Materials of Conferences

ANLAGE OF LYMPH NODES OF COELIAC ARTERY IN RAT

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I study initial development of lymph nodes (LN) in basin of coeliac artery of white rat. In the fetuses of 18-19 days cranial mesenteric artery (CMA) and its branches invaginate into lumen of neighbouring mesenteric lymphatic vessels with formation common anlage of mesenteric LN as stromal tape. It becomes lymphoid tape in the fetuses of 19–20 days. Initial segment of CMA is surrounded by lymphoid tissue likely horseshoe on right, left and caudal sides from the artery, behind pancreas. This «horseshoe» has two branches: the right is short, extends to pancreaticoduodenal artery, the left is long, extends into common root of mesentery and mesocolon. The right branch turns and continues in cranial direct, on the right side of hepatic portal vein - anlage of hepatic LN. This lympoid tape displaces on the dorsal surface of portal vein and to midline, on the right side and cranially from initial segment of coeliac artery, where the tape surrounds hepatic artery. Similar anlage of splenic LN is determined in lumen of lymphatic vessels, along tributaries of hepatic portal vein, on the dorsal surface of tail and on the left side from body of pancreas, at the level of CMA. The dorsal projection of tail of pancreas separates anlage of splenic LN from thick root of dorsal mesentery. The cranially this projection disappears and lymphoid tape passes on the dorsal side of body of pancreas, where it widens and surrounds splenic artery (anlage of pancreatic LN). Then this anlage reaches the midline and gastrosplenic artery, on the dorsal side from the mouth of splenic vein (anlage of gastrosplenic LN). The left, pancreatic lymphoid tape don't passes into the right, hepatic lymphoid tape and into the left, but more caudal mesenteric lymphoid tape.

LYMPH NODES IN BASIN OF COELIAC ARTERY IN RAT

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I prepared 20 white rats of first and second months with the purpose to study shape and topography of lymph nodes (LN) in the basin of coeliac artery. Usually it divides into two end branches: the right – hepatic artery, the left – gastrosplenic artery. I found one small LN with oval shape on caudal side of gastrosplenic artery, near end of splenic vein and two LN with such shape and sizes along hepatic artery, in different position about hepatic portal vein. Sometimes hepatic LN was unpaired and large as ileocaecal LN. I found two groups of LN along splenic artery and vein, near dorsal border of pancreas:

1) the dexter two LN, large, with shape of bean or «coffee bean» – pancreatic LN. They lie on dorsal side of greater curvature of stomach, near pylorus («caudal gastric» LN). After withdrawal of stomach these LN remain on the dorsal border of pancreas, about splenic vein. The body of pancreas separates pancreatic LN (at cranial side of pancreas) and central mesenteric LN (at the caudal side);

2) the left two LN, oval, in 2–3 times lesser, than the dexter, – splenic LN. They lie on the place of curve or bifurcation of body of pancreas (crossing into tail), about splenic hilum, between its two cranial veins.

Tail of pancreas ajoins to visceral surface of caudal part of spleen, and between splenic LN and cranial part of spleen is determined gastrosplenic ligamentum. Thus, 6–7 LN are situated in basin of coeliac artery of white rat, mainly in connection with hepatic portal (1–2) vein and splenic vein (5). Pancreatic and splenic LN enter in complement of gastrosplenic lymphatic circle. Two bundles of lymphatic vessels unite these LN: dorsal bundle passes onto greater curvature of stomach and ventral bundle acrosses pancreas.

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