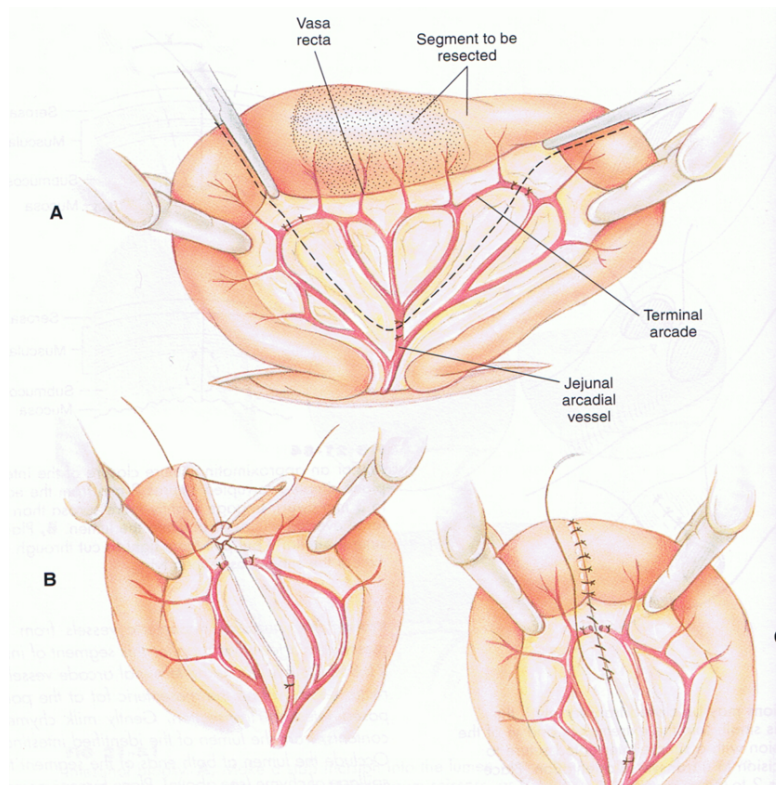


Ligate and transect the arcadial vessels that supply the affected segment of intestine. Also ligate and transect the terminal arcade vessels on either side of the planned intestinal transection.

Transect the mesentery, leaving adequate mesenteric tissue to facilitate closure of the defect after completion of the anastomosis.

The terminal vessels may need to be ligated blindly due to the presence of fat.



If only a short segment of small intestine is to be resected, this is a relatively straightforward procedure.

The peritoneum is incised on both sides of the mesentery along the selected line of vascular division .

*Windows are opened, using forceps, in the avascular areas of mesentery identified by transillumination.*

Vessels are carefully isolated, divided and ligated.

The specimen is then resected, taking slightly more on the avascular antimesenteric border, using a knife.

The ends, which should bleed freely, are cleansed with a moist swab before being set up for anastomosis, ensuring orientation is correct.

If there is a large disparity in calibre between the two ends, the narrower end may be widened by incising longitudinally for a short distance along its antimesenteric border (the Cheatle

manoeuvre).

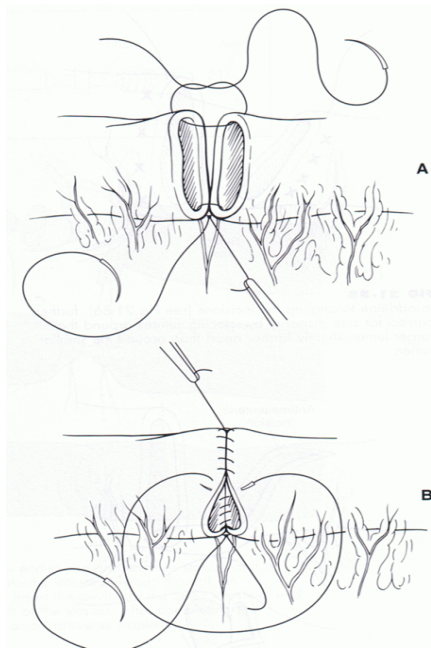
We perform a continuous, serosubmucosal, end-to-end anastomosis with Vicryl or PDS 3-0, completing the more difficult mesenteric border first.

The bowel to be resected is held by an assistant while the surgeon creates small openings in avascular segments of the mesentery along the line of transection. Small vessels are clamped and tied with Dexon suture.

Note that the line of transection in the bowel is oblique rather than perpendicular.

The blood supply to the small bowel is such that the antimesenteric border of the bowel can become ischemic if the vascular arcade supplying the edge of the resected bowel is transected perpendicularly.

A second reason for transecting the bowel in an oblique rather than a perpendicular line is that an oblique transection will give a larger anastomosis and reduce the incidence of stricture formation.



The lumen of the bowel on the left (jejunum) is smaller than the lumen of the bowel on the right (colon). To accommodate for this disparity, the antimesenteric aspect of the smaller bowel segment has been cut longitudinally to create a larger lumen, and facilitate even approximation of bowel ends for anastomosis.