Algoritms – general surgery)**1. Pathohistological signes of malignant and benign tumors of mesenchimal tissue (fibroma, lipoma, sarcoma).**

A. Fibroma of the skin

1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Pay attantion on the way of fibrose tissue location.
5. Determinate typical structures for fibroma .
6. Name the tipe of atypism.

B. Lipoma of the peritoneum

1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Pay attantion on the way of lipid tissue location.
5. Name the tipe of atypism.

C. Sarcoma of the right lung

1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Determinate typical structures for sarcoma.
5. Name the tipe of atypism

2. Pathohistological signes of malignant and benign tumors of epithelial tissue (adenoma, papiloma, cancer).

A. Adenoma of the stomach

1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Pay attantion on the way of glands tissue location.
5. Determinate typical structures for adenoma of the stomach.
6. Name the tipe of atypism.

B. Papiloma of the skin

1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Name the tipe of atypism.
5. Determinate typical structures for papiloma of the skin.

C. Cancer of the breast

1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Determinate typical structures for cancer of the breast.
5. Wath is the growth of tumor

3. Pathohistological signs of malignant and benign tumors of nervous system, melanoformation system (shwannoma, melanoma, astrocytoma).

A. Shwannoma
1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Determinate typical structures for shwannoma
5. Name the tipe of atypism.

B. Melanoma of the skin
1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Name the tipe of atypism.
5. Determinate typical structures for melanoma of the skin.

C. Astrocytoma
1. To observe a micropreparat.
2. To determinate the tissue.
3. To determinate the methot of coloring.
4. Determinate typical structures for astrocytoma.
5. Wath is the growth of tumor

4. Pathohistological signes of the tumor of blood (lympholeukosis, myeloleukosis).

A. Myeloleukosis Lympholeukosis
7. Consider a microslide.
8. Define tissue (organ) which preparation is made from.
9. Define the method of staining.
10. Pay attention to the tint of microslide staining and nature of the cells infiltrations.
11. In infiltrate pay attention to the sizes, shapes and intensity of staining of the cells and their kernels.

12. Pay attention to the degree of maturity of cells and to the correlation of the mature, youth and transitional cells.
13. Define the type of the atypism.

B. Lympholeukosis

6. Consider a microslide.
7. Define tissue (organ) which preparation is made from.
8. Define the method of staining.
9. Pay attention to the color and intensity of staining of the microslide or the heterochomia of areas in him, nature of the cells infiltrations.
10. Pay attention to the sizes, shapes and intensity of staining of the cells and their kernels, degree of differentiation, presence of transitional forms and correlation between them.
11. Pay attention to the presence of dystrophic and necrotizing changes in preparation.
12. Name the type of pathology of the hemopoetic tissue.

5. Pathohistological signes of lymphomas (lymphogranulomatosis, plasmocytoma, lymphosarcoma).

A. Lymphogranulomatosis

7. Consider a microslide.
8. Define tissue (organ) which preparation is made from.
9. Define the method of staining.
10. Pay attention to structure of tissues elements, presence or absence of the necrotizing and sclerotic fields, presence of hyperplastic areas of lymphoid tissue.
11. Pay attention to the sizes, shapes and intensity of staining of the cells and their kernels.
12. To find the giant cells of Berezovsky-Shternberg.
13. Define the type of the atypism.

B. Plasmocytoma

1. Consider a microslide.
2. Define tissue (organ) which preparation is made from.
3. Define the method of staining.
4. Pay attention to structure of tissues elements, presence or absence of the osteoporotic changes and niches of resorbtions, presence of hyperplastic areas of lymphoid tissue.
5. Pay attention to the sizes, shapes and intensity of staining of the cells and their kernels in infiltrate.
6. Define the type of the atypism.

C. Lymphosarcoma

6. Consider a microslide.
7. Define tissue (organ) which preparation is made from.
8. Define the method of staining.
9. Pay attention to the infiltrates which are formed by small lymphocyte-like cells between which the large macrophages with a light cytoplasm are present seldom.
10. Name the tumor.

6. Pathohistological signs of the stomach diseases (gastritis,).

A. Gastritis

6. Consider a microslide.
7. Define the method of staining.
8. Find an internal membrane (mucosa) by using features of typical structures.
9. Find the areas with the typical signs of dystrophy, necrosis and inflammation in a mucus and muscular shell.
10. Name the type of inflammatory process and its activity.

B. Ulcer of the stomach

6. Consider a microslide.
7. Define tissue (organ) which preparation is made from.
8. Define the method of staining.
9. Find an internal membrane (mucosa) by using features of typical structures.
10. Find the areas of damage of mucus membrane and describe it.
11. Describe the changes in surround tissues.
12. Define the activity of gastric ulcer.

7. Pathological attributes of liver diseases (hepatitis, cirrhosis) on the basis of a biopsy.

hepatitis

1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to structure of hepatocytes, structure of the central veins.
5. Name a kind of a dystrophia.

cirrhosis

1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to structure of hepatocytes, structure of the central veins, portal tracts, accommodation of a connecting tissue.
5. Name a pathology.

8. Pathogistological signs diseasesof kidneys (glomerulonephritis, pyelonephritis) on the basis of biopsy.

glomerulonephritis
1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to structure cortical and medullar of a layer of a nephros, character of inflammatory reaction in a lumen of capsule Shumlianskyy-Boumen.
5. Name disease.

pyelonephritis
1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to structure cortical and and medullar of a layer of a nephros, lymphocytic infiltration interstition tissue, a dystrophy and an atrophy of canaliculuses, dilatation collloidlike masses of canaliculus.
5. Name disease.

9. Pathogistological signs of rheumatic diseases (endocarditis, myocarditis, systemic lupus erythematosus, scleroderma, dermatomyositis)

endocarditis
1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to focal clumps of macrophages with fan-like manner accommullation of cells around it is central the located masses of a fibrinoid.
5. Name the morphological form of amyocarditis.

myocarditis,
1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to a diffuse sclerosis and a hyalinosis of the mitral valve of heart.
5. To define the form of a rheumatic endocarditis.

systemic lupus erythematosus
1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to structure cortical and medullar of layer of a nephros, structure capillars membranes of glomuluses, hyaline thrombuses and the locuses of a fibrinoid necrosis.

5. To define disease of a kidnay.

scleroderma

1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to an atrophy of a false skin, a sclerosis and a hyalinosis of a derma, gistio-lymphocitic infiltration of a stroma, infiltration of perivascular spaces.
5. To diagnose a kind of rheumatic illness disease.

dermatomyositis

1. To study micro photo.
2. To define a tissue.
3. To define a method of a staining.
4. To pay attention to the locuses of a calcification in a muscle of an anticnemion, dystrophic changes of muscular fibers with the locuses of necrosis, an edema and lymphocitic-macrophages reaction of a stroma.
5. To define rheumatic illness disease.