

accuracy of 0.01 mm. The weight of animals was measured on electronic scales of the touchscreen pocket scale «BS-100» (AWS Inc.) with an accuracy of 0.01 g. The effects of prenatal treatment with sinestrol resulted in accelerated growth of front part of the head, tail, body and hind paws of offspring to 7th day of postnatal development, and alignment and the inversion of the same parameters with control animals on 25 day. Experimental animals had statistically significant high weight of body compared with control animals (7 day: experience - 3.85 ± 0.35 g, control - 6.42 ± 0.39 g, 25 day: 10.4 ± 0.71 g and 7.54 ± 0.43 g respectively, $p < 0.05$). Thus, prenatal exposure to sinestrol during the critical period of development of organs of the reproductive system affects the growth and can influence on somatometric characteristics of the offspring in the early postnatal period of development.

HISTOLOGICAL CHANGES OF GASTRIC MUCOSA IN PATIENTS WITH CHRONIC GASTRIC EROSIONS COMBINED WITH BILIARY TRACT DISEASE

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Aims: to assess the frequency and type of histological changes in patients with chronic gastric erosions (CGE) combined with biliary tract disease (BTD). **Methods:** Adult patients (18 - 65 years) with endoscopically confirmed CGE and presence of BTD were eligible to participate (I group). As controls, patients with CGE and duodenal ulcer (II group) and CGE and chronic gastritis (III group) were recruited. Biopsy specimens were taken from stomach due to the Houston-updated gastric biopsy sampling protocol. One expert gastrointestinal pathologist, blinded to all patient clinical information, assessed tissue samples. Atrophy was scored due to Operative Link for Gastritis Assessment (OLGA) staging system. **Results:** 294 patients (I group - 151, II group - 73, III group - 70) were included into the study with no statistical difference in age and sex between groups. Antral atrophy (I-III stage) was detected in 122 (80.8%) patients of the I group, 58 (79.4%) - of the II, and in 55 (78.6%) - of the III. Corpus atrophy (I-II stage) was seen in 35 (23.2%) patients of the I group, 4 (5.5%) - of the II, and 8 (11.4%) - of the III group. **Conclusion:** No significant difference in antral atrophy between groups was found ($P_{1-2} = 0.81$, $P_{1-3} = 0.70$). With statistical significance corpus atrophy was more frequently detected in patients with CGE and BTD, comparing to the control groups ($P_{1-2} = 0.001$, $P_{1-3} = 0.004$).

ARTERIAL VARIATIONS IN THE PANCREATIC REGION

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The complex arterial system makes the pancreatic interventions technically challenging for surgeons, and interventional radiologists. The arterial variants may alter the tumor resectability, and cause complications in arterial embolization. International data on the pancreatic blood supply are variable; therefore, we aimed to determine the frequency of pancreatic arterial variants in a series of our population. Arteries of human abdominal organ complexes (50) were injected with resin mixture, then corroded. Digital photos and CT images were taken. Classic anatomical variation occurred in less than 50%. Replaced and accessory right hepatic arteries were detected in 12% and 6%, respectively. In one case the proper hepatic artery branched off from the superior mesenteric artery (SMA). The

gastroduodenal artery arose from the common hepatic in 86%, from the left hepatic in 8%, from the right hepatic in 4% and in 2% from the coeliac trunk. Superior pancreaticoduodenal artery was found in 10%, while the anterior and posterior superior pancreaticoduodenal artery stem separately in 90%. Inferior pancreaticoduodenal artery was found in 76% and originated with the 1st jejunal in 86%. Anterior and posterior inferior pancreaticoduodenal arteries stem separately from SMA in 22%, from the accessory hepatic (from SMA) in 2%. Single transverse pancreatic artery occurred in 80%, and two in 20%. Except one case, multiple dorsal pancreatic arteries arose from the splenic. Our results stress on the importance of the preoperative radiological analysis. Detection of replaced or accessory right hepatic artery is critical when performing pancreaticoduodenectomy. Insufficient anastomoses may result ischemia after gastroduodenal artery embolization.

CONDUCTION PATHWAYS IN THE ANTERIOR SEPTAL PLACE

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Aim: In the anterior septal place are located accessory pathways of the heart conducting system. The most common of them are Kent Bundles. Our aim in this study was to identify the anatomical characteristics of the area where Kent Bundles persist. **Material and Methods:** 12 human hearts were dissected. The position of Kent Bundles was determined from a study of serial sections. A variety of stains were employed but the most useful proved to be hematoxylin-eosin and Masson trichrome. **Results:** One important anatomical finding was the relationship of the atrial septum, the right fibrous trigone and the underlying membranous ventricular septum to the AV node and the Bundle of His. The AV node and the Bundle of His are actually in the posterior septal area with the compact AV node enclosed in the posterior aspect of the atrial septum. The other course of Kent Bundles was from the right atrium to the right ventricle which could be a point anterior to the right fibrous trigone to the arbitrary line separating the anterior septal area from the right free wall. The tendon of Todaro was found in 8 hearts. **Conclusion:** No other pathways, except Kent Bundles have been found in otherwise normal human hearts in the anterior septal area. This study indicates that the Kent Bundles and the Bundle of His could be within 2 mm of each other. Based on this anatomical information, one possible connection between them in the septal area could be from the anterior edge of the atrial septum to the muscular ventricular septum, skirting the anterior edge of the right fibrous trigone.

ANATOMICAL FEATURES OF THE KNEE ARTICULAR CARTILAGE AND MENISCUS THAT MAY AFFECT PATHOLOGY AND TREATMENT

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Meniscus and articular cartilage lesions comprise a very common clinical entity of the knee joint. There is increased interest on these lesions because: they may be associated with pain and significant disability in relatively young patients; they are characterized by limited healing potential; and result in progressive deterioration of the articular cartilage over time leading to osteoarthritis. Articular cartilage and meniscus are both cartilaginous tissues. Articular cartilage is made up of hyaline cartilage, while menisci of the knee are fibrocartilaginous tissue structures. Chondrocytes are the single cell type found in articular cartilage. The term fibrochondrocytes is usually used to describe the cells of the meniscus, which include three distinct cell populations. The extracellular matrix of both structures consists mainly of water, collagen