MINNESOTA GASTROENTEROLOGY, P.A.

# Colonoscopy with Chromoendoscopy in IBD

**CATEGORY:** **IBD**

**PURPOSE:** **To guide the provider in use of chromoendoscopy for IBD surveillance**

**RESPONSIBLE PARTIES:** Physicians

**GUIDELINE:**

**Background:**

Patient with inflammatory bowel disease have an increased risk of colon cancer. Patient's considered at increased risk include patients with ulcerative colitis (excluding proctitis), Crohn's disease involving at least 1/3 of the colon and patients with primary sclerosing cholangitis (PSC), even in the absence of gross colitis on white light endoscopic exam.

The initiation of a colon cancer surveillance program varies depending on the type of disease. Generally, it is recommended to start a colonoscopy surveillance program 8-10 years after the onset of symptoms in patients with ulcerative colitis and Crohn's colitis, but immediately after the diagnosis of PSC, regardless of the duration of associated IBD.

Traditional techniques for colon cancer surveillance include white light colonoscopy with at least 32 non-targeted biopsies in 4 separate specimen jars. That is, these biopsies should come from endoscopically normal appearing mucosa and sorted based on location. Additionally, any suspicious lesions should also be biopsied and sent for microscopic evaluation in separate specimen jars. Further, all polyps should be removed and sent for pathologic evaluation and biopsies of the area around the polypectomy site should be obtained and examined microscopically.

The rationale for this surveillance approach includes the fact that colon cancer in IBD frequently starts as flat lesions rather than more easily identified polypoid lesions. Because of this fact, other techniques including narrow band imaging and chromoendoscopy have been evaluated as possible alternatives to routine white light endoscopy which may yield better results and earlier detection of premalignant lesions.

Of the techniques, chromoendoscopy appears to be the most promising, however, currently there are no current national guidelines outlining when it should be used.

While chromoendoscopy appears to have no significant risk above and beyond that of routine colonoscopy itself, there is a theoretical risk of DNA damage, in vitro, at the cellular level. This does not appear to have clinical significance. Other risks include permanent dye staining of clothing, including patient clothing if there is leakage after the procedure and a blue, discoloration of the urine. Additionally, the procedure is time consuming, often times involving multiple passes of the scope and significant air insufflation of the colon.

**Indications:**

The following outline includes specific situations where chromoendoscopy should or may be considered:

**Definitely use:**

1) Follow up examination for patient with single, non-targeted specimen with low grade dysplasia on white light colonoscopy who is not going to have surgery

**Consider use:**

1) Follow up examination for patient with serrated change noted on one or more non-targeted biopsies on white light endoscopy
2) Patients with PSC (who as a group may be considered to be at higher risk than patients with IBD without PSC).
3) Anyone with IBD, if there is interest on the part of the MD and the patient.

**REFERENCES/RELATED DOCUMENTS:**

1. Marion, et al, Chromoendoscopy-Targeted Biopsies are Superior to Standard Colonoscopic Surveillance for Detecting Dysplasia in Inflammatory Bowel Disease Patients, ACG, 2008; 103:2342-2349
2. Neurath, et al, Is Chromoendoscopy the New Standard for Cancer Surveillance in Patients with Ulcerative Colitis? Nature Clinical Practice, 2009;6:134-135.

Person initiating original guideline or revision: Ronald Schwartz, MD

*Original Date of guideline: February 2013*
*Date of Revisions: _____*
*Date of Review: _____*

**APPROVAL:**

_____ _____
Ronald Schwartz, MD
Chair, IBD Focus Group Date

_____ _____
Douglas Nelson, MD
Chair, Clinical Practice Committee Date