ENDOSCOPIC ANATOMY OF THE ILEOCECAL JUNCTION AND THE CECUM

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Key words: *cecum, ileocecal junction, anatomy, endoscopy*

Aim. The study of the endoscopic anatomy of the ileocecal junction and the cecum.

Material and Methods. 97 people (57 women and 40 men) aged from 25 to 78 years, were examined, who underwent morphometry of the ileocecal transition and the cecum with the use of colonoscopy. Colonoscopy was used in suspected pathology of the ileocecal area, which was not confirmed.

Results and Discussion. In our study, the predominant direction of the ileocecal valve was in the dome of the cecum (in 71.1%), in 24.8% — perpendicular to the axis of the cecum, and only in 4.1% of cases — in the ascending colon. Studying the shape of the ileocecal valve, we noticed their difference depending on the level of examination during colonoscopy: from the ascending colon and frontal examination. We determined its shape in the phase of relaxation, that is, after the passage of the peristaltic wave. It turned out that among the variety of forms when viewed from the ascending colon, one can distinguish flattened, flat, crescent, saddle-shaped and polypoid forms. Moreover, flattened, flat and sickle-shaped forms can be combined into non — ascending forms, and saddle-shaped and polypoid forms-into protruding forms. Unyielding forms was predominate (67%) over exposed (33%). Among the first forms more often (40.2%) there are flattened forms, and among the second — saddle-shaped (19.6%). The lipoid, papillary and transitional forms are determined by the frontal examination of the ileocecal transition, and mainly (81.4%) there is a lipoid form, and papillary — only 4.1% of cases, transitional — in 14.5% of cases.

Conclusions. Thus, the results of the studies suggest that colonoscopy is a highly effective method of in vivo anatomical study of the ileocecal transition and the cecum.

PROMISING APPROACH TO LIVER PROTECTION AGAINST REPERFUSION-INDUCED INJURY

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Key words: *liver, protection, reperfusion-induced injury*

Aim. To explore hepatoprotective potency of some magnesium-containing compounds of 2-aminoethanesulfonic acid on the model of ischemia/reperfusion liver injury in experiment in rats.

Material and Methods. 24 male Wistar rats, weighing 220 to 280 g, were obtained from «Stolbovaya» Animal Breeding Facility. All rats were deprived of food, but not of water, for 24 h before each experiment. The hepatic ischemia/reperfusion (I/R) protocol was performed as described previously (Harada et al., 1999). LBK-527 (100 mg/kg) or LHT-8-16 (120 mg/kg) dissolved in saline was administered intravenously to rats (6 in each group) 30 min before reperfusion. Sham-operated animals (control-2, n=6) and naïve rats (control-1, n=6) received equal volume of saline administered the same way. Blood samples were taken from the anesthetized animals via withdrawal from the abdominal aorta using a 22-gauge needle 6 h after reperfusion to measure the level of serum alanine (AlAT) and aspartate aminotransferase (AsAT) by standard clinical automated analysis. At the same time, liver specimens were taken. Some of them stained with hematoxylin-eosin were used to assess the infiltration of polymorphonuclear leukocytes (PMNs) whereas the other samples of liver tissue were homogenized todetermine TNF-a, HGF and IL-10 level by immunoferment analysis.

Results and Discussion. Intravenous administration of both substances led to decrease serum aminotransferase level in comparison with animals of control-2. Only LBK-527 had a potency to make AlAT and AsAT concentration achieve the level as that of control-1 rats. The substances, but largely LBK-527 prevented activation of TNF-a-intermediated signal pathway of the organ damage whereas they increased tissue IL-10 and HGF levels, which highlighted aminoaethanesulfonate compounds protective property. Histological examination of liver specimens of pharmacologically treated rats showed weak signs of inflammatory infiltration.

Conclusions. Magnesium-containing 2-Aminoaethanesulfonate compounds protected rat's liver against ischemia/reperfusion damage. They impacted TNF-a-dependent pathway of the organ injury, prevented hepatic cytolysis via IL-10 activation, weakened liver tissue inflammation,and stimulated cells' regeneration.

DEPARTMENT OF OPERATIVE SURGERY AND TOPOGRAPHIC ANATOMY OF THE SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY (SECHENOV UNIVERSITY) — 150TH ANNIVERSARY

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Key words: *Department of operative surgery and topographic anatomy, Sechenov University, history, anniversary*

The Department of operative surgery and topographic anatomy of the medical faculty of Moscow University was established in 1868. The First head of this Department was Alexander Petrovich Rascvetov (1825–1902). In 1885, Alexander A. Bobrov (1850–1904) was elected as a head of the Department — an outstanding surveyor and surgeon, an active follower of N. I. Pirogov. A. A. Bobrov made a new program of teaching of operative surgery and topographic anatomy. For the first time topographic anatomy was presented as a whole course. A. A. Bobrov left a deep mark in the domestic and world surgery as a Topographer, Experimenter and Clinician. In 1923–1927 the Department of operative surgery and topographic anatomy was headed by Professor Nikolay Nilovich Burdenko (1876–1946). In 1947, head of the Department was elected a student of N. N. Burdenko Professor Vladimir Kovanov (1909–1994). Under his leadership, studies have been conducted ended the protection of the 37 doctoral and 85 master's theses. A huge role in the formation of the scientific school V. V. Kovanov played scientific student circle and postgraduate students. The traditions of the scientific student circle have been preserved. For example, the basis of the student team, successfully organizing and performing at the Moscow (all-Russian) Olympiade named after academician M. I. Perelman are students-members of the Department. From 1988 to 2013 head of the Department of operative surgery and topographic anatomy of the I. M. Sechenov First MSMU was a student of V. V. Kovanov, Professor, corresponding member of RAS Anatoly V. Nikolaev. From 2013 to the present time the Department of operative surgery and topographic anatomy of the Sechenov First Moscow State Medical University, is headed by doctor of medical Sciences, Professor Sergey S. Dydykin.

ORGAN-PRESERVING AND EXTENSIVE PANCREATIC SURGERY FOR VON HIPPEL-LINDAU DISEASE. SIX CASES OF 45 PATIENTS UNDER SURVEILLANCE

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Key words: *organ-preserving and extensive pancreatic surgery, VON HIPPEL-LINDAU disease*

Background. Pancreas is involved in 15% of patient with von Hippel—Lindau disease (VHL). Pancreatic surgery for VHL is recommended for pNENs>2 or >3 cm.

Aim. To assess results of pancreatic surgery for VHL NENs.

Material and Methods. Retrospective analysis of 6 pancreatic resections from 42 VHL patients under surveillance (2013–2018).

Results and Discussion. First case: total duodenopancreatectomy for head and tail pNENs on the background of total pancreatic involvement by serous cystadenomas of different size was performed to the 54-year old woman, who 6 years ago was treated by right-sided nephrectomy performed for clear-cell cancer. 8 months later she had died due to dissemination of renal cancer. A 45-year old woman with multiple cerebellar and spine hemangioblastomas, pNENs in the head and body and tail, 5 years after right adrenalectomy for pheo, centre-preserving pancreatectomy and left adrenalectomy for pheo. Central pancreatic resection was performed to a 36-year old man for 2 cm NEN.

A 47-year old man with multiple spine hemangioblastomas, large (5–6 cm) pNENs in the head and 10 years after bilateral adrenalectomy for pheo was successfully treated by pancreaticodudenectomy. One case of distal pancreatectomy (DP) for NENs combined with bilateral adrenalectomy and left renal resection and another case of DP combined with left adrenalectomy, triple left kidney and double right kidney resection after cranial hemanangioblastoma removal. All the patients were discharged and at the moment they are functional, working and fully compensated.

Conclusions. Timely and possibly parenchyma-sparing pancreatic resections are the operations of choice for pNENs on the background of VHL.