crohn's colitis

Name of Clinical Care Pathway

Post-Operative Management of Crohn's Disease

Objective

Provide direction for the management of patients with Crohn's disease after a bowel resection

Patient Population

Adult patients (> 18 years) with Crohn's disease with a recent surgical resection

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PACE Inflammatory Bowel Disease Clinical Care Pathways

Highlight Box

Surgery is often required in up to 80% of Crohn's disease patients for medically refractory disease or complications such as a bowel obstruction, abscess or fistula.

- Patients should be stratified based on disease and surgery-related risk factors.
- Smoking is associated with a higher risk of postoperative disease recurrence; therefore, all patients should receive smoking cessation counselling.
- All patients should have an ileocolonoscopy 6 to 12 months after surgery to assess for endoscopic recurrence in the neo-terminal ileum.
- Goals of therapy: Reduce endoscopic and clinical recurrence and maintain disease remission.

These clinical decision support tools were developed by Canadian experts in IBD, based on their interpretation of current evidence and considerations specific to Canadian healthcare. International guidelines from Europe and the United States are available. However, these may reflect regional factors not directly applicable in Canada.

Introduction

Although surgery is not curative, it is an important intervention to correct irreversible disease, such as a fibrotic stricture or medically refractory disease.

Clinical remission is often achieved with surgery; however, the majority of patients have postoperative disease recurrence, which is manifested by histologic or endoscopic findings with or without clinical symptoms.

The identification of risk factors for recurrence is important to determine the need for early medical prophylaxis after surgery versus not starting therapy and adopting a clinical monitoring approach.

There is no role for 5-ASA in the prevention of postoperative recurrence.

The algorithm below is a best-practice clinical pathway for the management of patients with Crohn's disease (CD) in clinical remission after surgery.

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Surgically induced clinical remission of Crohn's disease risk stratification

Lower risk of recurrence

- Non-smoker
- Older patients (>50 years at diagnosis)
- First surgery for CD
- Short segment CD (i.e. <10 to 20 cm)
- Long-standing history of CD (>10 years)

Monitoring without prophylactic therapy may be reasonable

- Fecal calprotectin (FCP) at 3-6 months
- Intestinal ultrasound at 6 months (if available)
- Ileocolonoscopy 6 to 12 months post-surgery to assess for disease recurrence. Rutgeerts endoscopic score ≥i2 indicates recurrence**

Recurrence?

Yes ≥i2

Start medical therapy with anti-TNF or other biologics such as Vedolizumab *

Other advanced therapies may also be considered

No i0-i1

- Ileocolonoscopy every 1 to 3 years depending on FCP, endoscopic findings, and pre-resection clinical disease course
- FCP and C-reactive protein every 6 months for two years after surgery, then annually thereafter

Moderate/high risk of recurrence

- Smoker
- Prior surgical history for CD
- Penetrating/fistulizing disease
- Residual luminal disease
- Younger age (< 30 years at diagnosis)
- Shorter disease duration prior to surgery
- Positive resection margins

Medical therapy: To start within 1 to 2 months postoperatively

Start anti-TNF therapy or Vedolizumab*

- Fecal calprotectin (FCP) at 3-6 months
- Intestinal ultrasound at 6 months (if available)
- Ileocolonoscopy 6 to 12 months post-surgery to assess for disease recurrence Rutgeerts endoscopic score ≥i2 indicates recurrence **

Recurrence?

Yes

Optimize current advanced therapy or switch therapy

Other advanced therapies may also be considered

No

- Ileocolonoscopy every 1 to 3 years, depending on FCP, endoscopic findings, and pre-resection clinical disease course.
- FCP and C-reactive protein every 6 months for two years after surgery, then annually thereafter

*Choice of biologic may depend on pre-resection advanced therapy used ** Consider earlier Ileocolonoscopy if symptoms or elevated FCP

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IBD CLINIC
Inflammatory Bowel Disease Group University of Calgary

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The modified Rutgeerts endoscopic scoring system predicts clinical occurrence based on endoscopic findings. The neo-terminal ileum is assessed during initial postoperative endoscopy and scored by the following scale:

Rutgeerts grade	Endoscopic finding	Decoding
i0	No lesions in the distal ileum	Post-surgery remission
i1	Not more than 5 anastomotic aphthous lesions in the distal ileum	Post-surgery remission
i2*	i2a: lesions confined to the ileocolonic anastomosis i2b: > 5 aphthous lesions in neoterminal ileum with or without lesions at the ileocolonic anastomosis	Substantial post-surgery recurrence
i3	Diffuse aphthous ileitis with diffusely inflamed mucosa between the multiple aphthae	Advanced post-surgery recurrence
i4	Diffuse inflammation, with larger lesions: large ulcers and/or nodules/cobble and/or narrowing/stenosis	Advanced post-surgery recurrence

*No clinical or surgical post-operative difference was observed between the i2a and i2b subcategories. The same treatment can be used for all patients classified under the i2 Rutgeerts category until more prospective studies are available (Rivière, Pauline et al.).

Other Resources

UpToDate® - Patient education: Crohn's disease (Beyond the Basics) (freely accessible) https://www.uptodate.com/contents/crohn-disease-beyond-the-basics?search=undefined&source=search_result&selectedTitle=1~20&usage_type=default&display_rank=1

American Gastroenterological Association Institute. Managing Crohn's Disease After Surgery: A Patient Guide. Gastroenterology 2017 ; 152:296-297 https://doi.org/10.1053/j.gastro.2016.11.039

References

Nguyen GC et al. American Gastroenterological Institute guideline on the management of Crohn's disease after surgical resection. Gastroenterology 2016; 152:271-275 https://doi.org/10.1053/j.gastro.2016.10.038

Singh, S. and Nguyen GC. Management of Crohn's Disease after Surgical Resection. Gastroenterology Clinical of North America 2017; 46(3):563-575 https://doi.org/10.1016/j.gtc.2017.05.011

Lamb C et al. British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults. Gut 2019; 1-106 https://doi.org/10.1136/gutjnl-2019-318484

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Rivière, Pauline et al. “Comparison of the Risk of Crohn's Disease Postoperative Recurrence Between Modified Rutgeerts Score i2a and i2b Categories: An Individual Patient Data Meta-analysis.” *Journal of Crohn's & colitis* vol. 17,2 (2023): 269-276. https://doi.org/10.1093/ecco-jcc/jjac137