Apply Now: www.gi.org/eavp

Deadline: Friday, July 17, 2020

The ACG Edgar Achkar Visiting Professorship Program provides an opportunity for a national expert to visit your institution, spend time with your fellows, educate colleagues, and visit with young faculty as mentors.
AJG Special Issue! 
WOMEN’S HEALTH in GASTROENTEROLOGY and HEPATOLOGY

The American Journal of Gastroenterology requests your high-quality, clinically relevant research about the burden of digestive disease in women. We will collect the very best original studies and clinical reviews into a special issue highlighting this vital area of our field.

Submit Your Manuscript!

DEADLINE: AUGUST 1, 2020


APPLY NOW!

ACG Institute
YOUNG PHYSICIAN LEADERSHIP SCHOLARS PROGRAM

Get Training in Leadership and Advocacy

Learn more: www.gi.org/yplsp
Deadline: Friday July 10, 2020

For Eligible: 3rd & 4th Year Fellows & Physicians <5 years out of fellowship
ACG Virtual Grand Rounds
Join us for upcoming Virtual Grand Rounds!

Week 14: EOE and EGID: Pearls and Pitfalls
Kathy A. Peterson, MD, Msc
June 25, 2020 at Noon EDT

Week 15: Management of Anti Coagulation for GI Endoscopy
Aasma Shaukat, MD, MPH, FACG
July 2, 2020 at Noon EDT

Visit gi.org/ACGVGR to Register
Participating in the Webinar

All attendees will be muted and will remain in Listen Only Mode.

Type your questions here so that the moderator can see them. Not all questions will be answered but we will get to as many as possible.

How to Receive CME and MOC Points

LIVE VIRTUAL GRAND ROUNDS WEBINAR
ACG will send a link to a CME & MOC evaluation to all attendees on the live webinar.

ABIM Board Certified physicians need to complete their MOC activities by December 31, 2020 in order for the MOC points to count toward any MOC requirements that are due by the end of the year. No MOC credit may be awarded after March 1, 2021 for this activity.

ACG will submit MOC points on the first of each month. Please allow 3-5 business days for your MOC credit to appear on your ABIM account.
MOC QUESTION

If you plan to claim MOC Points for this activity, you will be asked to: Please list specific changes you will make in your practice as a result of the information you received from this activity.

Include specific strategies or changes that you plan to implement. THESE ANSWERS WILL BE REVIEWED.

ACG Virtual Grand Rounds

Join us for upcoming Virtual Grand Rounds!

Week 14: EOE and EGID: Pearls and Pitfalls
Kathy A. Peterson, MD, Msci
June 25, 2020 at Noon EDT

Week 15: Management of Anti Coagulation for GI Endoscopy
Aasma Shaukat, MD, MPH, FACG
July 2, 2020 at Noon EDT

Visit gi.org/ACGVGR to Register
Disclosures:

Moderator:
David T. Rubin, MD, FACG
Advisory Committee/Board Member: CCFA, Janssen
Consultant: AbbVie Pharmaceuticals, Abgenomics, Allergan, Biomica, Boehringer Ingelheim, Bristol-Myers Squibb, Celgene, Check-cap, Dizal Pharmaceuticals, Galen Pharma/Atlantica, Genentech, Gilead Sciences, Ichnos Sciences S.A. (formerly Glenmark Pharmaceuticals), GSK, Janssen, Lilly, Narrow River Mgmt., Pfizer, Prometheus, Reistone, Shire, Takeda, Techlab, Inc.
Grant/Research Support: AbbVie Pharmaceuticals, Genentech, Janssen, Prometheus Laboratories, Shire, Takeda
Co-Founder: Cornerstones Health Inc. (non-profit medical education company), GoDuRn LLC (no financial support received)
Royalties: Slack Publications

Speaker:
Francis A. Farraye, MD, MSc, FACG
Consulting Fee: BMS, Braintree Labs, GI Reviewers, Gilead, GSK, Janssen, Pfizer, Sabela
Stockholder: Innovation Pharmaceuticals
DSMB: Lilly, Theravance
Health Maintenance for the Patient with IBD

Francis A. Farraye, MD, MSc, FACG
Professor of Medicine
Department of Gastroenterology and Hepatology
Director, Inflammatory Bowel Disease Center
Mayo Clinic, Jacksonville, FL
farraye.francis@mayo.edu

Objectives
1. Appreciate the increased risk of infections in patients with IBD.
2. Review necessary vaccinations for patients with IBD.
3. Review non vaccine ACG preventive care clinical recommendations for patients with IBD.
Health Maintenance in the Patient with IBD

- IBD patients do not receive preventive services at the same rate as general medical patients
- GI MD/NP/PAs are often the only clinician that the IBD patient will interact with
- Clarify the limits of your responsibilities with the patient; Delegate routine health care issues to the primary care clinician
- Offer guidance on the unique health maintenance needs in IBD patients on immunomodulators and biologic agents
- Should certain health maintenance tasks such as vaccinations be the responsibility of the treating gastroenterologist?


Why are the Initial Visits with a Patient with IBD so Important?

As many as 70% of IBD patients require immunosuppressive therapy at some time in their course

Why Vaccination?

• Immunomodulators and biologics used to treat IBD puts patients at increased risk for infections
  ➢ Multiple case reports of infections including fulminant hepatitis or fatal varicella
  ➢ Risk of infection increases with the number of immunosuppressive therapies
  ➢ Several of these are vaccine preventable

• IBD patients (like other patients on immunosuppressive therapy) are not being vaccinated appropriately


Patients With IBD Are at an Increased Risk of Pneumonia

Crude and Multivariate Analyses of Medication Use Within the Previous 120 Days and Pneumonia in Patients with IBD (N=108,361)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Crude OR, 95% CI</th>
<th>Adjusted OR, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biologic</td>
<td>2.83 (2.04-3.93)</td>
<td>1.32 (1.11-1.57)</td>
</tr>
<tr>
<td>Thiopurine</td>
<td>1.77 (1.49-2.11)</td>
<td>1.13 (1.00-1.27)</td>
</tr>
<tr>
<td>Corticosteroid</td>
<td>3.59 (3.14-4.10)</td>
<td>1.91 (1.75-2.12)</td>
</tr>
</tbody>
</table>

Annual Pneumonia Incidence in IBD and Non-IBD Populations

Patients With IBD Are at an Increased Risk of Herpes Zoster

Crude and Multivariate Analyses of Medication Use Within the Previous 120 Days and Zoster in Patients with IBD (N=108,361)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Crude OR, 95% CI</th>
<th>Adjusted OR, 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biologic</td>
<td>3.85 (2.47-6.00)</td>
<td>1.81 (1.48-2.41)</td>
</tr>
<tr>
<td>Thiopurine</td>
<td>2.20 (1.73-2.78)</td>
<td>1.85 (1.62-2.13)</td>
</tr>
<tr>
<td>Corticosteroid</td>
<td>2.83 (2.34-3.43)</td>
<td>1.73 (1.52-1.99)</td>
</tr>
</tbody>
</table>

Annual Zoster Incidence in IBD and Non-IBD Populations

Medication Crude OR, 95% CI Adjusted OR, 95% CI

Biologic 3.85 (2.47-6.00) 1.81 (1.48-2.41)
Thiopurine 2.20 (1.73-2.78) 1.85 (1.62-2.13)
Corticosteroid 2.83 (2.34-3.43) 1.73 (1.52-1.99)


Best Practices in Vaccinations

• The ideal time to obtain a vaccination history is during the initial office visit(s)
• Patients should be vaccinated prior to starting immunosuppressive therapy
• If vaccinations are not offered in your office, write a prescription for your patient to take to their local pharmacy
• Necessary IBD therapy should never be delayed in order to administer vaccines

Vaccinating the IBD Patient

Who Owns Vaccinations?

• Survey of 109 Gastroenterologists (2011)
  • Only 50% of GI providers ask about vaccinations always or most of the time with associated poor knowledge of appropriate vaccinations
  • Poor knowledge regarding the appropriate vaccines to recommend
  • Majority thought PCP was responsible for determining which vaccinations to give (65%) and administering the vaccine (83%)

• Survey of 61 PCPs (2010)
  • Only 30% felt comfortable coordinating vaccinations for the immunosuppressed IBD patient

IDSA Guidelines 2013

“Specialists who care for immunocompromised patients...

...share responsibility with the primary care provider for ensuring that appropriate vaccinations are administered to immunocompromised patients.”

...share responsibility with the primary care provider for recommending appropriate vaccinations for members of immunocompromised patients’ household.”


ACG Clinical Guideline: Preventive Care in Inflammatory Bowel Disease

Recent data suggest that inflammatory bowel disease (IBD) patients do not receive preventive services at the same rate as general medical patients. Patients with IBD often consider their gastroenterologist to be the primary provider of care. To improve the care delivered to IBD patients, health maintenance issues need to be co-managed by both the gastroenterologist and primary care team. Gastroenterologists need to explicitly inform the primary care provider of the unique needs of the IBD patient, especially those on immunomodulators and biologics or being considered for such therapy. In particular, documentation of up to date vaccinations are crucial as IBD patients are often treated with long-term immune-suppressive therapies and may be at increased risk for infections, many of which are preventable with vaccinations. Health maintenance issues addressed in this guideline include identification, safety and appropriate timing of vaccinations, screening for osteoporosis, cervical cancer, melanoma and non-melanoma skin cancer as well as identification of depression and anxiety and smoking cessation. To accomplish these health maintenance goals, coordination between the primary care provider, gastroenterology team and other specialists is necessary.

IBD is rare before age 5 so most patients have received all their childhood vaccines.

In adults, consider hepatitis A, hepatitis B, HPV, influenza, pneumococcal, herpes zoster and varicella vaccinations.
Will the Vaccine Work or Worsen the IBD?

- Diminished immune response in patients on anti TNFs alone or with immunomodulators but not with vedolizumab

- No evidence that vaccination exacerbates IBD

New Adjuvant Recombinant Hepatitis B Vaccine (Heplisav-B)

- FDA approved 2-dose hepatitis B vaccine in November 2017, given over one month instead of 6 months
- HepB-CpG vaccine is a yeast-derived vaccine prepared with a novel adjuvant recommended for use in all patients over the age of 18
- Seroprotective anti-HBs after two doses of HepB-CpG versus three doses of Engerix-B were 95.4 versus 81.3 percent respectively
- Potentially immune-mediated adverse events 0.1%-0.2% (HEPLISAV-B) vs. 0.0%-0.7% (comparator)
- To date, no studies have studied this new vaccine in immunosuppressed populations, including patients with IBD


Zoster Vaccine Recombinant, Adjuvanted (Shingrix)

- Zoster Vaccine Recombinant, Adjuvanted indicated for prevention of herpes zoster (shingles) in adults aged 50 years and older
- Administer 2 doses IM (0.5 mL each) at 0 and 2 to 6 months
- After a mean follow-up of 3.2 years, the overall vaccine efficacy was 97.2% (95% CI, 93.7%-99.0%), compared with placebo
- Solicited local adverse reactions in subjects aged 50 years and older were pain (78.0%), redness (38.1%), and swelling (25.9%)
- Solicited general adverse reactions in subjects aged 50 years and older were myalgia (44.7%), fatigue (44.5%), headache (37.7%), shivering (26.8%), fever (20.5%), and gastrointestinal symptoms (17.3%)

**Recommendations for the Use of Herpes Zoster Vaccines**

Zoster Vaccine Recombinant, Adjuvanted (Shingrix)

In October 2017, the Advisory Committee on Immunization Practices (ACIP) made the following three recommendations:

1. Recombinant zoster vaccine (RZV) is recommended for the prevention of herpes zoster and related complications for immunocompetent adults aged ≥50 years.

2. RZV is recommended for the prevention of herpes zoster and related complications for immunocompetent adults who previously received zoster vaccine live (ZVL).

3. RZV is preferred over ZVL for the prevention of herpes zoster and related complications.


**Safety of Recombinant Vaccine (RZV) in Patients with IBD**

- RZV administered between February 2018 and July 2019
- Sixty-seven patients received at least one dose of RZV
- Of these 55 (82%) receive two doses
- Median induration of follow-up was 207 days and no cases of herpes zoster identified
- Local and systemic adverse reactions reported 74.6 and 56.7% of patients, respectively
- One patient flared (1.5%)

Low vs High Level Immunosuppression

**Low-level immunosuppression**
Treatment with:
- Prednisone <2 mg/kg with a maximum of ≤20 mg/day;
- Methotrexate ≤0.4 mg/kg/week;
- Azathioprine ≤3 mg/kg/day;
- 6-mercaptopurine ≤1.5 mg/kg/day

**High-level immunosuppression**
Regimens include treatment with doses higher than those listed for low-dose immunosuppression and biologic agents such as tumor necrosis factor antagonists or rituximab


---

**Recommended Adult Immunization Schedule by Medical Condition (US 2020)**

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Pregnancy</th>
<th>15-18 years</th>
<th>19 years or older</th>
<th>50+ years</th>
<th>HIV/AIDS</th>
<th>Cancer</th>
<th>Diabetes</th>
<th>Hepatitis B</th>
<th>Pneumonia</th>
<th>Influenza</th>
<th>Precaution</th>
<th>MenACWY</th>
<th>Meningococcal</th>
<th>Hib</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPV YfL 4</td>
<td>NOT RECOMMENDED</td>
<td>1 dose annually</td>
<td>PRECAUTION</td>
<td>1 dose annually</td>
<td>1 dose annually</td>
<td>1 dose annually</td>
<td>1 dose annually</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPV 16,18,6,11</td>
<td>NOT RECOMMENDED</td>
<td>1 dose at age 11-12</td>
<td>3 doses at 0,2, and 6 months</td>
<td>3 doses at 0,1, and 6 months</td>
<td>3 doses at 0,1, and 6 months</td>
<td>3 doses at 0,1, and 6 months</td>
<td>3 doses at 0,1, and 6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAR</td>
<td>NOT RECOMMENDED</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td>NOT RECOMMENDED</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPSV23</td>
<td>NOT RECOMMENDED</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HepA</td>
<td>NOT RECOMMENDED</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HepB</td>
<td>NOT RECOMMENDED</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MenACWY</td>
<td>1 or 2 doses</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal</td>
<td>1 or 2 doses</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hib</td>
<td>PRECAUTION</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Precaution for LHD does not apply to alcoholism. 2. See notes for influenza, hepatitis A, meningococcal, and poultry vaccinations. 3. Hemophilic sera not applicable.

Barriers to Vaccination

• General apathy amongst both patients and physicians
• Fears and concerns about the side effects of vaccination
• Costs associated with storage and administration of vaccines
• Other logistical barriers:
  • Time constraints of an office visit
  • Location of offices
  • Wait times to see a provider
Utilizing Community-Based Pharmacies to Improve Vaccination Rates in Patients With IBD

- Methods to conveniently administer vaccines to IBD patients are needed.
- We surveyed seven pharmacies that account for > 90% total prescription revenue in 2015-2016.
- Referring IBD patients to local community based pharmacies bypasses the challenges of determining whether IBD patients should receive their vaccines at gastroenterology or primary care offices.
- This uncertainty often delays successful and timely vaccinations.
- Benefits to this resource include little cost variation amongst different pharmacies and our institution, convenient patient access on a walk in basis including weekends and nights and the assurance that large chains are fully stocked with inventory.


Increasing Vaccination Rates in IBD Patients

Vaccination status pre and post intervention
Flu 17.6% → 43.4% (P<.001)
PNA 20.8% → 39.8% (P<.001)

Intervention sustainable based on 3 and 15 month data

Non-Vaccine Recommendations

➢ Women with inflammatory bowel disease on immunosuppressive therapy should undergo annual cervical cancer screening.

➢ Patients with inflammatory bowel disease (both ulcerative colitis and Crohn’s disease) should undergo screening for melanoma independent of the use of biologic therapy.

➢ Screening for depression and anxiety is recommended in patients with inflammatory bowel disease.
Depression Screening Tools

1. Over the past month, have you felt down, depressed, or hopeless?
2. Over the past month, have you felt little interest or pleasure in doing things?


Scores are rated as normal (0-2), mild (3-5), moderate (6-8), and severe (9-12)

Non-Vaccine Recommendations

- Inflammatory bowel disease patients on immunomodulators (6-mercaptopurine or azathioprine) should undergo screening for non-melanoma squamous cell cancer (NMSC) while using these agents, particularly over the age of 50.

- Patients with conventional risk factors for abnormal bone mineral density with ulcerative colitis and Crohn’s disease should undergo screening for osteoporosis with bone mineral density testing at the time of diagnosis and periodically after diagnosis.

- Patients with Crohn’s disease who smoke should be counseled to quit.
### IBD Checklist for Monitoring and Prevention

**Vaccine Preventable Illnesses**

<table>
<thead>
<tr>
<th>Illness</th>
<th>Vaccine</th>
<th>Dose Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varicella Zoster (Chicken Pox Vaccine)</td>
<td>Check Varicella Zoster vaccine. May require consider vaccination. Can be considered in patients on &quot;five days&quot; immunosuppressive therapy (methotrexate, MTX, 6-MP, aminopterin), but not in biologics. Can administer 2-4 weeks prior to starting biologics.</td>
<td></td>
</tr>
<tr>
<td>Herpes Zoster (Shingles - Live Vaccine)</td>
<td>Recommended for patients taking low dose immunosuppressive therapy and persons undergoing immunosuppression. Recommendations regarding the use of IVIG in patients newly on higher dose immunosuppression have not been made by the CDC.</td>
<td></td>
</tr>
<tr>
<td>MMR (Live Vaccine)</td>
<td>Contraindicated in immunosuppressed patients and those planning to start immunosuppressants within 4 weeks.</td>
<td></td>
</tr>
<tr>
<td>Diphtheria and Pertussis (DPT Vaccine)</td>
<td>Diphtheria and Pertussis vaccine. Diphtheria toxin is given within last ten years, or if Td ≥ 2 years.</td>
<td></td>
</tr>
<tr>
<td>Influenza (Influenza Vaccine)</td>
<td>One dose annually in all patients during flu season. Avoid immunosusceptible vaccine in immunosusceptible patients.</td>
<td></td>
</tr>
<tr>
<td>HPV (Non-Live Vaccine)</td>
<td>Related to cervical and oral cancer. Three doses approved for females and males ≥18 years (regardless of immunosusceptibility).</td>
<td></td>
</tr>
<tr>
<td>Hepatitis A (Non-Live Vaccine)</td>
<td>Slight to administer to at-risk patients regardless of immunosusceptibility.</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B (Non-Live Vaccine)</td>
<td>Check hepatitis B surface antigen, hepatitis B surface antibody, hepatitis B core antibody before initiating anti-TNF therapy if non-immune; consider vaccine series with non-hepatitis B vaccine. 5 doses in total. (a) Active infections should be excluded or treated appropriately.</td>
<td></td>
</tr>
<tr>
<td>Menopausal Menopause (Non-Live Vaccine)</td>
<td>Vaccihein at-risk patients (college students, military recruits)</td>
<td></td>
</tr>
<tr>
<td>Pneumococcal Pneumonia (Vaxigen Vaccine)</td>
<td>If not immunosusceptible. Consider vaccination with PPSV23 (Pneumocerv) or Pneumovax.</td>
<td></td>
</tr>
</tbody>
</table>

**IBD Checklist for Monitoring and Prevention**

[https://www.cornerstoneshealth.org/ibd-checklists/](https://www.cornerstoneshealth.org/ibd-checklists/)
# Health Maintenance Checklist for Adult IBD Patients

<table>
<thead>
<tr>
<th>Vaccine/Preventable Disease</th>
<th>Which Patients</th>
<th>How Often</th>
<th>Check Year</th>
<th>Other Screenings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza ( Injectable)</td>
<td>All</td>
<td>No</td>
<td>Annually</td>
<td></td>
</tr>
<tr>
<td>PCV (Pneumococcal) and PPV (Pneumonia)</td>
<td>All</td>
<td>No</td>
<td>Annually</td>
<td></td>
</tr>
<tr>
<td>Mumps</td>
<td>All</td>
<td>No</td>
<td>Annually</td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>All</td>
<td>Yes</td>
<td>(birth)</td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>All</td>
<td>Yes</td>
<td>(birth)</td>
<td></td>
</tr>
<tr>
<td>HPV</td>
<td>All</td>
<td>Yes</td>
<td>(birth)</td>
<td></td>
</tr>
<tr>
<td>Zoster (Varicella-Zoster)</td>
<td>All patients ≥ 50</td>
<td>Yes</td>
<td>(birth)</td>
<td></td>
</tr>
</tbody>
</table>

Cervical Smear Screening
- Females aged 18 or ≥ 65 years of age at high risk
- Annually
- Pap and/or HPV

Colonoscopy
- All patients with chronic immune suppression
- Every 1-3 years

# Health Maintenance Checklist for Pediatric IBD Patients

<table>
<thead>
<tr>
<th>Vaccine/Preventable Disease</th>
<th>Which Patients</th>
<th>How Often</th>
<th>Check Year</th>
<th>Other Screenings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumococcal disease</td>
<td>All with altered immunity competence</td>
<td>Any age</td>
<td>6 years</td>
<td>Nutritional evaluation, height, weight, BMI, and vision at each visit</td>
</tr>
</tbody>
</table>

Cancer Prevention
- Full Skin Screen
  - All on chronic immune suppression
  - Annually

Colonoscopy
- All with colonic disease ≥ 6 years
  - Every 1-3 years

Other Screenings
- Nutritional evaluation
  - All
  - Height, weight, BMI, and vision at each visit

- Smoking status
  - All
  - Annual

- Depression check
  - All
  - Annual

- DEXA Scan
  - All
  - At time of diagnosis and periodically every 5 years

- PPD or IGRA
  - Prior to anti-TNF or anti-IL-12p40
    - Once (if repeat if positive at-risk region)

- Serologies (HepB/HepA, Hepatitis C, and HIV)
  - Prior to anti-TNF or anti-IL-12p40
    - Once (if repeat if positive at-risk region)

### Notes

2. All patients should receive hepatitis B vaccine
3. All pediatric patients should receive pneumococcal vaccine
4. Patients ≥ 65 years and previously conformed should have an annual influenza vaccination
5. Patients with a history of colorectal cancer or polyps should have a colonoscopy

Developed by Crohn’s & Colitis Foundation Professional Education Committee subgroup: Alan Press MD, JLR Gabe MD, Marcella Simoni MD – Vis July 2019
