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GALLBLADDER AND METHODS OF ITS EXAMINATION

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Abstract
Diagnosis of the gallbladder and biliary tract is based primarily on the study of patients' complaints, anamnesis and the results of physical examination. Patients most often complain of the following: pain, dyspepsia, fever, chills, skin itching, jaundice. When determining the anamnesis, it is necessary to pay attention to whether the patient has previously had jaundice and acute diseases of the liver and gallbladder, attacks of colic, which may have triggered this disease of these organs (chronic cholecystitis, cholangitis and cholelithiasis)

Introduction

The right and left hepatic bile ducts depart from the lobes of the liver of the same name and form the common hepatic duct. The width of the hepatic duct varies from 0.4 to 1 cm and is on average 0.5 cm. The length of the bile duct is approximately 2.5-3.5 cm. The common hepatic duct joins the gallbladder duct to form the common bile duct. Four sections are distinguished in the common bile duct: supraduodenal, located above the duodenum, retroduodenal, passing behind the upper horizontal part of the duodenum, retropancreatic (behind the head of the pancreas), and intramural sections in the wall of the vertical part of the duodenum.

The distal part of the common bile duct forms the large duodenal duct (Fater's duct), located in the submucosal layer of the duodenum. The large duodenal duct has an autonomous muscular system consisting of longitudinal, circular and oblique fibers - the sphincter of Oddi, which is not connected to the duodenum. The pancreatic duct approaches the large duodenal duct and, together with the terminal part of the common bile duct, forms the ampulla of the duodenal duct. When performing an operation on the large duodenal duct, various options for the relationship of the bile duct and the pancreatic duct should be taken into account. The gallbladder is located in a small depression on the lower surface of the liver. The capacity of the gallbladder is approximately 50-70 ml.

The cystic duct often descends at an acute angle into the right semicircle of the common bile duct. The wall of the gallbladder consists of three layers: mucous, muscular and fibrous. The mucous membrane of the gallbladder forms numerous folds. In the area of the neck of the gallbladder and at the beginning of its duct, there are Geister valves, in some distal sections of the duct, together with bundles of smooth muscle fibers, it forms the Lutkins sphincter. The mucous membrane forms numerous folds between the muscle bundles - the Rokitansky-Ashoff sinuses.

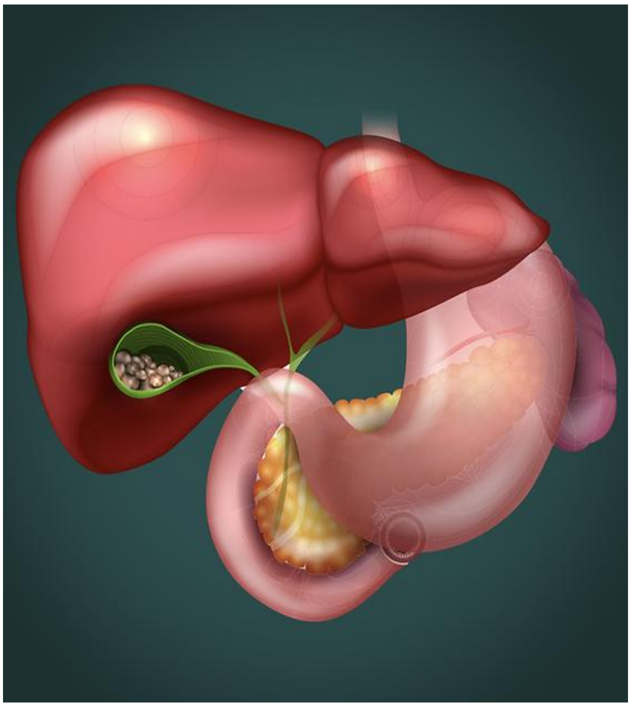
The gallbladder is supplied with blood by the gallbladder neck from one or two branches of the private hepatic artery or from its right branch through the vesical artery. Lymph drainage to the lymph nodes occurs from the hepatic portal vein and the lymphatic system of the liver itself.

Bile, which is processed in the liver and enters the extrahepatic bile ducts, consists of water (97%), bile salts (1-2%), pigments, cholesterol and bile acids (about 1%). The average bile secretion rate of the liver is 40 ml per minute. The gallbladder concentrates bile due to the absorption of water and electrolytes. In this case, the concentration of the main components of the bile increases by 5-10 times compared to their initial amount in the hepatic bile. Food, acidic gastric juice, fats and intestinal hormones in the blood - cholecystokinin, secretin - cause contraction of the gallbladder and, at the same time, relaxation of the sphincter of Oddi.

Diagnosis of the gallbladder and biliary tract is based primarily on the study of patient complaints, anamnesis and the results of physical examination. Patients most often complain of the following: pain, dyspepsia, fever, chills, itching, jaundice. When determining the anamnesis, it is necessary to pay attention to whether the patient has previously had jaundice and acute diseases of the liver and gallbladder, attacks of colic, which may have triggered this disease of these organs (chronic cholecystitis, cholangitis and cholelithiasis). Physical examination methods include visual inspection of the patient, palpation, percussion, auscultation.

They allow to form an understanding of anatomical and functional changes and are often considered one of the main methods for assessing the dynamics of the patient's condition during treatment. Functional examination of the liver reflects the specific functions of this organ, such as pigment, detoxification, protein formation, pharmacometabolism. In the diagnosis of biliary diseases, X-ray examination is often of decisive importance.

An image taken with the patient lying on his stomach can provide information about the size, shape, location of the liver and major structural changes in it. Choleography. The method of choleography is based on the ability of the liver to secrete iodine-containing substances into the bile ducts, which allows you to obtain an X-ray contrast image of them. Intravenous cholecystocholangiography helps to obtain an X-ray contrast image of the bile ducts, regardless of the state of the gallbladder, in case of impaired contractile function, with gallbladder block, as well as after cholecystectomy. Transcutaneous cholecystography. It consists in an X-ray examination of an enlarged gallbladder after puncture and injection of a contrast agent. Operative cholangiography consists in an X-ray contrast examination of the bile ducts during surgical operations. In the current conditions, this examination is considered a mandatory stage in operations on the biliary tract, as it allows to increase the quality of diagnostics, reduce the number of complications and improve the results of surgical treatment.



Endoscopic retrograde cholangiopancreatography (ERCP) - consists in the introduction of a contrast medium using a catheter inserted into the Vater suction or into the mouth of the biliary tract during duodenoscopy.

Manometric examination of the biliary tract - cholangiomanometry consists in determining the pressure indicators after injecting fluid into them, which allows to draw conclusions about the functional capacity and patency of the biliary tract.

Radioisotope examination of the liver - is based on its ability to absorb radioactive substances. Based on this, the functional state of the liver is determined by the dynamics of the absorption of a radioactive drug and the morphological features of the distribution of the radioactive drug in the liver tissues are studied.

Methods of endoscopic examination of the biliary tract. In surgical practice, laparoscopy is most often used to detect malignant lesions of the liver, bile duct cancer, as well as in the differential diagnosis of jaundice.

Duodenoscopy - allows you to examine the condition of the large duodenal ulcer, exclude duodenal pathology.

Choledochoscopy - is one of the methods of operational diagnostics and is an important stage of examination.

References:

1. Bitsch V. Gastrink sekretory pattens before and after vogotomy. Lancet- 1996
2. Bosch J., Garcia-Pagan J.C. Complications of cirrhosis. I. Portal hypertension.\\J Hepatol.-2000
3. Fabian TC, Croce MA, Stanford GG et a1. Factors affecting morbidity following hepatic trauma. A prospective analysis of 482 injuries.
4. XIRURGIK KASALLIKLAR SH.I. KARIMOV TOSHKENT 2010

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