

Management of Inpatient IBD - Case Based

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Case #1 – Acute Severe Ulcerative Colitis

67 yo male with seizure disorder and H/O pan-UC (rectum to hepatic flexure), remote mesalamine maintenance, surveillance colonoscopy 2 years prior with signs of deep remission, with ~1 month of progressive left-sided abdominal pain, diarrhea progressing to bloody diarrhea 6-8 episodes daily, weight loss/anorexia, failed 2 weeks of outpatient oral budesonide, admitted to outside hospital with fever, tachycardia, mild hypotension, Hgb 12, CRP 196.

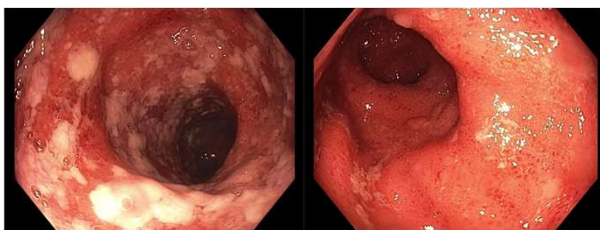
- Started on IV methylprednisolone 20 mg q8 hours
- Bloody diarrhea persisted after 96 hours of IV steroids
- Sigmoidoscopy performed Day #3 showing Mayo 2-3 pan-colitis
- Transferred to tertiary medical center



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Sigmoidoscopy with Mayo 2-3 inflammation extending from dentate line to ~40 cm (extent of exam)



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Case #1 – Acute Severe Ulcerative Colitis

Dr. Ananthkrishnan

What are the options for inpatient advanced therapy ("salvage therapy") when failing parenteral corticosteroids?

For the group:

What is a timeline to consider during the inpatient admission for making decisions on treatment strategy?

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Case #1 – Acute Severe Ulcerative Colitis

Factors I consider:

(a) Prior treatment history (and future treatment options),

(b) disease severity (albumin, Hb, CRP),

(c) Age, comorbidity, frailty, pregnancy

(d) Insurance and patient preference

	Pros	Cons
Infliximab	Long-history of use (and ease), safe during pregnancy, can be used for maintenance	Many patients with previous bio failure; fecal loss of IFX
Cyclosporine	Effective within 3-5 days	Limited experience, not a maintenance option
JAK inhibitors (UPA > TOFA)	Works quickly, oral, can be maintenance, less susceptible to fecal loss	Limited pregnancy data, ? Increase in VTE risk, logistically challenging (±)

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Case #1 – Acute Severe Ulcerative Colitis

Dr. Barnes

How might we decide on possible dose-escalated induction dosing of inpatient infliximab infusions? Do we consider dose (5-10 mg/kg) and/or interval (2nd infusion prior to 2 week interval)? Is there a role for therapeutic drug monitoring in dose-escalated induction?

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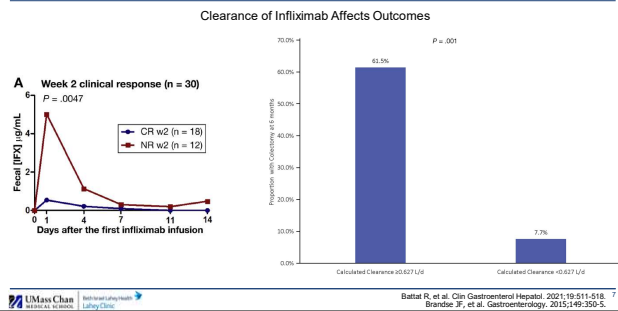
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Case #1 – Acute Severe Ulcerative Colitis



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Case #1 – Acute Severe Ulcerative Colitis

PREDICT-UC

Open-label, multi-center, RCT

Infliximab 10 mg/kg

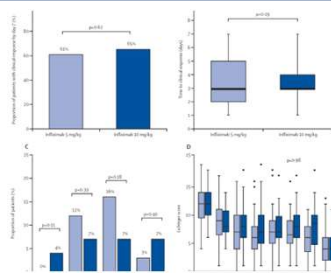
Infliximab 5 mg/kg

Patients in 10 mg/kg group received a second dose at day 7 or earlier at time of non-response

Patients in 5 mg/kg re-randomized between day 3 and 7

Standard induction strategy

Accelerated induction strategy



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Case #1 – Acute Severe Ulcerative Colitis

Dr. Winter

Does every patient presenting with ASUC require assessment for CMV colitis? What factors raise concern of CMV? What are methods to assess possible CMV?

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Case #1 – Acute Severe Ulcerative Colitis

- Does every patient presenting with ASUC require assessment for CMV colitis?
 - All patients who are hospitalized with ASUC should have a flexible sigmoidoscopy
- What factors raise concern of CMV?
 - Steroids – multiple courses, prolonged course
 - Severe inflammation/high inflammatory burden that has not responded to treatment
 - Extensive disease
 - Older age
 - Immunocompromised – thiopurines, not anti-tumor necrosis factor
 - Duration of IBD
 - Endoscopic appearance
- What are methods to assess possible CMV?
 - Biopsies – send tissue for CMV immunohistochemistry
 - CMV PCR is not an adequate screening tool by itself

Rubin DT et al. AJG, 120(6), 1187-1224.

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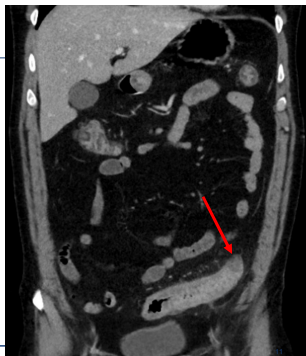
Case #2 – Intra-abdominal Abscess

46 yo male with prior history of diverticulosis, chronic diarrhea and remote colonoscopy showing mild ileitis, presenting initially with ~1 month of night sweats, left-sided abdominal pain, 30 lb weight loss, degree of constipation with initial CT revealing "inflammatory mass" 2.1x1.3cm at junction of descending and sigmoid colon with left-sided colonic thickening.

- Treated with IV antibiotics

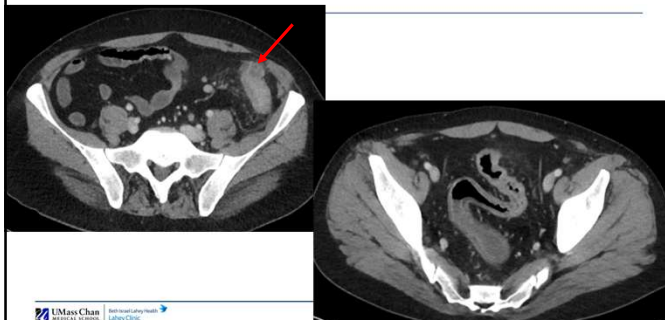
For the group

Is there a way to differentiate here between Crohn's disease and possible complicated diverticulitis with abscess?



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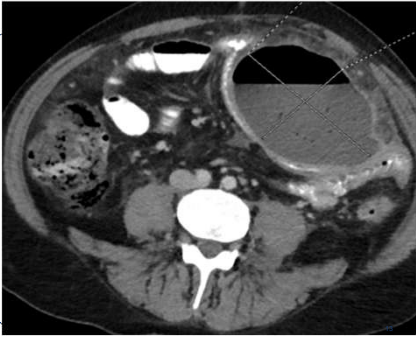
Case #2 – Initial CT – small abscess, left-sided colonic thickening



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Case #2 – Intra-abdominal Abscess

- Follow-up CT scan resolution of small mass-like collection, but persistent severe thickening of sigmoid and descending colon
- Follow-up colonoscopy with severe pan-colonic inflammation L>R including scattered cratered ulcerations in the left colon with chronic active colitis on biopsies
- Started on prednisone taper
- Worsening abdominal pain and diarrhea over ~3 weeks and CRP >240 prompted repeat CT showing large abscess





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Case #2 – Intra-abdominal Abscess

Dr. Winter

What are the initial treatment considerations for an intraabdominal abscess that appears Crohn's related?

What features of the abscess determine whether you would pursue percutaneous drainage versus antibiotics alone versus early surgery?

What might we do with patient's present corticosteroid treatment at 2nd week with dose of 30 mg daily? When do you consider the infection adequately controlled to begin advanced Crohn's therapy?



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Case #2 – Intra-abdominal Abscess

INITIAL ASSESSMENT

- Assess for sepsis, peritoneal signs
- Labs including blood cultures if febrile
- Imaging: Contrast CT/MR: assess size, location and complexity of abscess, fistula/stricture, perforation
- Multidisciplinary care: early interventional radiology and colorectal surgery involvement

START ANTIBIOTICS

Abscess characteristics (size, accessibility) and clinical stability

SMALL, WELL-CONTAINED <2-3 cm

- Clinically stable
- No peritonitis/uncontrolled sepsis
- Drainage not required or feasible

ANTIBIOTICS ALONE

- Broad-spectrum antibiotics
- Close clinical monitoring
- Repeat imaging if not improving / ~1-2 weeks
- Escalate if failure

CORTICOSTEROID MANAGEMENT:

- If possible, discontinue; if not, taper and minimize systemic steroids

LARGER / DRAINABLE ≥ 2-3 cm

- Accessible collection
- Usually well-defined/unilocular
- No immediate surgical indication

PERCUTANEOUS DRAINAGE + ANTIBIOTICS

- Image-guided drainage
- Send fluid for culture
- Culture-directed antibiotics
- Clinical + radiographic reassessment

LARGE / COMPLEX / NOT DRAINABLE

- > 5 cm may favor surgery
- Multiloculated/multiple/inaccessible
- Fistula, stricture or obstruction

SURGICAL MANAGEMENT

- Sepsis control + optimization first
- Consider drainage as bridge
- Surgery for failed: source control, recurrence, obstruction/stricture, refractory penetrating disease

EMERGENCY SURGICAL INDICATION

- Peritonitis/free perforation
- Uncontrolled sepsis
- Hemodynamic instability

URGENT SURGERY

- Resuscitation
- Broad-spectrum antibiotics
- Immediate surgical source control

WHEN IS INFECTION CONTROLLED?

- Clinically improving
- Adequate source control; labs improving
- Imaging shows resolving collection

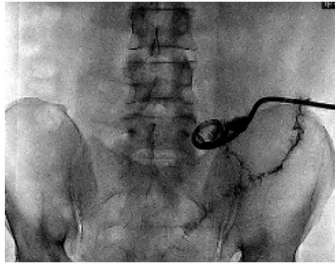
Multidisciplinary care: gastroenterology • interventional radiology • colorectal surgery • nutrition

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Case #2 – Intra-abdominal Abscess

- Undergoes percutaneous drainage and catheter left in place
- Treated with IV antibiotics again
- Follow-up CT showed near complete resolution of abscess cavity
- Follow-up tube study shows fistula to colon



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Case #2 – Intra-abdominal Abscess

Dr. Ananthakrishnan

What are the surgical and medical options in this complex setting of active colonic fistulizing disease and known pan-colonic inflammation? Would you initiate biologic therapy with a drain still in place?

Dr. Barnes

If not going to surgery, which advanced therapy medication might be positioned as the initial therapy? How much does the severe active colitis influence your choice of agent?

For the group

How do we communicate likelihood of success for medical therapy with such fistulizing disease? Should colorectal surgery be involved from day one even if the initial plan is drainage and medical therapy? If surgery is required, what operation would you favor in a patient with severe Crohn's colitis and an intra-abdominal abscess?

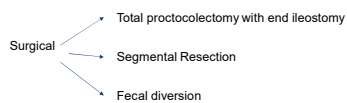
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Case #2 – Intra-abdominal Abscess

Dr. Ananthakrishnan

What are the surgical and medical options in this complex setting of active colonic fistulizing disease and known pan-colonic inflammation? Would you initiate biologic therapy with a drain still in place

Medical → Advanced therapy ± Antibiotics ± TPN / bowel rest



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Case #2 – Intra-abdominal Abscess

If not going to surgery, which advanced therapy medication might be positioned as the initial therapy? How much does the severe active colitis influence your choice of agent?

Thoughts:

1. Data on specific drug therapy for fistulae (outside of perianal fistulae) are relatively lacking
2. Guidelines have focused on evidence base for perianal fistula as a result
3. I would choose infliximab in combination with azathioprine for initial management for this patient
4. Severe colitis influences my decision making if:
 - Albumin is low (and I am worried about infliximab clearance)
 - I remain worried about progression to surgery, and thus would try to limit steroid exposure (in setting of abscess, potential need for surgery)
 - I am potentially less concerned about speed of onset of action, as I think this patient is likely destined for surgery

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