Multiplicity of the variations in ventral branches of abdominal aorta

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Key words: abdominal aorta, celiac trunk, superior mesenteric artery, testicular artery

SUMMARY

Numerous variations of the ventral branches of the abdominal aorta were observed during routine dissection of the abdominal region in a 63-year-old male cadaver in the Department of Anatomy at Ege University Medicine Faculty. The branches of the celiac trunk were arising from two different trunks as the upper and below ones. The trunk at the upper was gastrophrenic trunk and the trunk at the below was hepatosplenic trunk. The superior mesenteric artery arose from the front of the abdominal aorta just below the hepatosplenic trunk. The relations of the right testicular artery was also unusual.

Although the variations of the abdominal aorta branches are common the present case is interesting because of the multiplicity of the variations. The knowledge of these variations could be useful for clinicians for recognition and protection.

INTRODUCTION

The abdominal aorta begins at the aortic hiatus in the diaphragm at the level of the T12 vertebra. The branches of the abdominal aorta are described as ventral, lateral, dorsal and terminal. The celiac trunk is a wide ventral branch 1.5-2 cm long just below the aortic hiatus. The superior mesenteric artery usually arises from the abdominal aorta at the level of the L1-2 intervertebral disc, approximately 1 cm inferior to the celiac trunk (Standring, 2005).

The duodenal arteries arise from the celiac trunk via the branch of gastroduodenal artery (superior pancreaticoduodenal artery) and superior mesenteric artery (inferior pancreaticoduodenal artery). The pancreaticoduodenal arteries lie in the curve between duodenum and head of pancreas and supply both structures (Cavdar et al., 1997; Moore and Kelly, 1999; Standring, 2005).