## Sonographic picture of the chronic pancreatitis in an 8 years old child: clinical case

Kirill Valyalov<sup>1</sup>, Elena Kaytukova<sup>1, 2</sup>, Elena Komarova<sup>1</sup>, Nato Vashakmadze<sup>1, 2</sup>, Leyla Namazova-Baranova<sup>1, 2, 3</sup>

- <sup>1</sup> Research Institute of Pediatrics and Children's Health in "Central Clinical Hospital of the Russian Academy of Sciences", Moscow, Russian Federation
- <sup>2</sup> Pirogov Russian National Research Medical University, Moscow, Russian Federation
- <sup>3</sup> Belgorod National Research University, Belgorod, Russian Federation

**Objective.** Children's chronic pancreatitis is a casuistic rarity; it is an inflammatory and degenerative disease of the pancreas, which can be associated as a reaction to any pathological process or be of a hereditary nature. Chronic pancreatitis, as a rule, is asymptomatic or with unexpressed clinical signs, and can lead to acute pancreatitis.

**Case report.** An 8-year-old boy turned to the department with complains on intermittent cramp-like pain in the abdomen during a year, mostly after meal, on the rare liquid stool or it was absence during several days. The pain passed off on its own or was relieved with antacids. Last year at the other clinic the ultrasound examination of the abdominal cavity organs was conducted. Any pathological changes of the internal organs were not detected. Biochemical blood test was not conducted; the symptomatic therapy was prescribed by attending medical doctor.

**Results.** The ultrasound examination of the hepatobiliary system organs was conducted. Significant changes of the pancreas gland were detected: increases sizes, uneven counters, parenchyma was inhomogeneous due to different tissue areas of incorrect shape, of decreased and increased echoicity; multiple hyperechoic inclusions with sizes up to 1.5–8.0 mm with acoustic shadow were visualized in the

tail's region. The Wirsung's duct was expanded among along its entire length up to 5,0 mm with a wavy course, calculi and clots of secretion were detected in the lumen. No mass lesions were detected. Multiple lymph nodes wit sizes up to 1 cm of normal shape with preserved architectonics were detected in the part of the pancreas head. No changes of peripancreatic mass were detected.

Moderate quantity of free liquid was visualized in the abdominal cavity.

Sonographic data correspond to the chronic pancreatitis. Conducted laboratory examinations showed the increase of alpha-amylase up to 624 u/l and lipases up to 202 u/l, that confirmed the inflammatory process in the pancreas gland, the results of computed tomography of the abdominal cavity organs with a contrast enhancement of volumetric formations and foci of abnormal uptake of contrast medium were not detected. The patient was referred to the surgeon's consultation to solve the issue of the further treatment tactics.

**Conclusion.** Preserved abdominal pain can suggest the chronicity of inflammatory process in the pancreas gland, the patient is recommended to conduct the ultrasound examination not rare than once in 6 months due to the clinical data.