible damage to cells and tissues:
morphology of lipid metabolism disorders (lipid dystrophies).**

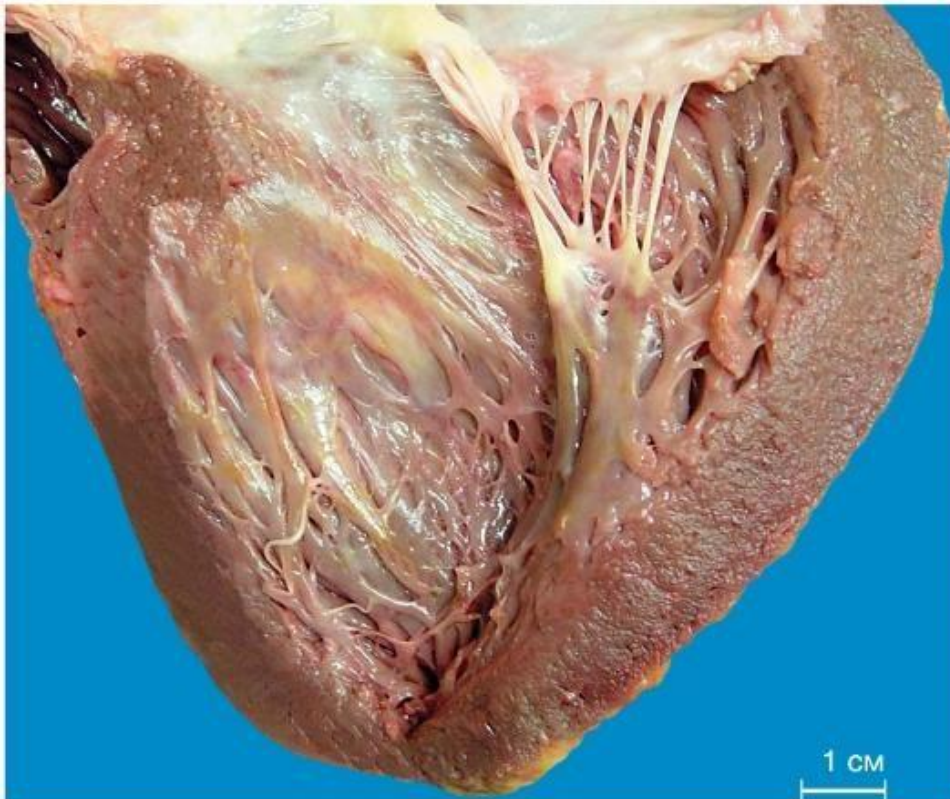
Macropreparations:

1. Macropreparation "Liver steatosis" (fatty liver).



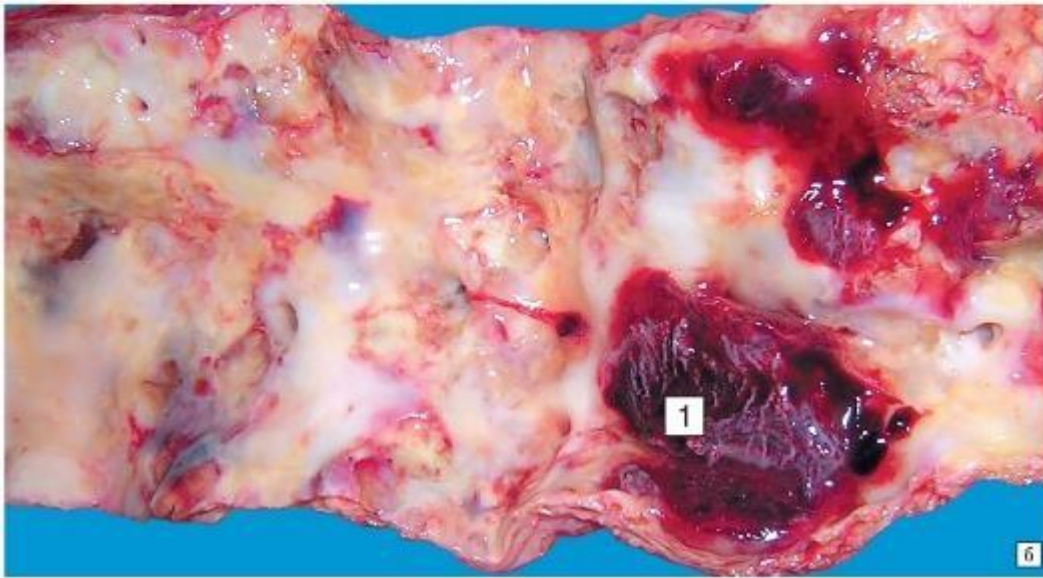
Pay attention to the size, surface, consistency, color and appearance of the liver in section.

2. Macropreparation "Fatty degeneration of the myocardium" ("tiger" heart).



Pay attention to the size of the heart, the size of its chambers, consistency, color, the presence of yellow-white striation under the endocardium of the left ventricle in the region of the trabeculae and papillary muscles.

3. Macropreparation "Aortic atherosclerosis".



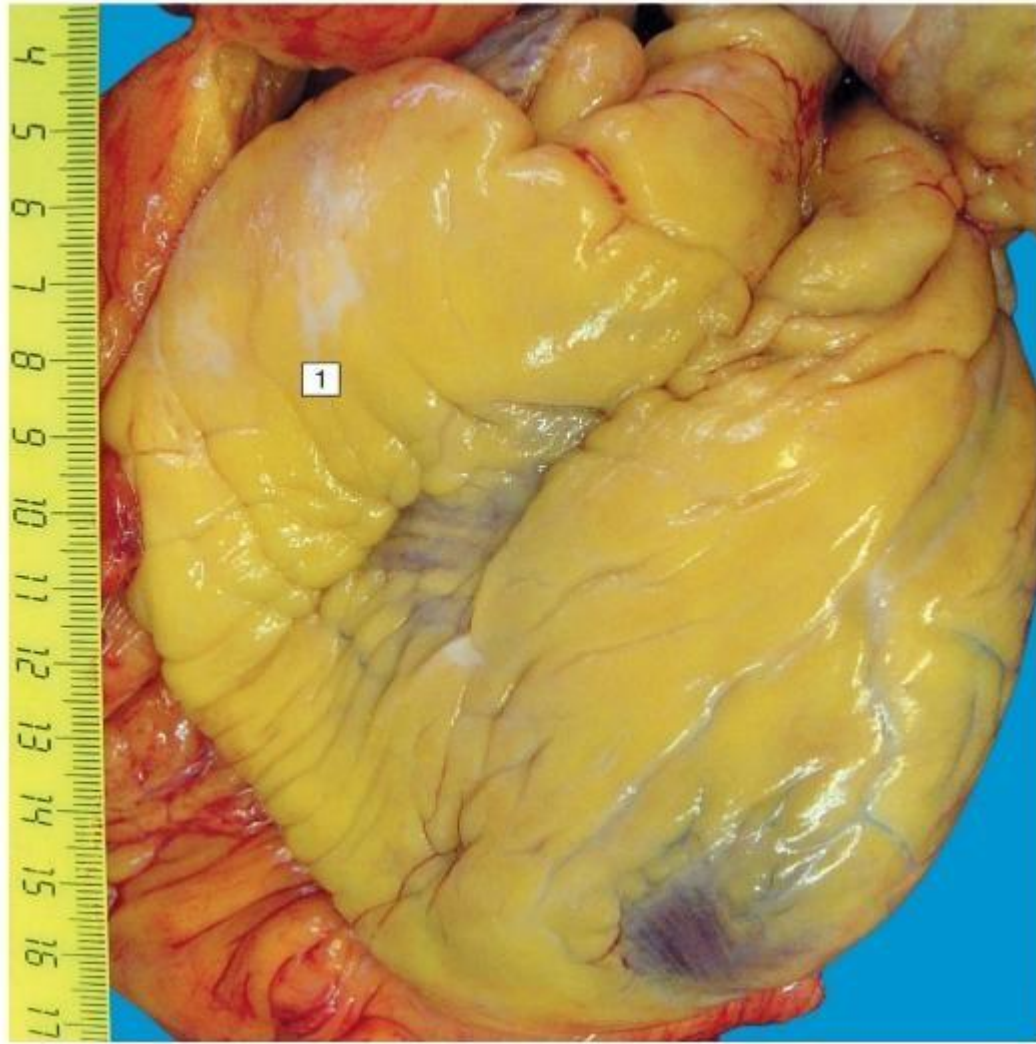
Pay attention to the color, shape, consistency of changes in the intima of the aorta.

4. Macropreparation "Cholesterosis of the gallbladder".



Pay attention to the wall thickness and condition of the mucous membrane of the gallbladder.

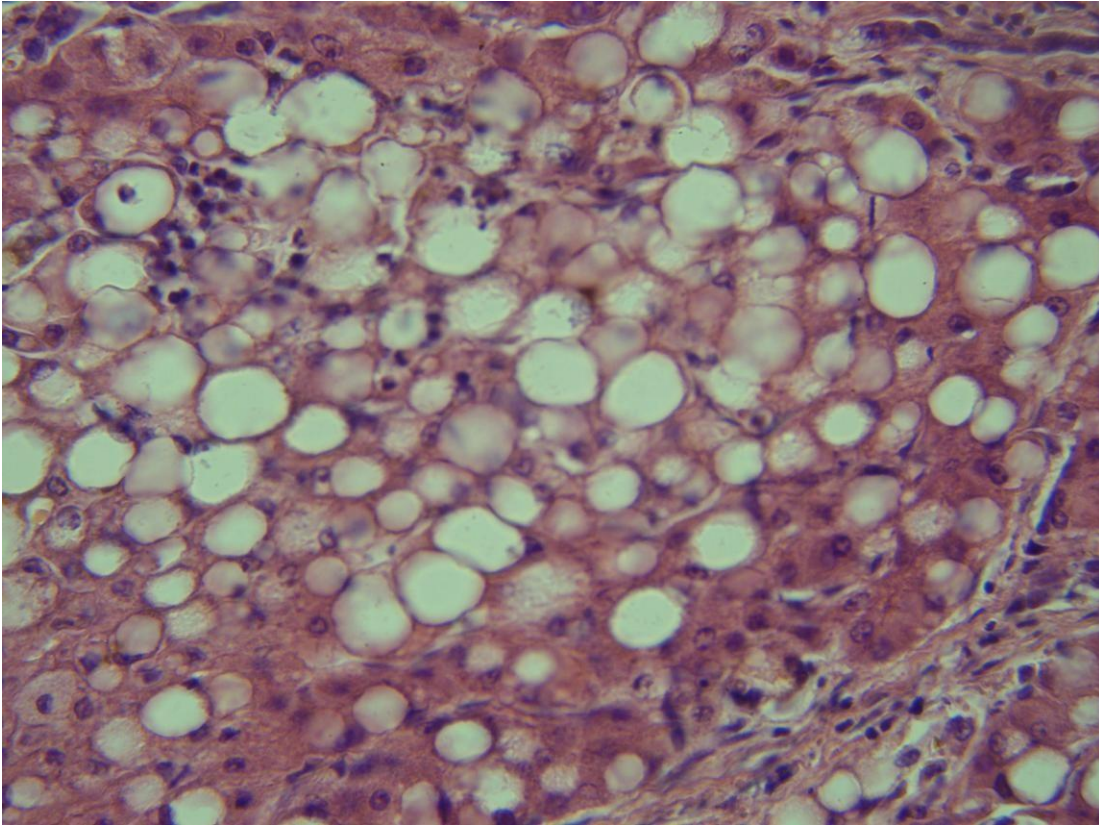
5. Macropreparation “Simple obesity of the myocardium”.



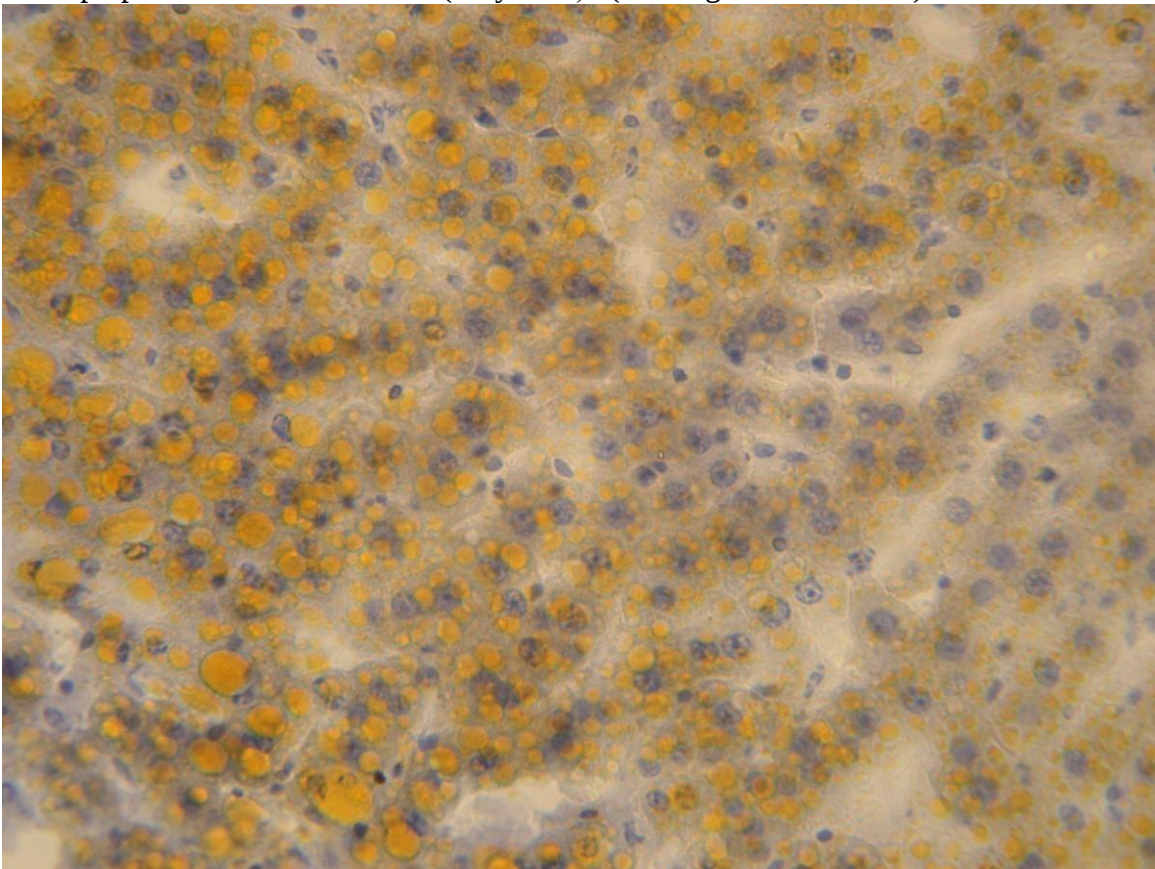
Pay attention to the localization of changes, the size and color of the inclusions.

Micropreparations:

1. Micropreparation “Liver steatosis (fatty liver)” (staining with hematoxylin and eosin).



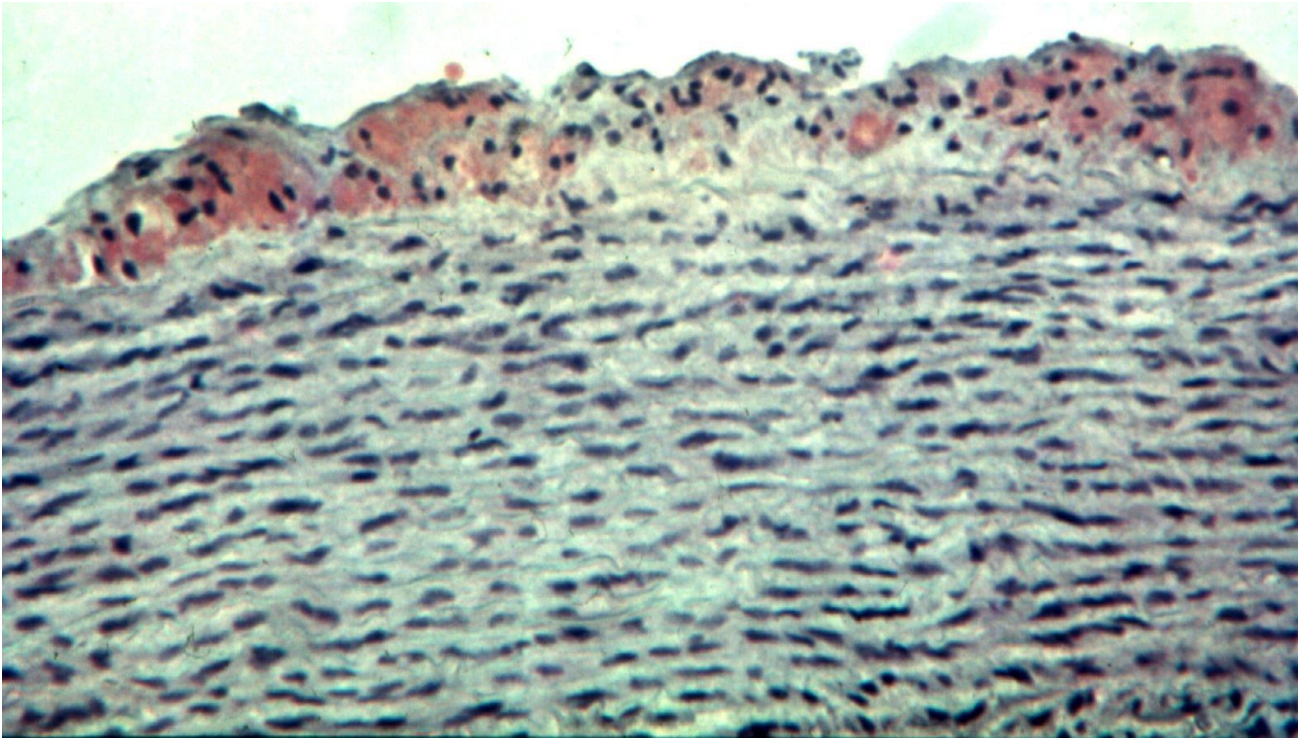
Micropreparation “Liver steatosis (fatty liver)” (staining with Sudan III).



When staining with hematoxylin and eosin, pay attention to changes in the cytoplasm and nuclei of hepatocytes; when staining with Sudan III, note the color of the droplets in the cytoplasm of

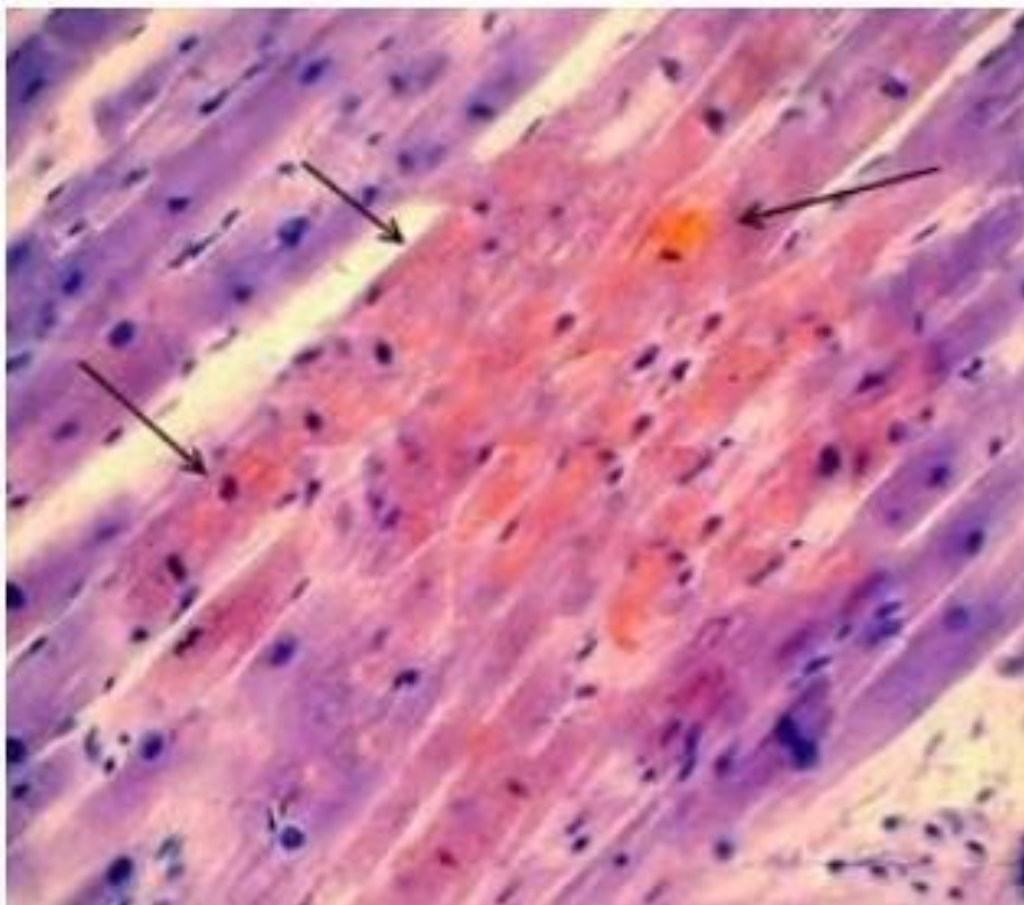
hepatocytes. Pay attention to the differences in the size of drops in the peripheral and central parts of the lobules.

2. Micropreparation “Aortic lipoidosis” (stained by Sudan III).



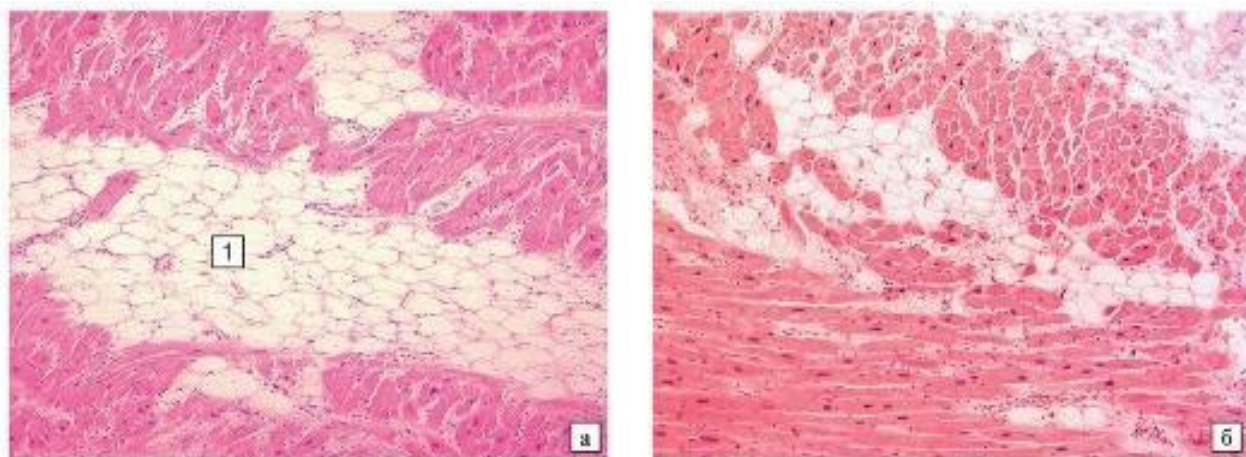
Pay attention to the thickness of the intima, the presence of inclusions, characteristic cells and crystals.

3. Micropreparation “Fatty degeneration of the myocardium” (stained by Sudan III).



Pay attention to the localization of changes, the size and color of the inclusions (arrows).

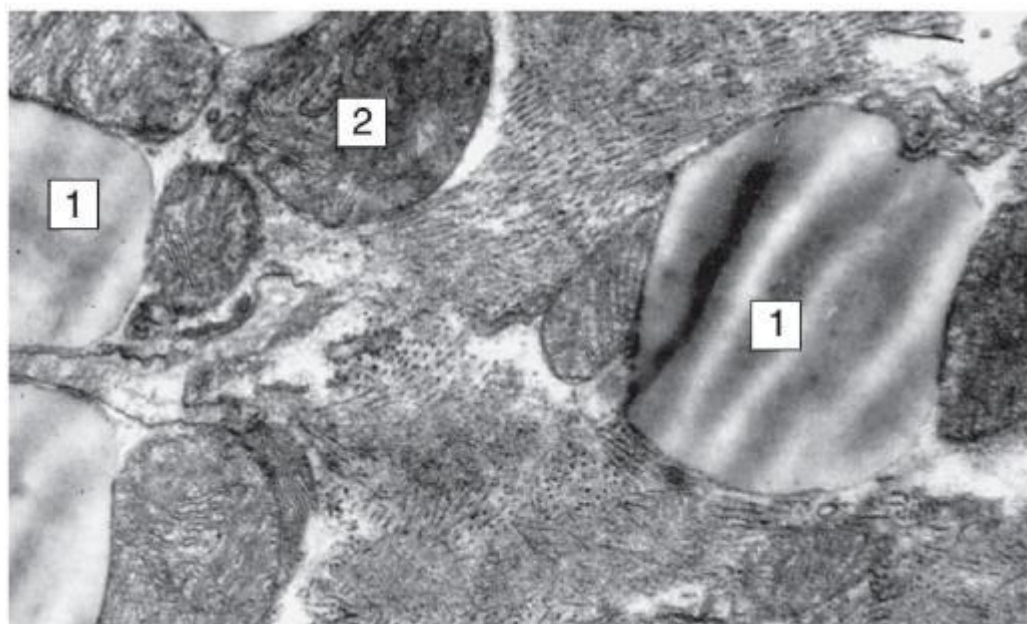
4. Micropreparation “Simple obesity of the myocardium”.



Pay attention to the localization of changes, the size and color of the inclusions.

Electronogram

1. Electronogram “Fatty degeneration of the myocardium”.



Pay attention to the cytoplasm of cardiomyocytes, filled with small drops of fat.

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).

<https://www.volgmed.ru/ru/depts/list/69/>

<https://volgmu-pat-anat.3dn.ru/>

<https://webpath.med.utah.edu/>