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INSTRUMENTAL DIAGNOSTIC STUDIES IN CHRONIC PANCREATITIS

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The choice of visualization method should be based on its accessibility, the presence of relevant skills in the staff, and the level of invasiveness of a specific study. All patients with clinical symptoms characteristic of CP, upon initial consultation with doctors of any profile, are recommended for further targeted examination using radiation diagnostics methods to confirm or exclude CP [2,3,4].

Keywords: general radiography, intravascular concretions, chronic pancreatitis, transabdominal ultrasound;

An overview of the abdominal cavity allows for the detection of only pronounced calcification in the projection of the pancreas. This method is outdated. According to the results of the conducted research, general radiography in 30-40% of cases made it possible to determine the calcification of the pancreas or intracondylar concretions, especially when studied in a curved projection. Formally, such a finding previously excluded the need for further examination to confirm the diagnosis of chronic pancreatitis. However, it should be remembered that gastric calcification is most common in alcoholic, hereditary CP, and rarely in idiopathic pancreatitis [4, 5, 6].

Moreover, calcification is also characteristic of prostate cancer, which in combination with low sensitivity does not allow recommending this method as a competitive and diagnostic value.

For primary screening of patients with clinical symptoms characteristic of CP, to exclude other causes of abdominal pain, transabdominal ultrasound is recommended due to the non-invasive nature of the method, ease of execution, sufficient specificity in determining the main manifestations of CP - an increase in the size of the prostate gland, the presence of an expansion of the prostate gland, virsunguliasis and parenchymal calcification, post-necrotic cysts [7,8,9].

Transabdominal ultrasound is a primary screening method for unexplained abdominal pain. This method allows for the detection of free fluid in the abdominal cavity, the assessment of the condition of the liver, biliary tract, and kidneys, the pathology of which may simulate CP or accompany it, and in some cases - excludes surgical and gynecological pathology. Ultrasound has low sensitivity and specificity in the diagnosis of CP [4,5,6].

Even in specially planned studies with a high level of specialists and equipment used, the absence of restrictions on the duration of the procedure, a standardized approach to the study and high inter-research consistency, the sensitivity and specificity of transabdominal ultrasound do not exceed 70-80%, which is definitely insufficient for the diagnosis of CP. The study should include examination of all organs of the abdominal cavity, retroperitoneal space and pelvis [11,12,13].

Characteristic ultrasound signs of CP, detected in the B-mode, are increased echogenicity of the parenchyma, heterogeneity of the structure due to multiple hyperechogenic drafts - fibrous areas, presence of parenchymal calcifications and concretions in the biliary tract, diameter of the parenchyma more than 2 mm, post-necrotic cysts. Diffuse changes in the parenchyma of the pancreas and an increase in its size without the aforementioned changes do not allow us to confirm the presence of CP [13]. Transabdominal ultrasound can confirm the diagnosis of CP in the late stages, detect calcification of the pancreas and intravascular calcium concretions (if their size exceeds 5 mm), pseudocytes, dilatation of the GPJ and its lateral branches, atrophy of the parenchyma of the pancreas [1,2,3].

Patients with CP diagnosed with asymptomatic pseudocyst of the pancreas are recommended to undergo transabdominal ultrasound dynamically within the framework of observation tactics for managing these patients in order to timely diagnose possible complications. If there are no signs of CP in transabdominal ultrasound, it is recommended to continue the diagnostic search - perform other instrumental studies - endosonography of the pancreatobiliary zone (ESPZ) and CT of the abdominal organs with intravenous bolus contrast [14].

To date, it can be asserted that transabdominal ultrasound is unable to detect CP in its early stages, significantly inferior to CT and ESPZ in image quality, spatial resolution, and contrast resolution. Therefore, the negative result of ultrasound does not exclude the presence of PB specifics. The signs of "different changes in the pancreas" according to ultrasound data are not the basis for diagnosing chronic pancreatitis. Computed tomography of the abdominal cavity with intravenous bolus contrasting (with mandatory performance of native, arterial, venous, delayed phases of the study) is a method of choice in the diagnosis of CP and is recommended to all patients in order to identify specific changes in the pancreas, including pancreonecrosis.

CT is recommended for all patients with CP no later than 2 weeks from the time of initial admission [3,9].

CT of the abdominal organs with intravenous bolus contrast is a method of choice for the primary diagnosis of CP, significantly exceeds transabdominal ultrasound in diagnostic value and is more accessible in Russia today than other methods - ESPZ and magnetic resonance cholangiectography (MRCPG) with secretin. To effectively utilize all the capabilities of CT, reliable diagnosis of pelvic edema, necrosis, and tumors, it is important to perform a study with intravenous bolus enhancement and scanning of all phases of the contrast study.

The native phase of computed tomography is necessary to identify the specifics of the pancreas, the arterial phase is necessary to visualize the false aneurysms of the pelvic, gastro-duodenal arteries, the venous phase is necessary for differential diagnosis with other diseases of the pancreas (IPMNII type), and the delayed phase is necessary to determine the degree of fibrous changes in the parenchyma of the pancreas. CT with intravenous contrasting allows for the detection of PB necrosis

zones (absence of contrasting substance accumulation). The method's sensitivity in the diagnosis of CP is 75-90%, specificity is 85-90% [7,8,9].

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