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OCCURRENCE OF LIVER CIRRHOSIS IN FORENSIC MEDICAL PRACTICE AND STATISTICAL ANALYSIS

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Summary
Liver cirrhosis is the last stage of any chronic liver disease. In this case, under the influence of infection, alcohol and other reasons, liver cells are destroyed and replaced by connective tissue. As a result, the liver cannot perform its function, internal blood circulation fails, and liver failure develops. It is not always possible to make a diagnosis based on the symptoms of cirrhosis in the early stages. Because in 20% of cases, the disease is latent (hidden) and does not show itself at all. In the article, the statistical analysis of the autopsy forensic medical examination at the RSTEIAM Bukhara branch during the 9 months of 2022 was studied and explained, and conclusions were made regarding the work that should be carried out in the future.

Keywords: cirrhosis, liver, necrosis, portal, biliary.

РАСПРОСТРАНЕННОСТЬ И СТАТИСТИЧЕСКИЙ АНАЛИЗ ЦИРРОЗА ПЕЧЕНИ В СУДЕБНО-МЕДИЦИНСКОЙ ПРАКТИКЕ

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Резюме
Цирроз печени является последней стадией любого хронического заболевания печени. При этом под влиянием инфекции, алкоголя и других причин клетки печени разрушаются и замещаются соединительной тканью. В результате печень не может выполнять свою функцию, нарушается внутреннее кровообращение, развивается печеночная недостаточность. Не всегда удается поставить диагноз на основании симптомов цирроза печени на ранних стадиях. Потому что в 20% случаев заболевание протекает латентно (скрыто) и никак себя не проявляет. В статье изучен и объяснен статистический анализ патологоанатомической судебно-медицинской экспертизы в Бухарском филиале РГТИАМ за 9 месяцев 2022 года, а также сделаны выводы относительно работы, которую следует провести в дальнейшем.

Ключевые слова: цирроз, печень, некроз, портальные, билиарные.

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СУД ТИББИЙ АМАЛИЁТИДА ЖИГАР ЦИРРОЗИ УЧРАШИ ВА СТАТИСТИК ТАҲЛИЛИ

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Аннотация
Жигар циррози бу исталган сурункали жигар касаллигининг энг сўнгги босқичи бўлиб ҳисобланади. Бунда инфекция, спиртли ичимлик ва бошқа сабаблар таъсири остида жигар ҳужайралари ҳалокатга учрайди ва ўрнини бириктирувчи тўқима эгаллайди. Оқибатда жигар ўз вазифасини бажара олмайди, ички қон айланиши ишдан чиқиб, жигар етишмовчилиги ривожланади. Ҳар доим ҳам циррознинг илк босқичларида, касаллик белгиларига қараб ташхис қўйишнинг иложи йўқ. Чунки 20 % ҳолатларда хасталик латент (яширин) кўринишда кечади ва ўзини ҳеч қандай намоён қилмайди. Маколада 2022 йил 9 ой мобайнида РСТЭИАМ Бухоро филиалида аутопсия суд тиббий экспертизасининг статистик тахлили урганиб чикилган ва изох берилган булиб, келгусида амалга оширилиши лозим деб топилган ишлар юзасидан хулосалар килинган.

Калит сўзлар: цирроз, жигар, некроз, портал, билиар.

Relevance
Liver pathologies, especially liver cirrhosis, in most cases are detected during the autopsy process after the death of patients. Such cases are diagnosed much later in 20% of patients only after death. However, in the remaining 60% of patients, the disease manifests itself in the early stages and makes it possible to make a diagnosis.

Purpose of Work
During 2022, it was considered to analyze statistical data of 9 months of 2022 of liver cirrhosis expertise in autopsy at RSTEIAM Bukhara branch and give practical recommendations.

Materials and Methods
Traditionally, after macroscopic examination at autopsy, samples of lungs, heart, liver, kidney, spleen, gastro-intestinal tract, brain and other necessary tissues are taken for microscopic examination. For general morphology, 1.5x1.5 cm pieces of internal organs are cut and fixed in 10% neutral formalin. After washing in running

water for 2-4 hours, they were dehydrated in increasing concentrations of alcohols and chloroform, then paraffin was poured and blocks were prepared. 5-8 μm sections were prepared from paraffin blocks and stained with hematoxylin and eosin. Histological preparations were studied under the 10, 20, 40, 100 objectives of a light microscope and the required areas were photographed.

Results

If we analyze the occurrence of liver cirrhosis in forensic medical practice, from the beginning of 2022 to September 2022, that is, during 9 months, liver cirrhosis was found in 16 autopsy cases out of 382 autopsy cases. If we analyze these 16 cases, it was found that men have more cases than women. There were 15 cases in men and 1 case in women. The court came to different places in the diagnosis of medical experts, for example: in the court medical diagnosis, cirrhosis of the liver as the main disease, hardening of the liver tissue in 6 cases, liver cirrhosis as an additional disease in 7 cases, and acute liver failure as a complication were noted in 3 cases.

Liver cirrhosis is a chronic disease characterized by liver failure.

There are different types of etiological tone:

1. In infectious (viral hepatitis), parasitic diseases.
2. Toxic and toxic-allergic
3. Biliary (cholangitis, cholestasis)
4. Metabolic - alimentary
5. Circulator is chronically hypothermic

There are 4 morphogenetic types of cirrhosis:

1. postnecrotic
2. portal
3. biliary
4. mixing

From the clinical point of view, viral and biliary cirrhosis are of great importance.

Pathological anatomy.

Deformation of the liver occurs due to dystrophy, necrosis, regeneration of hepatocytes, diffuse sclerosis, reconstruction of organ structures, exacerbation of sclerotic processes in cirrhosis of the liver. Necrosis that occurs in a follicle is called submassive necrosis, and if it occurs in several follicles, it is called massive necrosis.

After the liver cells die, regeneration begins. Enlarged liver cells appear near the altered parts, 3-4 nuclei are visible in their nuclei. In the place of death, false buds appear. The veins are irregularly located in such blebs, the central vein is sometimes

swallowed by the edge of the false bleb or does not open at all (portocaval shunts, anastomoses in the liver).

The nodes that appear are called regenerated nodes, based on their size, there are 3 types of cirrhosis:

1. Small nodule (diameter - up to 2 cm)
2. Large nodule (diameter - up to 5 cm)
3. Mixed nodule (small and large regenerated nodules)

The development of connective tissue in cirrhosis of the liver is diffuse and is called diffuse fibrosis.

Fibroblasts that produce collagen fibers proliferate in the periportal tissue. In the development of portal and periportal sclerosis, portal hypertension occurs, as a result of which portocaval anastomoses appear not only inside the liver, but also outside the liver.

Reconstruction of liver structures is the most important morphological sign of cirrhosis. Deformation of the liver occurs as a result of reconstruction, regenerated nodules come out of the surface of the liver, giving it a grainy or rough appearance, and it is caused by the contraction of the connective tissue between the nodules.

Stages of cirrhosis:

1. Insular stage /island/ - growth of connective tissue along Glisson's crust, infiltration with lymphocytes is observed. Parenchymatous cells located near these islets are found in fatty dystrophy.
2. Interinsular stage /interislet/ - the growth of connective tissue increases, fibrous bundles are joined to each other, the bundles are sharply demarcated.
3. Annular stage /ring-like/, fibrous-reticular tissue grows, "false follicles" are randomly located between them, lymphoid infiltration increases.

Postnecrotic cirrhosis of the liver - develops after massive necrosis in the liver. Collapse of the reticular stroma and the appearance of connective tissue are observed in the areas of necrosis. Regeneration processes begin in the preserved parenchyma, regenerated nodules are formed, the liver is deformed, as a result of the collapse of the stroma, the triad and the central veins converge. Macroscopic liver consists of small, hard, deep and large nodules mixed with wide egates. Cirrhosis is characterized by early failure of liver cells and eventually portal hypertension.

Portal cirrhosis/septal, atrophic/cuprous aging occurs in men: the enlarged and sclerosed areas in the portal and periportal areas are formed as a result of adhesion of fibrous septa, leading to compression of the central vein and portal veins and the formation of small pseudobulbs. Microscopic sparse connective tissue type and small false follicles are observed. The macroscopic liver is reduced, hardened, weighing up

to 500g, the surface is finely granular. This cirrhosis develops slowly, after alcoholism and nutritional imbalance. Portal hypertension develops early, and liver cell failure develops late.

There are 2 types of Billiary cirrhosis: 1st and 2nd. There are 2 types of primary cirrhosis. Primary biliary cirrhosis is based on non-purulent destructive cholangitis and cholangiolitis. As a response to the destruction, scarring and proliferation of bile ducts, sclerosis and infiltration of the periportal area, destruction of hepatocytes at the edge of the follicle, formation of septa and false follicles are observed. In this case, the liver is enlarged, thickened, gray-blue in color, and the surface is smooth or finely granular. This cirrhosis is often observed in women at the time of climax. 2-biliary cirrhosis is associated with extrahepatic bile duct obstruction, leading to cholestasis or purulent cholangitis and cholangiolitis. This cirrhosis is characterized by the expansion and closing of the uric acid capillaries, the accumulation of "uric acid fluid", cholangitis and pericholangiolitis, the growth of connective tissue in the periportal area and the formation of false follicles. The liver is enlarged, thickened, bluish in color, and when cut, the liver is enlarged and filled with fluid. Postnecrotic and portal cirrhosis symptoms are found in mixed cirrhosis.

During the formation of regenerate nodes in the liver, the veins are crushed and anastomoses are formed between the hepatic arteries and the portal vein, the portal vein and the networks of the hepatic veins, leading to portal hypertension and intoxication (the venous deposit is not detoxified in the liver).

Extrahepatic changes in cirrhosis:

In decompensation, ascites is observed, which originates from the development of collateral veins as a result of venous flow compression:

1) From the umbilical vein to the umbilical branch and the superior vena cava (porto-abdominal vein).

2) From the veins of the cardial branch of the stomach to the diaphragmatic veins and the esophageal veins /porto-oesophagal path/.

3) The porto-ileocecal path is the arch of the veins of the ileocecal branch.

4) Porto-lumbar path - lumbar veins to inferior vena cava

5) Porto-pulmonary path - opens and circulates when adhesions are formed between the liver shell and the diaphragm.

A relatively narrow porto-abdominal tract circulates (relatively physiological, in which part of the iron is absorbed by the liver), and it is called the hepatofetal tract, and the extrahepatic tract is called the hepatofugal tract.

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As a Complication of Liver Cirrhosis

1. Ascites-peritonitis. In the pathogenesis of ascites, portal hypertension, lymph flow disorders, hypoproteinemia, decreased blood circulation in the kidney, retention of water and sodium, increased aldosterone due to impaired liver functions, and hypersecretion are important.
2. Jaundice (as a result of parenchyma deficiency).
3. Anemia
4. Enlargement of the spleen
5. Atrophy of the testis, ovary, thyroid gland, cachexia, hair loss
6. Sclerosis of the pancreas
7. Violations of metabolism of vitamins and other substances and their consequences (cachexia, deposits, polyneuritis, vision impairment, etc.)

Conclusions

- This information opens up a real prospect of a significant reduction in liver pathologies and complications, causes of death, and is undoubtedly necessary not only for forensic medical experts, expert histologists, pathologists, but also for all specialists involved in the diagnosis, prevention and treatment of liver diseases. provides information.
- This information can help to improve the activity of clinical ordinators studying in medical institutions, masters in a narrow range of specialties, especially forensic medical examination, pathologoanatomy at any level of practice.

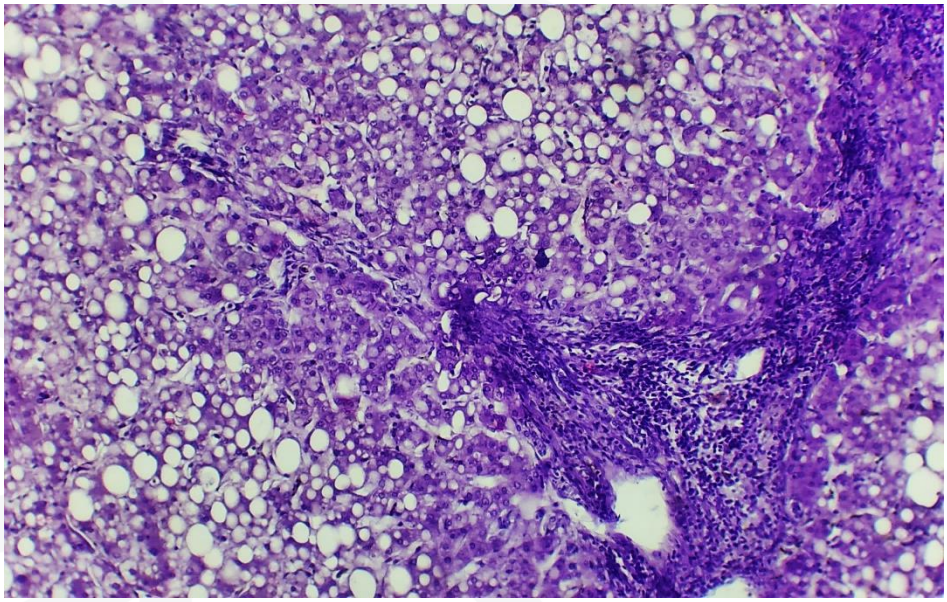

Photo 1. Liver cirrhosis. Micropreparation. Stained in hematoxylin-eosin. 20x20 ob.

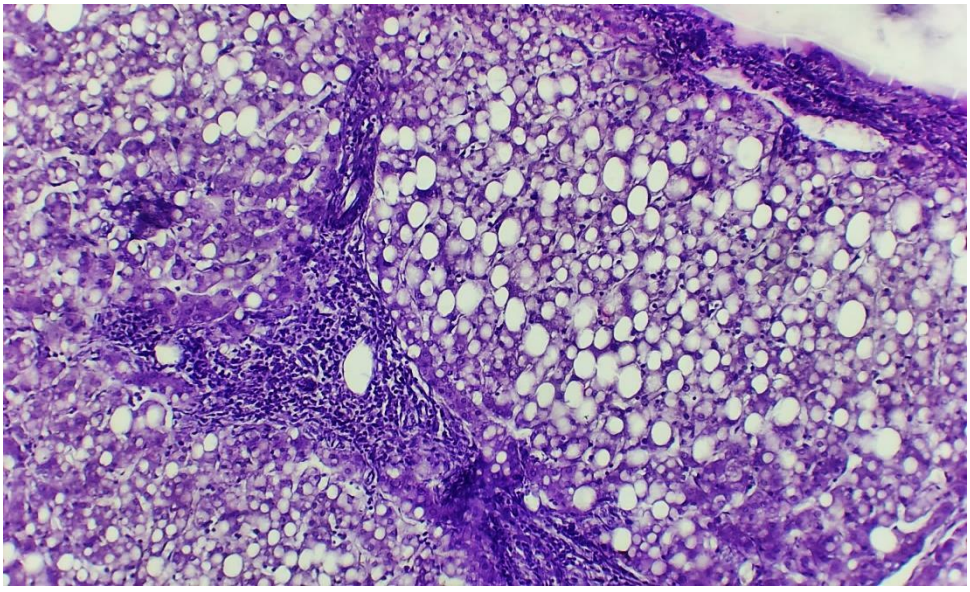

Photo 2. Liver cirrhosis. Micropreparation. Stained in hematoxylin-eosin. 20x20 ob.

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