IDENTIFICATION, ASSESSMENT AND INITIAL MEDICAL TREATMENT OF

Ulcerative Colitis

CLINICAL CARE PATHWAY

Make Diagnosis and Assess Inflammatory Status (1)

Assess Comorbidities and Disease- and Therapy-Related Complications (2)

Stratify According to Colectomy Risk (3)

LOW-RISK PATIENT

HIGH-RISK PATIENT

Inductive and Maintenance Therapy (Low Risk) (4)

Identify Patient Requiring Hospitalization

LOW-RISK PATIENT

HIGH-RISK PATIENT

OUTPATIENT

INPATIENT

Inductive and Maintenance Therapy (High Risk, Outpatient) (5)

Inductive and Maintenance Therapy (High Risk, Inpatient) (7)

Therapy for High-Risk Outpatient Not in Remission (6)

Review online at www.gastro.org/ucdecisiontool.
MAKE DIAGNOSIS AND ASSESS INFLAMMATORY STATUS (1)

Assess Symptoms/Signs¹-³
- Bloody diarrhea
- Tenesmus
- Urgency
- Abdominal pain
- Fever
- Weight loss
- Joint swelling/redness
- Localized abdominal tenderness
- Signs of anemia
- Cutaneous signs

Perform Lab Testing¹,³
- CBC
- CMP
- CRP
- ESR
- C. difficile assay
- Stool cultures

Perform Colonoscopy/Sigmoidoscopy¹-³,⁴,⁵*

Select Imaging Modalities (If Indicated)

ASSESS COMORBIDITIES AND DISEASE AND THERAPY-RELATED COMPLICATIONS (2)

Patient Engagement and Coping

Assess Patient Preferences, Belief Systems, Disease Knowledge, Depression, Psychosocial Support

Infection

Treat Infection (C. difficile, Other Bacteria, CMV, Parasites)

Aspirin or NSAIDs

Stop Aspirin or NSAIDs

Non-Compliance

Educate and Support Patient

Adverse Reaction to Medical Therapy

Modify Therapy

Thromboembolic Complications

Treat DVT/PE

Colorectal Cancer/Dysplasia*

Colectomy

Toxic Megacolon/Fulminant Colitis

Consult Surgery

*Colectomy is recommended for: 1) endoscopically unresectable polypoid high-grade or low-grade dysplasia, 2) invisible high-grade dysplasia on random biopsies, and 3) invisible low-grade dysplasia on random biopsies if the dysplasia is found (a) at more than one site (multifocal dysplasia), (b) on more than one occasion (repetitive dysplasia), and/or (c) at the time of initial screening colonoscopy (prevalent dysplasia).⁶

* In patients with severe colitis, flexible sigmoidoscopy is safer and preferred over colonoscopy.⁴,⁵
STRATIFY ACCORDING TO COLECTOMY RISK (3)

Identify Patient at Low Risk for Colectomy
- Limited anatomic extent
- Mild endoscopic disease

Identify Patient at High Risk for Colectomy
- Extensive colitis
- Deep ulcers
- Age <40
- High CRP and ESR
- Steroid-requiring disease
- History of hospitalization
- C. difficile infection
- CMV infection

INDUCTIVE AND MAINTENANCE THERAPY (LOW-RISK) (4)

Inductive Therapy
- Oral 5ASA and/or
- Rectal 5ASA and/or
- Oral budesonide or prednisone and/or
- Rectal steroids
- Rectal 5ASA is first line therapy in distal UC

Maintenance Therapy
- Maintenance with oral 5ASA and/or rectal 5ASA
- Taper steroid over 60 days

Inductive and Maintenance Therapy (High Risk, Outpatient) (5)

Induction Therapy
- Short course of steroids with initiation of thiopurine
- Anti-TNF with or without thiopurine
- Vedolizumab, with or without immunomodulator

Maintenance Therapy
- Options:
  - Thiopurine and taper steroids over 60 days
  - Anti-TNF, with or without thiopurine
  - Vedolizumab, with or without thiopurine or methotrexate
- Continue anti-TNF, with or without thiopurine
- Continue vedolizumab, with or without immunomodulator

Therapy for High-Risk Outpatient Not in Remission (6)

* Combination therapy with a thiopurine is more efficacious than anti-TNF monotherapy and should be considered, especially in patients who have failed one or more anti-TNF agents.

** Extrapolating from data in Crohn's disease, methotrexate may be used instead of thiopurines to decrease anti-TNF immunogenicity.

*** Extrapolating from data with anti-TNF agents, thiopurines and methotrexate may be used to decrease vedolizumab immunogenicity.
THERAPY FOR HIGH-RISK OUTPATIENT NOT IN REMISSION (6)

Options:
- Anti-TNF +/- thiopurine*,**
- Vedolizumab +/- immunomodulator***
- Thiopurine (optimize 6TGN concentrations)
- Proctocolectomy

(6A)

Failure to Respond to Prednisone

- Anti-TNF With or Without Thiopurine
- Vedolizumab With or Without Immunomodulator

(6B)

Failure to Maintain Steroid-Induced Remission on Thiopurine

- Subtherapeutic 6TGN
  (+<230 pmol 6-TGN/8×10^8 RBCs)
- Therapeutic 6TGN
  (+>230 pmol 6-TGN/8×10^8 RBCs)

- Increase Dose and Recheck Metabolites◊
- Switch to Anti-TNF or Vedolizumab

(6C)

Loss of Response to Anti-TNF

- Subtherapeutic Level
  - No or Low Ab
  - Increase dose and/or decrease interval
  - Consider adding immunomodulator
- Subtherapeutic Level
  - High Ab
  - Switch within class
- Therapeutic Level
  - Switch to vedolizumab with or without immunomodulator

(6D)

Loss of Response to Vedolizumab

- Increase Dose to 300 mg Every 4 Weeks
- NON-RESPONSE
- Switch to Anti-TNF With or Without Thiopurine

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** Extrapolating from data in Crohn’s disease, methotrexate may be used instead of thiopurines to decrease anti-TNF immunogenicity.

*** Extrapolating from data with anti-TNF agents, thiopurines and methotrexate may be used to decrease vedolizumab immunogenicity.

◊ The addition of allopurinol (while decreasing the thiopurine dose to 1/4 of the previous dose) may be considered at centers with experience with this approach and recognizing the risks of severe myelosuppression and infection.
INDUCTIVE AND MAINTENANCE THERAPY (HIGH RISK, INPATIENT) (7)

**Inductive Therapy**

Options:
- IV steroids
- Infliximab
- IV cyclosporine

**IV Steroids**

IV steroid-induced remission maintenance options:
- Thiopurine
- Anti-TNF, with or without Thiopurine
- Vedolizumab, with or without immunomodulator

IV steroid failure options:
- Infliximab
- Cyclosporine
- Colectomy

**Infliximab**

Infliximab-induced remission maintenance:
- Infliximab with or without Thiopurine

Infliximab failure:
- Colectomy

**IV Cyclosporine**

IV Cyclosporin-induced remission maintenance options:
- Start thiopurine
- Anti-TNF, with or without Thiopurine
- Vedolizumab, with or without immunomodulator

IV cyclosporine failure:
- Colectomy

* All hospitalized patients should receive prophylaxis for venous thromboembolism.

** Combination therapy with a thiopurine is more efficacious than anti-TNF monotherapy and should be considered, especially in patients who have failed one or more anti-TNF agents.

★ Extrapolating from data in Crohn’s disease, methotrexate may be used instead of thiopurines to decrease anti-TNF immunogenicity.

✚ Extrapolating from data with anti-TNF agents, thiopurines and methotrexate may be used to decrease vedolizumab immunogenicity.

✦ Sequential rescue therapy (IFX-CSA or CSA-IFX) may be considered for select patients only in centers with experience with this approach and recognizing the risks of severe infection and death.

Clinical care pathways are formulated by an expert physician panel through the review of existing clinical practice guidelines and systematic reviews. For pathway decisions points where no guidelines or systematic reviews exist, recommendations are made based on review of the available data. The clinical care pathways are not created using the GRADE methodology.

**AUTHORS**

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