



ULTRASOUND AND HISTOLOGICAL EXAMINATION GALLBLADDER IN CHOLECYSTITIS.

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ABSTRACT

The use of echography allows you to make the correct diagnosis as soon as possible, determine the subsequent treatment tactics, and start conservative or surgical treatment in a timely manner. The advantages of ultrasound examination over X-ray cholecystography are shown, the features of echograms in various diseases of the gallbladder are considered.

Relevance. A direct threat to the patient's life is associated with complex forms of gallstone disease associated with the inflammatory process in the gallbladder, bile ducts, surrounding tissues and organs. The development of these complications can lead to the rapid development of the inflammatory process in the liver, biliary tract, and pancreas, increased intoxication, and the development of often irreversible organ failure. As an inflammatory complication of the gallbladder, cholecystitis remains one of the most common diseases in the world. The relationship between the morphological changes in the gallbladder and the clinical presentation has been of interest to researchers worldwide for decades. The advent of ultrasound diagnostics has made it possible to identify a whole group of patients who are not accompanied by significant clinical symptoms in gallbladder pathologies [3]. It will be useful to identify groups at risk of developing less symptomatic forms of acute destructive cholecystitis and to optimize treatment tactics for such patients. On ultrasound examination, the gastrointestinal tract of a healthy person on an empty stomach looks like an exonegative formation with an exogenous wall [10]. Inflammatory diseases of the gallbladder remain the most common diseases in the world as a complication of gallstone disease. In recent years, the number of patients with acute cholecystitis has doubled in many countries.

The purpose of the study. Study of morphofunctional and histological changes of gallbladder walls in cholecystitis.

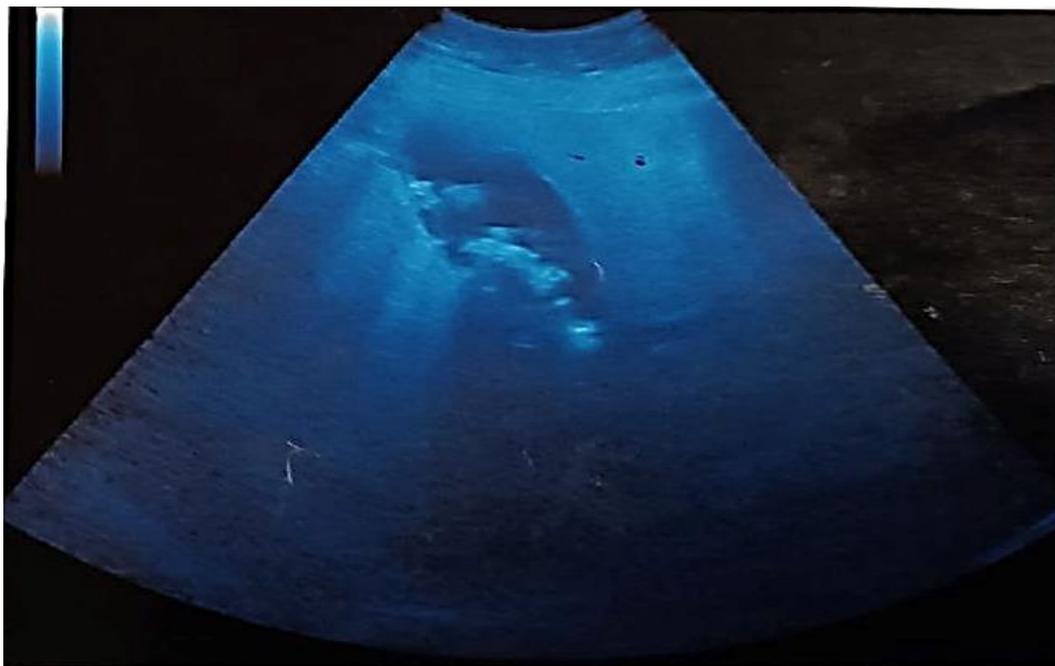
Research materials and methods. Patients undergo abdominal ultrasound examination, clinical findings and histological examinations

Research results. Acute cholecystitis is defined as inflammation caused by obstruction of the bile ducts. Abdominal ultrasound findings include evidence of bile duct dilatation and etiologies such as strictures, stones, or stents. Acute cholecystitis is diagnosed by a combination of local and systemic inflammatory symptoms[4]. Abdominal ultrasound confirmed the diagnosis,

revealed abdominal swelling, thickening of the walls, and the presence of mud in the gallbladder. The introduction of the ultrasound method into widespread practice has significantly improved the diagnosis of gallbladder pathology. Dynamic ultrasound examination made it possible to determine the thickness of the gallbladder walls and the presence of its deformation, to accurately determine the size, number and, to a certain extent, the structure of stones in the gallbladder. In addition, it allowed to determine the initial stages of stone formation based on changes in the exostructure of bile fluid [7].

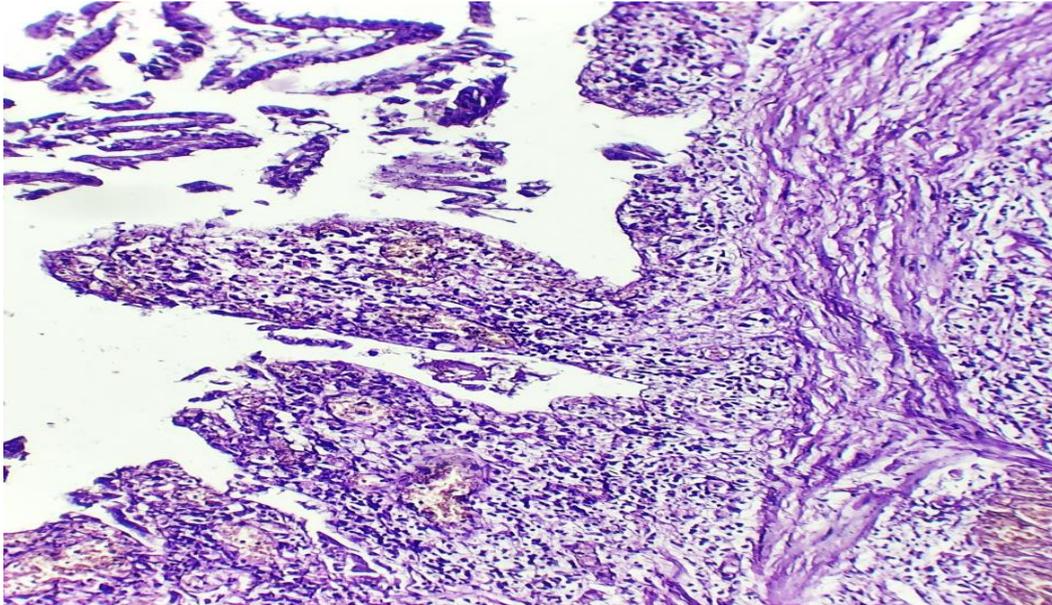


Picture-1. Gallstone disease. stony cholecystitis.

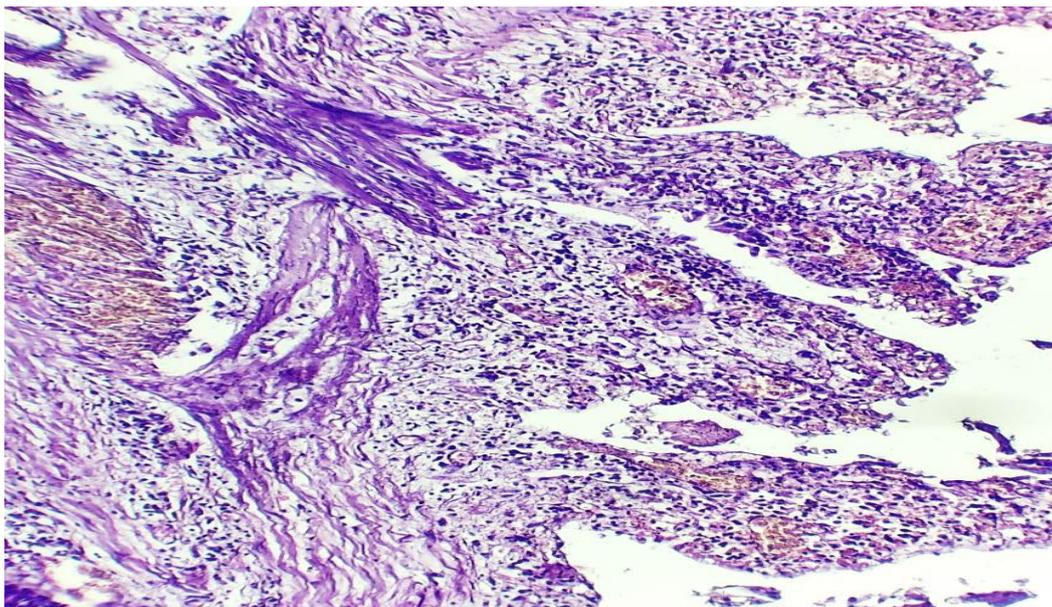


Picture-2. Gallstone disease. stony cholecystitis.

However, the possibilities of the method, unfortunately, are not fully used in practice. Thus, the condition of the mucous membrane and smooth muscles of the gallbladder is indirectly assessed by the thickness of its entire wall [8-9]. Diffuse thickening of the gallbladder wall is characteristic, especially if this symptom is not observed in many pathological processes. According to the results of the investigation, the incidence of acute cholecystitis in people aged 18 to 65 years is 6.7%-14.6%. Risk factors for the development of this disease are age, gender, existing liver diseases, excess body weight, hypercholesterolemia, lack of movement and diabetes, smoking. Gallstone disease in most cases continues in the form of acute cholecystitis[15].



Picture-3. Morphological view of the body part of the gallbladder. Hematoxylin-eosin stain. Ob 10x10 ok



Picture-4. Morphological view of the lower part of the gallbladder. Hematoxylin-eosin stain. Ob 10x10 ok.

If the inflammatory process begins acutely, it is manifested by an increase in lympho-leukocyte cells characteristic of inflammation in the layers of the gallbladder wall. This type of inflammatory infiltrate can lead to reparative regeneration, as a result of which, first of all, the development of the gallbladder cover and glandular epithelium is damaged, dysregenerative changes such as metaplasia and dysplasia can develop. Chronic cholecystitis and gallstone disease are among the most common diseases. According to the results of extensive epidemiological studies conducted in recent years, this disease affects 10-15% of the working population in developed countries.

Conclusions. Abdominal ultrasound was suitable for diagnosing patients with abdominal symptoms. Control of the functioning of the bile ducts, as well as other body systems, is based on a multilevel regulation. Undoubtedly, surgical interventions lead to significant changes in the working mechanisms of this system. Experimental and clinical observations show that the removal of a functioning gallbladder leads to disruption of the sphincter apparatus of the biliary tract, since the gallbladder is the coordinator of its activity. Ultrasound screening and morphological changes in the pathology of the organs of the hepatobiliary system allow to determine the expansion of the bile ducts, the presence of cholangiectases, the expansion of the gallbladder, etc. Ultrasound examination (UTT) and morphological examinations play an important role in the diagnosis and choice of treatment tactics for cholecystitis. The method has many advantages, including a relatively short research period, non-invasiveness, absence of side effects and radiation. Thus, in chronic calculous cholecystitis, the illustrated macro and microscopic picture of the gallbladder and its wall occurs when the gallbladder is obstructed by the accumulation of purulent or fibrinous-purulent exudate. It is known that late diagnosis leads to dysfunction and organic changes in bile ducts, large duodenal papilla, pancreas, liver, intra- and extrahepatic bile ducts. Early detection of the complex diagnosis of chronic cholecystitis allows timely diagnosis and surgical treatment. Therefore, we believe that it will allow us to continue to develop new methods of examining changes in the gallbladder and prevent new complications in the classification of cholecystitis.

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