Core Surgical Anatomy – Learning outcomes

Abdo. 2 – GI tract – oesophagus to anus

Describe the organisation and clinical significance of the parietal and visceral peritoneum, the greater and lesser sacs, mesenteries and peritoneal 'ligaments'. Explain the significance of the attachments of the ascending and descending colon to the posterior abdominal wall.

Describe the functional anatomy of the small and large bowel mesenteries; their structure, location and their vascular, lymphatic and neural contents.

Explain the nerve supply of the parietal and visceral peritoneum and the role of the visceral peritoneum in referred pain.

Describe the position and functional anatomy of the stomach, its position, parts, sphincters, vascular, lymphatic and nerve supply and key relations to other abdominal organs.

Describe the duodenum, its parts, position, secondary retroperitoneal attachment; vascular, lymphatic and nerve supply and key relations to other abdominal organs.

Describe the regions and positions of the small and large intestine and their vascular, lymphatic and nerve supply. Describe the anatomical variations in the position of the appendix and explain their significance in relation to appendicitis.

Describe the origins, courses and major branches of the abdominal aorta, coeliac axis, superior and inferior mesenteric, renal and gonadal arteries. Describe the clinical significance of the blood supply to the abdomen for example in relation to abdominal aneurysm repair.

Describe the origin and course of the inferior vena cava and its major tributaries.

Describe the anatomy, relations and peritoneal coverings of the sigmoid colon, rectum and anal canal.

Describe the blood supply and venous drainage of the distal bowel; the supply from superior rectal (from inferior mesenteric), middle rectal (from internal iliac) and inferior rectal arteries (from internal pudendal to anal canal only), and porto-systemic venous anastomoses. Explain the clinical significance of the blood supply and venous drainage of the distal bowel, e.g. in continence, haemorrhoids and anal fissures.