

INTRADUCTAL PAPILLARY MUCINOUS NEOPLASMS: RADIOLOGY METHODS IN THE DEFINITION OF TREATMENT TACTICS



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Introduction. Intraductal papillary mucinous neoplasms (IPMN) of the pancreas is characterized by cystic expansion of the main and / or branch pancreatic ducts, which in most cases, but not always, forms papillary structures. The tumor grows from the epithelium of the pancreatic ducts and can be represented by various histological options from mild dysplasia to carcinoma, which, in essence, are biological stages of development and can be detected within a single tumor. The frequency of malignancy depending on the type of tumor (Crippa S. et al., 2010): type 1 - 48%; type 2 - 11%; type 3 - 42%.

Objective: to analyze the data of patients with IPMN and to evaluate the possibilities of radiology in determining the tactics of patient management and treatment.

Materials and methods. In A.V. Vishnevsky NMRC of Surgery **96 patients with IPMN** were examined and treated in 2006-2019. At the preoperative stage, all patients underwent ultrasound, MSCT and MRI.

Results. Depending on the type of tumor (Lim J.H. et al., 2001), IPMN was divided as follows: type I - 19 (19.8%) patients; type 2 - 46 (47.9%) patients; type 3 - 31 (32.3%) patients.

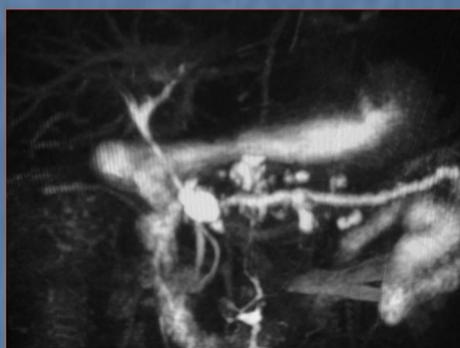
Characteristic signs of IPMN according to radiology: the presence of expanded main pancreatic duct (MPD), expanded branch pancreatic ducts, compaction of the MPD walls, parietal papillary growths of varying severity, the presence of tumor masses around the MPD (with the accumulation of contrast substances).

Tumor malignancy criteria: obstructive jaundice; parietal papillary growths of more than 5 mm / presence of a solid component; the presence of tumor cells during cytological examination; the diameter of the pancreatic duct is more than 10 mm.

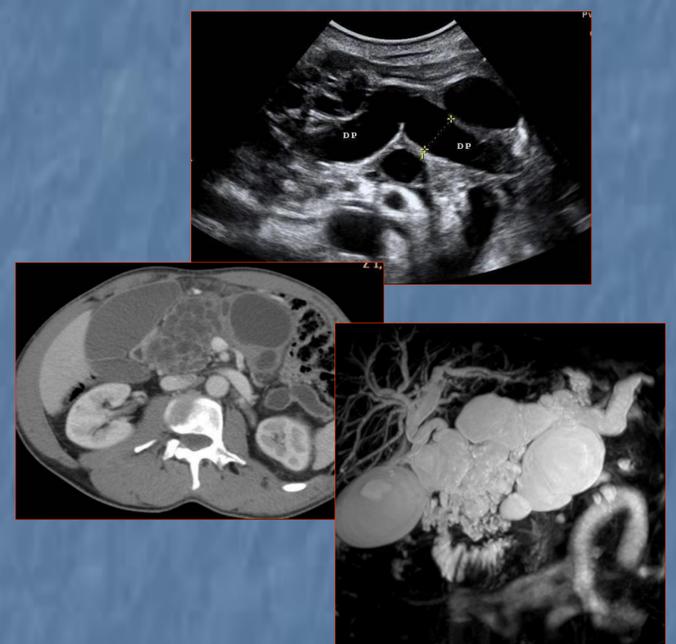
IPMN of the main pancreatic duct



IPMN of branch pancreatic ducts



IPMN of the mixed type



In accordance with these criteria, 56 (58.3%) patients were operated on, 40 (41.7%) were under observation:

Type 1: operated on - 17 (89.5%); are under observation - 2 (10.5%);

Type 2: operated on - 12 (26.1%); are under observation - 34 (73.9%);

Type 3: operated on - 27 (87.1%); are under observation - 4 (12.9%).

Thus, dynamic monitoring is carried out mainly for type II tumors.

The observation is carried out according to the following scheme: after 3 months, after 3 months, then 1 time in 6 months.

The scope of the examination during the follow-up: MSCT and / or MRI and the tumor marker CA 19-9.

Criteria for malignancy: newly detected expansion of the pancreatic duct 5-10 mm; an increase in the cystic component over 5 mm in 1 year; newly identified parietal papillary growths up to 5 mm; the appearance of a solid component; transition to type III; an increase in CA 19-9.

Conclusion. Peculiarities of the growth of IPMN with a tendency to diffuse propagation along the MPD impose responsibility on doctors of instrumental diagnostics and surgeons in assessing the area of primary damage. Radiology research methods also play an important role in the dynamic monitoring of patients with IPMN (mainly type II) to determine possible malignancy.