Total Colectomy for Slow Transit Constipation

Total colectomy involved removal of the entire colon (large bowel) with the formation of an ileorectal anastomosis (IRA).

Effectiveness

This extremely effective for slow transit constipation. Meta-analysis has found overall global satisfaction rates to be greater than 85%, when performed for slow transit constipation confirmed on marker studies [1.] Its effectiveness as a operation is based on complete removal of the large colon whose only function is to absorb water thereby concentrating faeces making them firm.

Nutritional considerations

Very few nutrients are absorbed by the colon, so nutritional deficiency following this operation is rare.

Key Hole Versus Open Surgery

Although this type of surgery is generally able to be performed by key-hole (laparoscopic) methods, it is nonetheless major surgery, and choice of approach will very much depend of experience. The operating time is approximately 25% longer with laparoscopic surgery than open surgery [1]. The quicker recovery following laparoscopic surgery and fewer post operative and long term complications (including incisional hernia and adhesions) make this the preferred method for surgery.

Risks

The main risk of total colectomy is that of primarily anastomotic leak, with a risk of anywhere from 5-10% in expert hands. Other risks include those related to prolonged operating time (up to 4 hours), with death reported in up to 0.4% of cases [1].

Therefore, the potential benefits need to be carefully weighed against the potential hazards of this surgery, which after all, is for benign disease, that can be managed conservatively with life long laxatives.

Surgical Alternative

The surgical alternatives to total colectomy with ileorectal anastomosis (IR) include Chait caecostomy with antegrade lavage. This involves formation of a stoma at the appendiceal orifice, through which water irrigation is performed allowing antegrade lavage. Sacral Nerve Stimulation (SNS) initially showed some promise by long-term studies have unfortunately shown disappointing results for slow transit constipation.

Medical Alternative

Long term laxatives are often required for slow transit constipation. Laxatives that work primarily by osmosis such as macragol (Movicol), and Magnessium sulfate (Epsom Salts), are preferred to stimulant laxatives such as Coloxyl. Retrograde enemas and irrigation are alternative.

1. Knowles, CH., Grossi, U., Chapman, M., et al Surgery for constipation: systematic review and practice recommendations Results I: Colonic resection, Colorectal Disease, 29 Sep 2017