



**Diagnostic And Therapeutic
Colonoscopy Guidelines**
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Guideline

Diagnostic and Therapeutic Colonoscopy Guidelines
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Guideline

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General Guidelines (COLON-0)

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- The Gastrointestinal Endoscopy Program applies an evidence-based approach to evaluate the most appropriate care for each individual. This evaluation requires submission of medical records pertinent to the treatment and/or services being requested by the provider.
- If the medical records provided do not provide sufficiently detailed information to understand the individual's current clinical status, then the medical necessity for the request cannot be established and the request cannot be approved.
- A pertinent clinical evaluation since the new onset or change in symptoms is required prior to considering gastrointestinal endoscopy services:
 - A pertinent clinical evaluation should include the following:
 - A detailed history and physical examination
 - Appropriate laboratory studies
 - Pertinent imaging studies
 - Pathology reports
 - Procedure reports
 - Reports from other providers participating in the treatment of the relevant condition
 - For an established individual, a meaningful technological contact (telehealth visit, telephone call, electronic mail or messaging) since the onset or change in symptoms can serve as a pertinent clinical evaluation
- A recent clinical evaluation may be deferred if the individual is undergoing a guideline-supported, scheduled follow-up imaging or other designated procedural evaluation. Exceptions due to routine surveillance indications are addressed in the applicable condition-specific guideline sections.
- The Gastrointestinal Endoscopy program reserves the right to change and update the policy as new evidence emerges. The policy undergo a formal review at least annually. The policy is based upon major national and international association and society guidelines and criteria, peer reviewed literature, major treatises, as well as input from health plans, and practicing academic and community-based physicians.
- This policy is not intended to supersede or replace sound medical judgment, but instead, should facilitate the identification of the most appropriate treatment given the individual's clinical condition. This policy is written to cover most gastrointestinal endoscopic indications. However, the policy may not be applicable in certain clinical circumstances. Physician judgment may override the policy. Clinical decisions, including treatment decisions, are the responsibility of the individual and his/her

provider. Clinicians are expected to use independent medical judgment, which takes into account the clinical circumstances to determine individual management decisions

- All time intervals in the guideline refer to colonoscopy, unless otherwise stated.
- Requests for Open-Access Colonoscopy must meet criteria according these guidelines.
- New and Emerging Technologies
 - Requests related to new and emerging technologies will be considered to determine whether they meet evidence-based guidelines.
 - If a specific CPT code does not exist for a new technology, the CPT code used in the request will be considered based on its typical procedure application.
 - Procedures which are inconsistent with established clinical standards or are requested for data collection and not used in direct clinical management are not supported.
- State and federal legislations may need to be considered in the review of gastrointestinal endoscopy requests.
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Surveillance after Polypectomy (COLON-3)

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- The proper application of surveillance guidelines requires information regarding the size, number, and histologic findings from the initial baseline colonoscopy.
- First surveillance colonoscopy intervals after polypectomy:
 - Adenomatous Polyps:
 - If no polyps found on screening or other colonoscopy: 10 years (average risk)
 - 1-2 tubular adenomas < 10mm: 7-10 years
 - 3-4 tubular adenomas < 10mm: 3-5 years
 - 5-10 tubular adenomas < 10mm: 3 years
 - One or more tubular adenomas ≥ 10mm: 3 years
 - Adenoma with tubulovillous or villous histology: 3 years
 - Adenoma with high-grade dysplasia: 3 years
 - > 10 adenomas on a single examination: 1 year
 - Piecemeal resection of adenoma ≥ 20mm: 6 months
 - Hyperplastic polyps:
 - All polyps located in the rectum and/or sigmoid colon:
 - ≤ 20 polyps, size < 10mm: Repeat in 10 years
 - Polyps located proximal to the sigmoid colon:
 - ≤ 20 polyps, size < 10mm: Repeat in 10 years
 - Polyps ≥ 10mm: Repeat in 5-10 years
 - > 20 polyps
 - Follow Serrated Polyposis Syndrome guidelines (**Genetic Syndromes (COLON-17)**)
 - Sessile Serrated Polyps:
 - 1-2 polyps < 10mm in size: Repeat in 5-10 years
 - 3-4 polyps < 10mm in size: Repeat in 3-5 years
 - 5-10 polyps < 10mm in size: Repeat in 3 years
 - Polyp ≥ 10mm: Repeat in 3 years
 - Isolated polyp containing dysplasia: Repeat in 3 years
 - Piecemeal resection of SSP > 20mm: Repeat in 6 months
 - See also: Serrated Polyposis Syndrome in **Genetic Syndromes (COLON-17)**

- Traditional Serrated Adenoma:
 - Repeat in 3 years
- Second surveillance colonoscopy (stratified by baseline and first surveillance adenoma findings):
 - **If Baseline Colonoscopy/Polypectomy Findings show 1-4 tubular adenomas < 10 mm:**
 - First surveillance colonoscopy findings:
 - Normal colonoscopy:
 - Second surveillance colonoscopy: Repeat in 10 years
 - 1-2 tubular adenomas < 10mm:
 - Second surveillance colonoscopy: Repeat in 7-10 years
 - 3-4 tubular adenomas < 10mm:
 - Second surveillance colonoscopy: Repeat in 3-5 years
 - Adenoma ≥ 10mm in size:
 - Second surveillance colonoscopy: Repeat in 3 years
 - Adenoma with tubulovillous or villous history:
 - Second surveillance colonoscopy: Repeat in 3 years
 - Adenoma with high-grade dysplasia:
 - Second surveillance colonoscopy: Repeat in 3 years
 - 5-10 adenomas < 10mm:
 - Second surveillance colonoscopy: Repeat in 3 years
 - **For any of the following scenarios on baseline colonoscopy/polypectomy:**
 - **Adenoma ≥ 10mm**
 - **Adenoma with tubulovillous or villous pathology**
 - **Adenoma with high-grade dysplasia**
 - **5-10 adenomas < 10mm**
 - First surveillance colonoscopy findings:
 - Normal colonoscopy:
 - Second surveillance colonoscopy: Repeat in 5 years
 - 1-2 tubular adenomas < 10mm:
 - Second surveillance colonoscopy: Repeat in 5 years
 - 3-4 tubular adenomas < 10mm:

- Second surveillance colonoscopy: Repeat in 3-5 years
- Adenoma $\geq 10\text{mm}$:
 - Second surveillance colonoscopy: Repeat in 3 years
- Adenoma with tubulovillous histology:
 - Second surveillance colonoscopy: Repeat in 3 years
- Adenoma with high-grade dysplasia:
 - Second surveillance colonoscopy: Repeat in 3 years
- 5-10 adenomas $< 10\text{mm}$:
 - Second surveillance colonoscopy: Repeat in 3 years
- **If baseline colonoscopy shows: Adenoma or SSP $> 20\text{mm}$ with piecemeal resection:**
 - Second surveillance: 1 year from the first surveillance colonoscopy
 - Third surveillance: 3 years from the second surveillance colonoscopy
 - (Note: In this scenario, if any surveillance study after the initial polypectomy reveals local recurrence, subsequent examinations can be performed at 6 month intervals until there is no local recurrence. Once a clear resection site is documented, the next follow-up is at 1 year, and the subsequent follow-ups are at 3 year intervals.)
- Duodenal Adenoma (sporadic duodenal tumors not associated with genetic syndromes)⁵⁹
 - If an ampullary adenoma or duodenal adenoma is found on EGD, a concomitant colonoscopy is also indicated.
 - See: **Upper GI Polyp Treatment and Follow-Up (EGD-1.8)** for EGD indications

Evidence Discussion

Colonoscopy is considered the standard of care and performed routinely for colorectal cancer (CRC) screening and surveillance after CRC and polyp removal. Risk of metachronous advanced neoplasia is associated with findings on prior colonoscopy. After colonoscopy, individuals with no neoplasia detected are at the lowest risk, and those with polyps are risk-stratified based on the histology, number, location, and size of polyps detected. The US Multi-Society Task Force recommendations for post-colonoscopy follow-up and polyp surveillance were published in the Gastroenterology in 2012. Updated Guidelines by the Multi-Society Task Force entitled "Recommendations for Follow-Up after Colonoscopy and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer" were published jointly in Gastrointestinal Endoscopy, Gastroenterology, and The American Journal of Gastroenterology in 2020, and represent the most recent recommendations and the present standard for

surveillance after polypectomy. As the primary goals of colonoscopy screening and post-polypectomy surveillance are to reduce CRC incidence and mortality, these updated Guidelines provide recommendations for follow-up strategies toward achievement of those outcomes.

Surveillance of Colorectal Cancer and Resected Lesions (COLON-4)

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- If colonoscopy was not completed pre-operatively (e.g., because of an obstructing lesion)
 - Repeat colonoscopy 3-6 months post-surgery, for clearance
- For individuals who have undergone curative surgical resection colonoscopy is medically necessary in the following scenarios:^{11,65}
 - Successful peri-operative clearing colonoscopy at diagnosis or subsequent colonoscopy:
 - Colonoscopy 1 year after the surgery or one year after the clearing colonoscopy (assuming clearing colonoscopy occurred post-surgery)
 - If an advanced adenoma (villous polyp, high-grade dysplasia, or any polyp >1 cm) is found, repeat colonoscopy in 1 year
 - If no advanced adenoma is found, repeat colonoscopy in 3 years (or 4 years from the surgery or clearing colonoscopy)
 - Repeat next colonoscopy in 5 years (9 years from the surgery or clearing colonoscopy)
 - Subsequent colonoscopies should occur at 5 year intervals
 - Successful curative resection (based on histopathological criteria) of colonic dysplasia or adenocarcinoma via submucosal resection (SMR) or submucosal dissection (SMD)⁶³:
 - Adenoma with low grade dysplasia or sessile serrated polyp without dysplasia:
 - Colonoscopy 1 year after resection
 - Second follow-up colonoscopy 3 years after the first surveillance
 - Traditional serrated adenoma, sessile serrated polyp with dysplasia, adenoma high grade dysplasia, carcinoma in situ, intramucosal carcinoma, or dysplasia in the setting of IBD:
 - Colonoscopy 6-12 months after resection
 - Second follow-up colonoscopy 1 year after the first surveillance
 - Subsequent colonoscopy 3 years after second surveillance
 - T1b (submucosal invasion) adenocarcinoma:
 - Colonoscopy 3-6 months after resection

- Second follow-up colonoscopy 6-12 months after the first surveillance
 - Subsequent colonoscopy 1 year after second surveillance
- In individuals with stage IV disease managed nonoperatively with complete clinical response, initiate colonoscopy surveillance from first documentation of complete response OR at the request of the treating oncologist
- For individuals with Lynch Syndrome, see: **Genetic Syndromes (COLON-17)**
- Additional surveillance of rectal cancer:
 - In addition to the above surveillance colonoscopies, a sigmoidoscopy or EUS can be performed at prescribed intervals.
 - These surveillance strategies are beyond the scope of the current guideline, which only references colonoscopy.
- See: **Inflammatory Bowel Disease (COLON-5)** for surveillance of dysplasia

Evidence Discussion

For obstructing colonic lesions in which colonoscopy was not completed, perform perioperative colonoscopy withing 3-6 month interval post surgery to help clear the colon of synchronous cancer and resection of pre-cancerous polyps.

For those who have undergone curative resection of colorectal cancer and, had at time of diagnosis, a complete colonoscopy to rule out metachronous lesions may have a subsequent surveillance colonoscopy:

- One year after surgery
- Then repeat surveillance three years after surgery (four years from the surgery or clearing colonoscopy)
- Then repeat colonoscopy in five years (nine years from the surgery or clearing colonoscopy)
- Subsequent surveillance intervals should occur every five years thereafter

Additional surveillance of rectal cancer:

- In addition to the above surveillance colonoscopies, a sigmoidoscopy or EUS can be performed at prescribed intervals (i.e. every 3-6 months for the first 2-3 years after surgery)
- These surveillance strategies are beyond the scope of the current guideline, which only references colonoscopy

Successful curative resection (based on histopathologic criteria) of colonic dysplasia or adenocarcinoma via submucosal resection (SMR) or submucosal dissection (SMD)

- Adenoma with low grade dysplasia or sessile serrated polyp without dysplasia:
 - Colonoscopy one year after resection
 - Second follow-up colonoscopy, three years after the first surveillance

- Traditional serrated adenoma, sessile serrated polyp with dysplasia, adenoma high grade dysplasia, carcinoma in situ, intramucosal carcinoma, or dysplasia in the setting of IBD:
 - Colonoscopy 6-12 months after resection
 - Second follow-up colonoscopy one year after the first surveillance
 - Subsequent colonoscopy three years after second surveillance
- T1b (submucosal invasion) adenocarcinoma:
 - Colonoscopy 3-6 months after resection
 - Second follow-up colonoscopy 6-12 months after the first surveillance
 - Subsequent colonoscopy one year after second surveillance

Inflammatory Bowel Disease (COLON-5)

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- Colonoscopy is medically necessary for assessment of disease activity and/or treatment decisions, including assessment for mucosal healing on therapy^{4,66}
- Post-surgery for Inflammatory Bowel Disease^{4,66}
 - Evaluation of pouchitis, as clinically indicated
 - After partial colectomy or partial ileocelectomy
 - Examination of the neoterminal ileum 6-12 months after surgery to risk-stratify individuals who may be affected by endoscopic recurrence
- Screening and surveillance for dysplasia in established ulcerative colitis^{3,4,5}
 - Average risk individuals with ulcerative colitis
 - Begin screening 8 years after symptom onset (includes individuals with pancolitis, and left-sided colitis).
 - Continue surveillance colonoscopy every 1-3 years
 - Individuals with isolated ulcerative proctitis do not appear to be at increased risk of colon cancer. Thus, surveillance is not recommended in this group.
 - Elevated risk individuals with ulcerative colitis:
 - Begin annual surveillance beginning immediately upon diagnosis in the following high risk individuals:
 - Active inflammation
 - Anatomic abnormality such as a stricture or multiple pseudopolyps
 - Prior history of dysplasia
 - Family history of CRC in a first-degree relative
 - History of primary sclerosing cholangitis
 - If dysplasia is discovered or a lesion is present which needs follow-up evaluation:
 - If a polypoid or non-polypoid dysplastic lesion has been removed^{3,5}:
 - Colonoscopy surveillance at 1-6 months, then at 12 months, and then yearly
- Screening and surveillance for dysplasia in established Crohn's Disease of the colon:
 - Colonoscopy every 1-3 years in individuals with Crohn's Disease who have disease involving at least one-third of the colon, beginning 8 years after symptom onset
- Surveillance of pouchitis⁶⁴

- Annual colonoscopy for surveillance of an ileo-anal pouch is medically necessary for individuals with a history of any of the following:
 - Colorectal dysplasia
 - Colon cancer
 - Primary sclerosing cholangitis
- If dysplasia is discovered or a lesion is present requiring follow up beyond annual surveillance:
 - Colonoscopy is medically necessary at 1-6 months and again at 6-12 months
 - Continued intensive surveillance is indicated until 2 consecutive negative colonoscopy exams, after which standard colonoscopy surveillance guidelines apply.
- Chronic inflammatory bowel disease in remission (clinical, endoscopic, or histologic)
 - Routine follow-up is not medically necessary except for dysplasia/cancer surveillance as above

Evidence Discussion

Colonoscopy with biopsies should be performed in the assessment of individuals with suspected Inflammatory Bowel Disease. It is indicated to evaluate disease activity and response to therapy with a great impact on patient management, in individuals with known Inflammatory Bowel Disease (IBD). Endoscopic evaluation of the surgically altered bowel is often needed to assess for disease recurrence, its severity, and for therapy. Screening and subsequent surveillance colonoscopy to assess for dysplasia in individuals with IBD should start 8 years after diagnosis. Individuals with ulcerative colitis and primary sclerosing cholangitis (PSC) should undergo a screening colonoscopy at the time of diagnosis of ulcerative colitis and surveillance annually thereafter. Annual surveillance is also recommended for high risk individuals with ulcerative colitis with anatomic abnormality such as a stricture or multiple pseudopolyps, prior history of dysplasia or family history of CRC in a first-degree relative. After complete removal of endoscopically resectable polypoid or nonpolypoid dysplastic lesions, surveillance colonoscopy is recommended.

Irritable Bowel Syndrome (COLON-6)

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- Irritable Bowel Syndrome (IBS) is a positive diagnosis, not a diagnosis of exclusion. It is characterized by abdominal pain associated with altered bowel habits, abdominal distension, and bloating over a period of 6 months. Subtypes include IBS-C (constipation-predominant), IBS-D (diarrhea-predominant), IBS-M (mixed), and unclassified IBS. Rome IV Criteria for the diagnosis of IBS are:
 - Recurrent abdominal pain, on average ≥ 1 day/week in the past 3 months, related to ≥ 2 of the following:
 - Defecation
 - Change in stool frequency
 - Change in stool appearance
- If any one of the following alarm features are present, colonoscopy is medically necessary:
 - Positive family history of colorectal cancer (first-degree relative)
 - Rectal bleeding in the absence of documented bleeding hemorrhoids or anal fissures (e.g. positive stool occult blood, hematochezia. See: **GI Bleeding (COLON-9)**)
 - Unintentional weight loss is defined as loss of ≥ 10 lbs. or $\geq 5\%$ of body weight over 6 months or less, without an identifiable reason
 - Abdominal pain awakening individual at night-time
 - A change of pattern including frequent passage of stool during night-time
 - Iron-deficiency anemia as manifested by a low hematocrit and/or hemoglobin AND one of the following:
 - Low serum iron
 - Low serum ferritin (≤ 45 ng/mL or $<$ lab lower limit if higher than 45 ng/mL)
 - Elevated serum iron-binding capacity
 - Low serum transferrin saturation
 - Positive inflammatory markers (see typical lab studies as noted below)
- In the absence of alarm features, the following laboratory studies should be performed:
 - CBC
 - For non-constipated IBS:
 - CRP (C-reactive protein), fecal calprotectin, or fecal lactoferrin

- Serologic tests for celiac disease (Note: HLA test does not preclude the need for celiac serology)
- Stool analysis for giardia
- If the diagnosis is inconclusive or suggestive of IBD after the above studies, colonoscopy can be approved.

Evidence Discussion

Irritable Bowel Syndrome (IBS) is a functional intestinal disorder causing abdominal pain, bloating, distention and altered bowel habits. Subtypes include IBS-C (constipation predominant), IBS-D (diarrhea predominant), and IBS-M (mixed type).

Further defined by Rome IV Criteria:

- Recurrent abdominal pain, on average at least one per day/week in the last three months, associated with two or more of the following:
 - Defecation
 - Change in stool frequency
 - Change in form or appearance of stool

ACG recommends against routine colonoscopy in individuals with IBS symptoms younger than 45 years without alarm symptoms.

- In the absence of alarm symptoms the following laboratory tests should be ordered:
 - CBC with iron panel
 - Those with IBS-D or IBS-M:
 - CRP (C-Reactive Protein), fecal calprotectin +/- fecal lactoferrin
 - Celiac antibody panel
 - Stool analysis for giardia
- If the diagnosis remains inconclusive or suggestive of IBD after above evaluation, colonoscopy can be approved.

Colonoscopy may be performed, if any of the following alarm symptoms are present:

- Positive family history of colorectal cancer
- Rectal bleeding in the absence of documented bleeding hemorrhoids or anal fissure (e.g., positive stool occult blood, hematochezia. See: **GI Bleeding (Colon 9)**)
- Unintentional weight loss
- Nocturnal abdominal pain
- Nocturnal diarrhea
- Iron deficiency anemia as manifested by a low hematocrit and/or hemoglobin AND one of the following:
 - Low serum iron
 - Low serum ferritin
 - Elevated serum iron binding capacity

- Low serum transferrin saturation
- Positive inflammatory markers

Constipation (COLON-7)

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- Colonoscopy is medically necessary:
 - For the following alarm symptoms:
 - Rectal bleeding
 - Note: the nature of rectal bleeding should be specific (e.g., bright red blood per rectum, melena, hematochezia, etc. See: **GI Bleeding (COLON-9)**
 - Heme-positive stool
 - Iron-deficiency anemia as manifested by a low hematocrit and/or hemoglobin AND one of the following:
 - Low serum iron
 - Low serum ferritin (≤ 45 ng/mL or $<$ lab lower limit if higher than 45 ng/mL)
 - Elevated serum iron-binding capacity
 - Low serum transferrin saturation
 - Unintentional weight loss is defined as loss of ≥ 10 lbs. or $\geq 5\%$ of body weight over 6 months or less, without an identifiable reason
 - Individuals ≥ 45 years who have not previously had colon cancer screening via colonoscopy
 - For dilation of benign colon strictures or creation of percutaneous cecostomy when clinically appropriate
 - Note: the nature of the stricture should be specified (e.g., anastomotic stricture in the sigmoid)
 - In selected individuals, if there is a documented concern for obstruction secondary to cancer, stricture, or extrinsic compression
 - If surgery is being considered for the treatment of constipation

Background and Supporting Information

- As per ASGE guidelines, colonoscopy is generally NOT performed for the initial evaluation of individuals presenting with symptoms of chronic constipation in the absence of alarm features or suspicion of organic disease. It should be noted that in a retrospective review of 41,775 colonoscopies performed for average-risk CRC screening, constipation only, or constipation with another indication, individuals with constipation alone (as opposed to constipation with another indication) had a lower risk of significant findings than individuals undergoing colonoscopy for average risk screening.³⁰ In general, the yield of colonoscopy for isolated constipation is

comparable to that of asymptomatic individuals undergoing colonoscopy for routine CRC screening.

Evidence Discussion

Per ASGE guidelines, colonoscopy is not recommended for the initial evaluation of constipation as the sole symptom. In general, the yield of colonoscopy for isolated constipation is comparable to that of asymptomatic individuals undergoing colonoscopy for routine colorectal cancer screening. Colonoscopy for constipation is indicated for associated alarm symptoms, including iron deficiency anemia, heme-positive stool, rectal bleeding, weight loss, and age ≥ 45 years old with no prior colonoscopy. Colonoscopy is indicated if there is a concern for obstruction, if surgery is being considered to treat constipation, or for dilation of strictures.

Diarrhea (COLON-8)

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- Chronic diarrhea (≥ 28 days)^{8,22}
 - Prior to colonoscopy, the following should be performed:
 - Fecal calprotectin or lactoferrin to screen for Inflammatory Bowel Disease.
 - Giardia antigen test or PCR for Giardia.
 - Testing for celiac with IgA tissue transglutaminase (A positive test would warrant confirmation by duodenal biopsy). The use of IgG-tTG or a test for IgG deaminated gliadin peptides can be considered for IgA-deficient individuals.
 - If the diagnosis is inconclusive or suggestive of IBD after the above studies, colonoscopy is medically necessary.
- Acute diarrhea⁸ (<28 days):
 - Immunocompetent individuals:
 - Stool and laboratory tests, including tests for the presence of microbial pathogens are the initial studies for the evaluation of clinical scenarios suggestive of infectious diarrhea
 - Colonoscopy is generally not medically necessary for the initial evaluation of acute diarrhea in this setting, unless:
 - Findings on sigmoidoscopy are inconclusive
 - Results should be provided
 - Symptoms persist and fail to respond to empirical therapy
 - Type of therapy should be provided
 - The diagnosis is inconclusive after routine blood and stool studies
 - Results of these studies should be provided
 - There is significant blood loss
 - Nature of blood loss should be specified
 - Immunocompromised Individuals:
 - Stool testing for pathogens is the first-line evaluation
 - Colonoscopy is considered medically necessary if stool studies fail to reveal a cause and symptoms persist. In addition, cytomegalovirus infection (CMV) diagnosed by PCR, viral culture, or positive serology may not be indicative of tissue-invasive disease and endoscopic biopsy may be needed.

Background and Supporting Information

- In the immunocompromised individual (e.g., HIV) evidence indicates that colonoscopy has a higher diagnostic yield than sigmoidoscopy.

Evidence Discussion

Chronic diarrhea is defined as diarrhea for greater than 28 days, whereas acute diarrhea is present <28 days duration. Both acute and chronic diarrhea have many etiologies including infection, inflammation, or malabsorption. Colonoscopy is medically necessary in the setting of chronic diarrhea once baseline work up to assess for inflammation, infection and celiac disease has been completed, and studies are inconclusive or suggestive of inflammatory bowel disease. Colonoscopy is indicated in immunocompetent individuals with acute diarrhea a baseline work up including labs, stool testing and sigmoidoscopy are negative or inconclusive, or there is concern for significant lower gastrointestinal bleeding. Immunocompromised individuals are at increased risk of gastrointestinal pathology. Colonoscopy should be performed (rather than sigmoidoscopy) to increase diagnostic yield in immunocompromised individuals if stool studies do not reveal an etiology or if the symptoms do not respond to treatment.

GI Bleeding (COLON-9)

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- The nature of the rectal bleeding should be specified (e.g., bright red blood per rectum, melena, hematochezia, etc.)
 - For symptoms suggesting outlet-type bleeding (e.g., scant hematochezia, blood on toilet paper, small amount of blood on outside of stool)
 - Individuals age less than 40 years, colonoscopy is medically necessary when:
 - In the presence of alarm symptoms of unintentional weight loss or bowel habit changes, or if criteria for colonoscopy is met by other guidelines (e.g. iron-deficiency anemia, etc.)
 - Sigmoidoscopy does not reveal a local source of bleeding such as hemorrhoids or anal fissure.
 - Findings on sigmoidoscopy or imaging suggest a need for further evaluation (e.g., inflammatory bowel disease, adenomatous polyp, etc.)
 - For elevated risk individuals with family history of colorectal polyps or cancer or other genetic predisposition to colonic cancer
 - Individuals age 40 years or older, colonoscopy is medically necessary
 - For confirmed positive occult blood, melena, or hematochezia not suggestive of outlet-type bleeding
 - Colonoscopy is medically necessary
- Iron-deficiency anemia as manifested by a low hematocrit and/or hemoglobin AND one of the following:
 - Low serum iron
 - Low serum ferritin (≤ 45 ng/mL or $<$ lab lower limit if higher than 45 ng/mL)
 - Elevated serum iron-binding capacity
 - Low serum transferrin saturation

Evidence Discussion

Lower GI bleeding (LGIB) accounts for 20-30% of major GI bleeding cases. Blood loss from lower GI bleeding (LGIB) can range from minor to life threatening. The incidence of lower GI bleeding (LGIB) increases with age. As such, age as an important factor in determining the appropriate management of lower GI bleeding. The nature of rectal bleeding should be specified. For symptoms suggesting outlet-type bleeding, sigmoidoscopy may be performed initially in individuals under age 40 years in the absence of alarm symptoms or high-risk criteria. Colonoscopy may be performed if

sigmoidoscopy does not reveal a source of bleeding, or if findings warrant additional evaluation. In individuals over age 40 years, colonoscopy should be performed as the initial test. Colonoscopy is indicated in individuals with melena, hematochezia or occult positive stools not suggestive of outlet-type bleeding as well as iron deficiency anemia, regardless of age.

Abdominal Pain (COLON-10)

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- With respect to colonoscopy indications, isolated abdominal pain is usually localized to the lower abdomen. In general, isolated abdominal pain is a poor indication for colonoscopy but can be considered in individual cases:
 - In individuals ≥ 45 years of age, colonoscopy is medically necessary if a screening colonoscopy (or a diagnostic colonoscopy for another indication) has not yet been performed.
 - A recent negative colonoscopy for colon cancer screening or for other investigative purposes should mitigate the need for another colonoscopy for isolated abdominal pain or irritable bowel-type symptomatology in the absence of new alarm symptoms.
 - See alarm symptoms under **Irritable Bowel Syndrome (COLON-6)** for indications for colonoscopy in this setting.
 - In individuals < 45 years of age, see alarm symptoms under **Irritable Bowel Syndrome (COLON-6)** for colonoscopy indications.

Evidence Discussion

Goal of evaluation for abdominal pain is differentiate benign functional abdominal pain versus serious pathology (such as colon cancer, IBD, GI bleeding, obstruction) that might require urgent intervention. Diagnostic evaluation will depend on the suspected etiologies and severity based on thorough history and physical. Alarm symptoms such as family history of colorectal cancer, rectal bleeding, and unintentional weight loss, night symptoms, change in bowel habits.

Initial work up (noninvasive) includes labs helps to differentiate benign from organic pathology. CBC, electrolytes, inflammatory markers, stool calprotectin, LFT's, lipase, iron labs, and celiac labs which might help indicate alarm features such as anemia, iron deficiency, elevated inflammation markers.

In individuals over 45 years of age, by virtue of their increased risk of malignancy, will likely benefit from screening colonoscopy if it has not been performed yet.

Although colonoscopy is useful in establishing diagnosis and intervention, serious adverse are rare (approximately 3 per 1000 screening colonoscopies) but possible. Those include adverse events of sedation, related to the preparation, bleeding, and perforation. Older individuals have higher rate of serious adverse events.

Unexplained Weight Loss (COLON-11)

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- Unintentional weight loss is defined as loss of ≥ 10 lbs. or $\geq 5\%$ of body weight over 6 months or less, without an identifiable reason
 - colonoscopy as requested
- See also: **Unexplained Weight Loss (ONC-30.2)** in the Oncology Imaging Guidelines

Evidence Discussion

70% of unexplained weight loss can be attributed to gastrointestinal causes of IBD 4%, pancreatic cancer 2%, colon cancer 3%, and majority of cases being caused by irritable bowel syndrome 58%.

Initial work-up may include appropriate history and physical exam and appropriate baseline labs (CBC, CMP, TSH, Hemoglobin A1C, Celiac serologies, ESR/CRP).

Colonoscopy as requested for weight loss with ANY of the following:

- Lower abdominal pain
- Iron deficiency with or without anemia
- GI bleed (overt OR occult)
- Change in bowel habits (diarrhea or constipation or mixed pattern)
- Palpable abdominal mass

Abnormal Radiologic Study (COLON-12)

GI.AR.0012.0.A

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- Abnormal radiologic studies or other examinations indicating colorectal pathology⁶:
 - Colonoscopy is medically necessary to assess the abnormality as indicated
 - The nature of the abnormality must be documented by description of the radiologic finding (e.g., colon wall thickening on CT scan)

Evidence Discussion

Endoscopy or colonoscopy as requested to assess abnormality as indicated for ALL of the following:

- The nature of the abnormality must be documented by the description of the radiologic finding (e.g. colon wall thickening OR colonic mass on CT scan).
- If change in management is probable based on results of endoscopy OR after an empirical trial of therapy for a suspected benign digestive disorder has been unsuccessful OR when a primary therapeutic procedure is contemplated.

Repeat Colonoscopy for Inadequate Preparation (COLON-13)

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- Inadequate preparation on initial colonoscopy for screening or surveillance:
 - For cases in which the BBPS (Boston Bowel Prep Scale) score is not available:
 - Repeat examination as per the endoscopist with documentation from prior colonoscopy report indicating the inadequacy of the preparation and the need for earlier-than-usual follow-up.
 - For BBPS score of 0 or 1 in any segment of the colon or a total score of 0 to 5:
 - Repeat examination as per the endoscopist
- Adequate preparation on initial colonoscopy for screening or surveillance
 - For a BBPS (Boston Bowel Prep Scale) score of 2 or 3 in all segments of the colon:
 - Repeat examination as per screening or surveillance guidelines

Evidence Discussion

Bowel preparation adequacy is defined as BBPS ≥ 6 with each segment score of 2 OR 3.

Colonoscopy as requested within 1 year if bowel preparation is inadequate.

General and Therapeutic Colonoscopy (COLON-14)

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- Removal of a foreign body⁶
 - The nature of the suspected foreign body should be provided (e.g., battery, etc.)
- Treatment of a known bleeding source (e.g., radiation proctitis, arteriovenous malformation, etc.)
- Excision of a known polyp⁶
 - This would apply to a known polyp not previously resected. Documentation of the nature of the retained polyp should be provided (e.g., large polyp for which endoscopic mucosal resection is being planned)
 - For colon polyp surveillance, see: **Surveillance after Polypectomy (COLON-3)**
 - For surveillance after surgical or submucosal resection (SMR) or submucosal dissection (SMD), see: **Surveillance After Diagnosis of Colorectal Cancer (COLON-4)**
- Decompression of acute nontoxic megacolon or sigmoid volvulus⁶
 - Documentation of the history should be provided
- Balloon-dilation of stenotic lesions⁶
 - The nature of the stenosis should be specified (e.g., dilation of an anastomotic sigmoid stricture)
- Palliative treatment of stenosing or bleeding neoplasms⁶
 - The type of neoplasm and location should be specified
- Marking a neoplasm for localization⁶
 - The type of neoplasm and location should be specified
- Intra-operative colonoscopy for site identification at time of surgery⁶
 - The nature of the planned surgical procedure should be specified (e.g., surgical treatment of a polypoid lesion)
- For change in bowel habit (CIBH), see: **Irritable Bowel Syndrome (COLON-6)**

Background and Supporting

- Eosinophilic Gastrointestinal Disorders (EGIDs) other than EoE (eosinophilic esophagitis)

- Non-EoE Eosinophilic gastrointestinal disorders (EGIDs) included eosinophilic gastritis (EoG), eosinophilic enteritis (EoN), and eosinophilic colitis (EoC). They are characterized by pathologic eosinophilic infiltration of the stomach, small intestine, or colon leading to organ dysfunction and clinical symptoms.
- The initial laboratory evaluation is similar between EGID and other GI diseases. Peripheral eosinophilia, iron deficiency, or hypoalbuminemia should raise clinical suspicion of EGID.

Evidence Discussion

Colonoscopy is a visual examination of the lining of the large intestine using a fiberoptic endoscope. The procedure includes inspection of the entire colon, from the rectum to the cecum, and may include the examination of the terminal ileum. A colonoscopy, by definition, must examine the colon proximal to the splenic flexure. The colonoscope is inserted via the anus or stoma, and then advanced under direct vision.

A therapeutic colonoscopy is indicated for:

- Removal of a foreign body
- Treatment of bleeding from such lesions as vascular anomalies, ulceration, and neoplasia
- Excision of a colon polyp
- Balloon dilation of a stenotic lesion
- Decompression of a sigmoid volvulus and/or an acute non-toxic megacolon or pseudo-obstruction associated with Ogilvie's Syndrome
- Palliative treatment of a stenosing or bleeding neoplasm
- Marking a neoplasm of localization
- Intraoperative colonoscopy for site identification at time of surgery
- Repair of a perforation when it is expected that such repair will most likely avoid further surgical intervention and further surgical intervention is not needed

Colonoscopy is contraindicated if the individual has:

- Fulminant colitis
- Acute severe diverticulitis
- Suspected perforated viscus
 - A therapeutic colonoscopy by a trained endoscopist capable of repairing a perforation site may be allowed when the clinical findings and imaging studies strongly indicate that a perforation has occurred and the suspected site of the perforation allows for endoscopic repair

Metastatic Cancer of Unknown Primary Site (COLON-15)

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- Metastatic adenocarcinoma of unknown primary site when, in the opinion of the treating physician responsible for oncology care, the results will not alter management.
 - Colonoscopy is NOT medically necessary⁶

Evidence Discussion

Individuals with metastatic adenocarcinoma of unknown primary typically present with advanced cancer that has spread to multiple sites without a clearly identifiable origin. For many individuals, finding the primary tumor site does not significantly impact therapeutic options or clinical outcomes. In these cases, the role of invasive procedures like colonoscopy is limited, as management focuses on palliative care, symptom control, and optimizing quality of life.

Studies indicate that, in metastatic cancer of unknown primary (CUP), identifying the primary site rarely changes the treatment approach or outcomes, particularly if therapeutic options are determined by the individual's response to generalized treatment regimens, rather than by the primary tumor site.

The oncologist's clinical judgment plays a critical role in determining the value of colonoscopy in cancer of unknown primary cases. When the oncologist assesses that the results of a colonoscopy would not alter the individual's treatment plan, performing this procedure may not be in the individual's best interest.

Colonoscopy is invasive, with risks including bleeding, perforation, and sedation-related complications. In individuals with metastatic cancer of unknown primary, the compromised health status often exacerbates these risks, especially when procedural findings are unlikely to provide clinical benefit.

Colonoscopy is not indicated for evaluation of metastatic adenocarcinoma of unknown primary when in the opinion of the treating physician responsible for oncology care the results will not alter management.

Colonoscopy Via Stoma (COLON-16)

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- Colonoscopy via stoma can be performed for any of the above indications, and in addition¹³:
 - To evaluate stoma complications (e.g., hernia, retraction, prolapse, stenosis, fistula, etc.)

Genetic Syndromes (COLON-17)

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- Lynch Syndrome (NOTE: Screening colonoscopy begins at the stated age as indicated below, or 5 years before the youngest age of diagnosis of colorectal cancer in an affected family member, whichever occurs first)
 - MLH1/MSH2 Mutation:
 - Annual colonoscopy beginning at age 20
 - MSH6/PMS2 Mutation:
 - Annual colonoscopy beginning at age 25
 - Deletions of upstream EpCAM gene⁵²⁻⁵⁴:
 - Annual colonoscopy beginning at age 20
- Li-Fraumeni Syndrome (defined as a syndrome inherited in an autosomal-dominant manner, associated with germline mutations in TP53, and resulting in an increased susceptibility to a variety of cancers)
 - Colonoscopy every 2-5 years beginning at age 25 (or 5 years before the earliest known colon cancer in the family)^{56, 57}
- Polyposis Syndromes
 - FAP (Familial Adenomatous Polyposis, confirmed by a mutation in the APC-Adenomatous Polyposis Coli gene):
 - Annual colonoscopy beginning at age 10
 - Attenuated FAP:
 - Annual colonoscopy beginning at age 18
 - MUTYH-associated polyposis:
 - Annual colonoscopy beginning at age 25
 - Juvenile Polyposis Syndrome (defined as individuals with 5 or more juvenile polyps in the colorectum or any juvenile polyps in other parts of the GI tract, or evidence of SMAD4 or BMPRI1A mutations)
 - Colonoscopy at age 12. If polyps are present, repeat yearly. If no polyps, repeat every 2 years.
 - Serrated Polyposis Syndrome:
 - Colonoscopy yearly
 - Criteria for diagnosis - at least one of the following:

- At least 5 serrated polyps proximal to the sigmoid colon with ≥ 2 of these being $> 10\text{mm}$
- Any number of serrated polyps proximal to the sigmoid colon in an individual who has a first-degree relative with serrated polyposis
- > 20 serrated polyps of any size, distributed throughout the colon
- Puetz-Jeghers Syndrome (individuals with perioral or buccal pigmentation and/or 2 or more histologically characteristic hamartomatous polyps, or family history of PJS, or STK11 mutations):
 - Colonoscopy at age 8. If polyps are present, can be repeated every 3 years. If no polyps are discovered, repeat at age 18, then every 3 years, or earlier if any symptoms occur.
- Cowden Syndrome (individuals with PTEN gene mutations, history of multiple gastrointestinal hamartomas or ganglioneuromas):
 - Colonoscopy beginning at age 15. Can be repeated every 2 years if no polyps are discovered. If polyps are found, repeat as requested.
- Family Colon Cancer X Syndrome (individuals who meet Amsterdam I criteria* but lack genetic mutation findings):
 - Colonoscopy every 3 years beginning 10 years before the age at diagnosis of the youngest affected relative.
- Hereditary Gastric Cancer (Hereditary Diffuse Gastric Cancer-HDGC Syndrome):
 - Colonoscopy beginning at age 40. Interval has not been established.
- BMMRD (Biallelic Mismatch Repair Deficiency)
 - Colonoscopy annually beginning at age 6. Once polyps are found, colonoscopy is recommended every 6 months.
 - All heterozygous family members are eligible for Lynch Syndrome Screening (See above for Lynch Syndrome)
- CHEK2 mutation
 - Colonoscopy every 5 years beginning at age 40 years (or 10 years prior to the age at which at first-degree relative was diagnosed with colorectal cancer)
- Cystic Fibrosis⁵⁸
 - Individuals who have NOT received a solid organ transplant:
 - Colonoscopy every 5 years beginning at age 40 years
 - If any adenomatous polyps are found on colonoscopy, repeat colonoscopy should be performed within 3 years
 - Subsequent intervals based on the most recent endoscopic examination
 - Individuals who are ≥ 30 years of age and HAVE received a solid organ transplant:

- Colonoscopy every 5 years beginning within 2 years of transplant (unless there is a negative colonoscopy within the past 5 years)
 - If any adenomatous polyps are found on colonoscopy, repeat colonoscopy should be performed within 3 years
 - Subsequent intervals based on the most recent endoscopic examination

Background and Supporting Information

- Lynch syndrome is caused by germline variants in one of the DNA mismatch repair (MMR) genes (MLH1, MSH2, MSH6, PMS2) or by deletions in the epithelial cell adhesion molecule gene (EpCAM). This increases susceptibility to colorectal, endometrial, and other tumors.
- High Risk Screening:
 - If there is no information regarding the pathology of the first-degree relative's polyp, it cannot be assumed that the adenomas or polyps were advanced, unless surgery was required to remove the polyp.
- *Amsterdam I Criteria
 - At least three relatives with colorectal cancer (CRC)
 - All of the following criteria should be present:
 - One should be a first-degree relative of the other two
 - At least two successive generations must be affected
 - At least one of the relative with CRC must have received the diagnosis before the age of 50 years
 - Familial adenomatous polyposis should be excluded
 - Tumors should be verified by pathologic examination

Evidence Discussion

Cancer genetics summaries focus on the genetics of specific cancers that are inherited cancer syndromes.

The goal and benefit of cancer surveillance is to identify a genetics-predisposed neoplastic process earlier in the course than standard procedure surveillance/screening recommendations in the absence of a genetic syndrome.

The genetics of specific cancers include syndrome-specific information on the risk implications of a family history of cancer, the prevalence and characteristics of cancer-predisposing variants, known modifiers of genetic risk, opportunities for genetic testing, outcomes of genetic counseling and testing, and interventions available for people with increased cancer risk resulting from an inherited predisposition.

Endoscopy and colonoscopy surveillance recommendations are based on the recommended surveillance intervals for the specific genetic defect when possible, or presence of a genetic-associated specific neoplasm in the absence of genetic assessment.

If a positive neoplastic finding is identified via surveillance, subsequent endoscopic testing is based on the shorter interval of either the genetic syndrome specific surveillance guideline or specific tumor follow-up Oncology recommendations.

As this is a rapidly changing field, clinical judgment in conjunction with recommended guidelines for specific genetic tumor syndromes are considered when supported by national guidelines.

Colonoscopy After Noninvasive Testing (COLON-18)

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- Colonoscopy is medically necessary after an abnormal result on a noninvasive colon cancer screening test (e.g., fecal occult blood test (FOBT), fecal immunochemical test (FIT), serum-based screening test, or stool-based DNA test such as Cologuard[®])^{47, 49-52}
- Colonoscopy is medically necessary if the individual had a prior negative screening colonoscopy, but later received an abnormal result on a noninvasive colon cancer screening test (as listed above)⁴⁸

Evidence Discussion

Occult Blood and Positive Cologuard

Options for colon cancer screening other than colonoscopy include non-invasive options. These options are Fecal occult blood tests, FIT (fecal immunochemical test), and stool based DNA tests (Cologuard). Colonoscopy is indicated for positive result of any of the above tests. Screening tests should be performed starting at age 45 and older with an average risk of colon cancer. FIT testing should be done annually, cologuard every 3 years.

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Guideline

References

References

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