ENDOSCOPIC ANATOMY OF THE ILEOCECAL JUNCTION AND THE CECUM

Dronova O. B., Fateyev I. N., Shepelev A. N.

Orenburg State Medical University (OrSMU), Orenburg, Russia; Orenburg Regional Clinical Hospital, Orenburg, Russia; Orenburg Regional Clinical Hospital, Orenburg, Russia

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

Dydykin S. S. [1], Blinova E. V.[2], Semeleva E. V.[2], Khalzova M. S.[2], Ovsepjan J. A.[2], Morozov M. A.[2], Blinov D. S.[2]

[1] Sechenov First Moscow State Medical University, Moscow, Russia; [2] National Research Mordovia State University, Saransk, Russia
bev-saransk@yandex.ru

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.