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Peri and Postoperative IBD Management Protocol

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1) Ulcerative Colitis

a) Surgical colectomy options:
   i) 2 Stage – Stage 1: Total abdominal colectomy with an ileal pouch anal anastomosis and diverting loop ileostomy. Stage 2: Takedown of the loop ileostomy.
   ii) 3 Stage – Stage 1: Total abdominal colectomy with Hartmann's pouch and end ileostomy. Stage 2: Ileal pouch anal anastomosis with a diverting loop ileostomy. Stage 3: Takedown of the loop ileostomy.
      (1) 3 stage approach is favored with any of the following[1,2,3]:
         (a) Inability to taper below 15 mg prednisone without flaring
         (b) Inability to stop biologic for more than 10 days without flaring
         (c) Malnourished (albumin level < 3 g/dL)
         (d) Urgent surgical intervention during current hospitalization
         (e) Presence of perianal disease

b) Postoperative management following Subtotal Colectomy with a planned J pouch in 8-12 weeks:
   i) Monitoring
      (1) Routine imaging or endoscopy is not indicated in the absence of significant symptoms.
   ii) Treatment/Evaluation of rectal discharge:
      (1) For mild rectal discharge (mucus or blood), use one of the following[4]:
         (a) Canasa 1 gram PR BID
         (b) Proctofoam 15 grams PR BID
      (2) If inadequate response to therapy in mild discharge, or for more severe symptoms:
         (a) GI consult for endoscopic evaluation of the rectal stump.
         (b) Consider adjustment in therapy based on endoscopy.
   iii) Steroid Management
      (1) Perioperative high-dose steroids are not superior to low-dose steroids in reducing the incidence of postural hypotension or adrenal insufficiency postoperatively.[5]
      (2) If less than 2 weeks of steroids were used in the previous 6 months prior to surgery, stop steroids following surgery.
      (3) If 2 to 8 weeks of preoperative steroids were used in past 6 months, recommend a rapid taper over 10 days starting at prednisone 40 mg daily. Steroids should be completed by POD 11.
      (4) If more than 8 weeks of preoperative steroids were used in the past 6 months, recommend the following taper:
         (a) Taper IV steroids from preoperative dose to 20 mg daily prednisone over 3 days (Solumedrol 15 mg IV = Prednisone 19 mg PO)
         (b) Switch to 20 mg daily prednisone, taper by 5 mg per week over 4 weeks until off prednisone.
   iv) Immunomodulator Management: Azathioprine, Imuran, 6-MP, methotrexate
      (1) Discontinue use following surgery.

v) Biologic Management: Remicade, Humira, Cimzia, Simponi, Entyvio
   (1) Discontinue use following surgery.
vi) Follow up:
   (1) GI Clinic visit in 10 weeks.
   (2) Plan for flexible sigmoidoscopy to evaluate J pouch and rectal cuff for surveillance of dysplasia at 1 year after colectomy, followed by q 2 years if no prior dysplasia or Family history, or annually if dysplasia or cancer found in resected colon or positive family history of CRC.[6]

2) <u>Crohn's Disease</u>

a) Surgical Intervention
   i) Consider a Diverting Ostomy (with or without anastomosis) if any of the following are present[1,2,3]:
      (1) Inability to taper below 15 mg prednisone without flaring
      (2) Inability to stop biologic for more than 10 days without flaring
      (3) Malnourished (albumin level < 3 g/dL)
      (4) Urgent surgical intervention during current hospitalization
      (5) Presence of an abdominal abscess or fistula
b) Biologic management in Elective Surgery[7]
   i) Recommend holding Biologics prior to the surgery date
      (1) Goal is to miss only one dose of the Biologic.
      (2) It is important that patients continue immunomodulators (AZA, 6MP, MTX) during this Biologic free interval.
      (3) Long interval biologics (Remicade, Entyvio) – last dose should be given 4 weeks before surgery (can be between 3 to 6 weeks before surgery)
      (4) Short interval biologics (Humira, Cimzia, Simponi) – last dose should be given 2-3 weeks before surgery
      (5) If interval between pre-op dose and post-op dose is longer than previous dosing interval, should schedule re-load of the Biologic at the first GI postoperative visit.
      (6) If interval between pre-op dose and post-op dose is shorter or equal to previous dosing interval, continue Biologic at previous dosing and intervals.
   ii) If surgery is planned for fibrotic damage, muscular bowel damage, or penetrating complications, restart biologic after the surgery (unless major wound infection or wound dehiscence occurs – see below) for lower recurrence of active disease postoperatively[8]
      (1) If major wound infection, dehiscence, anastomotic leak, abscess, or other complication, document with a photograph in the Media tab in MiChart and notify GI immediately to adjust management of immunosuppressive medications. GI will consider temporizing with Entocort.
   iii) If surgery is planned for uncontrolled inflammation (rather than fibrotic damage) GI should strongly consider alternate class of medication. Endoscopic disease recurrence is

significantly lower with Infliximab vs. control at 1 year.[9] Adalimumab is more effective than azathioprine and mesalamine at preventing postoperative recurrence of Crohns disease.[10]

iv) Active endoscopic surveillance for detection of disease recurrence is more effective than waiting for clinical recurrence.[11] There is a disconnect between clinical symptoms and endoscopic disease activity.[12]

v) Risk Factors for postoperative recurrence include:
   (1) Active smoking[13,14]
   (2) Penetrating disease[15]
   (3) Prior surgical resection[16]

vi) **Research goal**: Test fecal calprotectin at 2 weeks postop
   (1) Question: what threshold of FCP is normal at 2 weeks postop, vs. what predicts early flare – would be really helpful to know. FCP>100 at 3 months postop is clearly predictive of endoscopic recurrence.

c) Immunomodulators in Elective Surgery
   i) Stop immunomodulators (including Azathioprine, Imuran, 6-MP, methotrexate) on admission to the hospital.
   ii) Restart immunomodulators on the **<u>day after discharge</u>** (unless major wound infection or wound dehiscence occurs – see below)
      (1) If major wound infection, dehiscence, anastomotic leak, abscess, or other complication, document with a photograph in the Media tab in MiChart and notify GI immediately to adjust management of immunosuppressive medications. GI will consider temporizing with Entocort.

d) Steroids
   (1) Perioperative high-dose steroids are not superior to low-dose steroids in reducing the incidence of postural hypotension or adrenal insufficiency postoperatively.[5]
   (2) If less than 2 weeks of steroids were used in the previous 6 months prior to surgery, stop steroids following surgery.
   (3) If 2 to 8 weeks of preoperative steroids were used in past 6 months, recommend a rapid taper over 10 days starting at prednisone 40 mg daily. Steroids should be completed by POD 11.
   (4) If more than 8 weeks of preoperative steroids were used in the past 6 months, recommend the following taper:
      (a) Taper IV steroids from preoperative dose to 20 mg daily prednisone over 3 days (Solumedrol 15 mg IV = Prednisone 19 mg PO)
      (b) Switch to 20 mg daily prednisone, taper by 5 mg per week over 4 weeks until off prednisone.

b) Metronidazole therapy[17]
   i) If postop plan includes using a Biologic, no need to start metronidazole postoperatively
   ii) If postop plan does NOT include Biologic therapy, start metronidazole 250 mg PO TID after patient is tolerating solid food. Continue for 3 months to delay endoscopic recurrence. If 250 mg TID is poorly tolerated, 250 BID can be use and is likely still beneficial.

d) Discharge instructions/Follow up

i) Pain control with NSAIDs for the next 10 days. Goal of stopping NSAIDS by 10 days post-discharge to avoid inducing a Crohn's flare. Narcotic use is an independent risk factor for serious infectious complications.[18]
ii) Plan for GI follow up with the GI consult fellow or PA at 4 weeks postop for interim visit before returning to primary GI physician.
iii) Fecal Calprotectin[19]
   (1) Place standing orders for FCP at 3, 6, and 9 months post anastomosis date
   (2) If FCP > 100 at any of these dates (or at 1 year post anastomosis), evaluate for endoscopic ulceration using the Rutgeerts scale. If Rutgeerts > i2a, escalate therapy.

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