

VASCULAR ABNORMALITIES OF THE MESENTERY Acute mese

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- The arterial inflow to the mesenteric domain is limited to three major vessels: the coeliac trunk and the superior and inferior mesenteric arteries (65.5). Additional arterial inflow in the pelvis comes via the middle rectal arteries. The limited number of arterial inputs to the mesenteric domain mean that narrowing or occlusion at the origin of any one vessel can have significant clinical effects. Acute mesenteric ischaemia mostly follows embolisation to the origin of either the coeliac or superior mesenteric arterial trunk. Unless quickly reversed, it can lead to ischaemia and necrosis of most of the intestine. At first, the severity of abdominal pain does not match clinical findings on examination. If ischaemia and necrosis occur, the patient develops peritonism as a result of irritation of the parietal peritoneum by the necrotic intestine. The inferior mesenteric artery (IMA) is usually divided at open repair of an abdominal aortic aneurysm; however, anastomoses between peripheral branches of the SMA and IMA, Drummond, usually pre-referred to as the marginal artery of Drummond, are critical in preventing ischaemia of the sigmoid and descending colon. If ischaemia is limited to the mucosa, the patient may experience mild colicky cramping suprapubic pain and diarrhoea that settles. If ischaemia is transmural the colon may become necrotic and require resection.

Severe mesenteric Mild Normal disease mesenteric mesentery disease Fat wrapping Creeping fat
Figure 65.12 The mesentery in Crohn's disease. (a) Levels of mesenteric disease manifestations.
creeping fat. (Reproduced with permission from Coffey JC, Lavery I, Sehgal R (eds). applied
principles . Boca Raton: CRC Press, 2017: 85-108.)