

crohn's colitis

Name of Clinical Care Pathway

Colonic Dysplasia/Cancer Surveillance

Objective

Early detection of colon cancer/dysplasia

Patient Population

Patients with a known diagnosis of IBD whose disease is in endoscopic remission. Active inflammation precludes a detailed assessment of colonic dysplasia.

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These clinical decision support tools were developed by Canadian experts in IBD, based on their interpretation of current evidence and considerations specific to Canadian healthcare. International guidelines from Europe and the United States are available. However, these may reflect regional factors not directly applicable in Canada

Abbreviations

AI	Artificial intelligence
BLI	Blue light imaging
CRC	Colorectal cancer
FDR	First-degree relative
IBD	Inflammatory bowel disease
NBI	Narrow-band imaging
PACE	Promoting Access and Care through Centres of Excellence
PSC	Primary sclerosing cholangitis
QPI	Quality Performance Indicator
SDR	Second-degree relative
UC	Ulcerative colitis

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Highlights from this CCP

The applicability of some suggested recommendations in these guidelines may be impacted by the IBD practitioners' access to recommended resources (colonic dye spray / virtual chromoendoscopy).

This is an evolving field in which the standards for neoplasia/dysplasia detection and colonoscopy surveillance intervals are constantly changing, with newer modalities, such as AI-assisted endoscopy and personalized approaches to surveillance, being actively investigated.

Introduction

This care protocol aims to provide IBD providers guidelines for colonic dysplasia/cancer surveillance based on patients' risk.

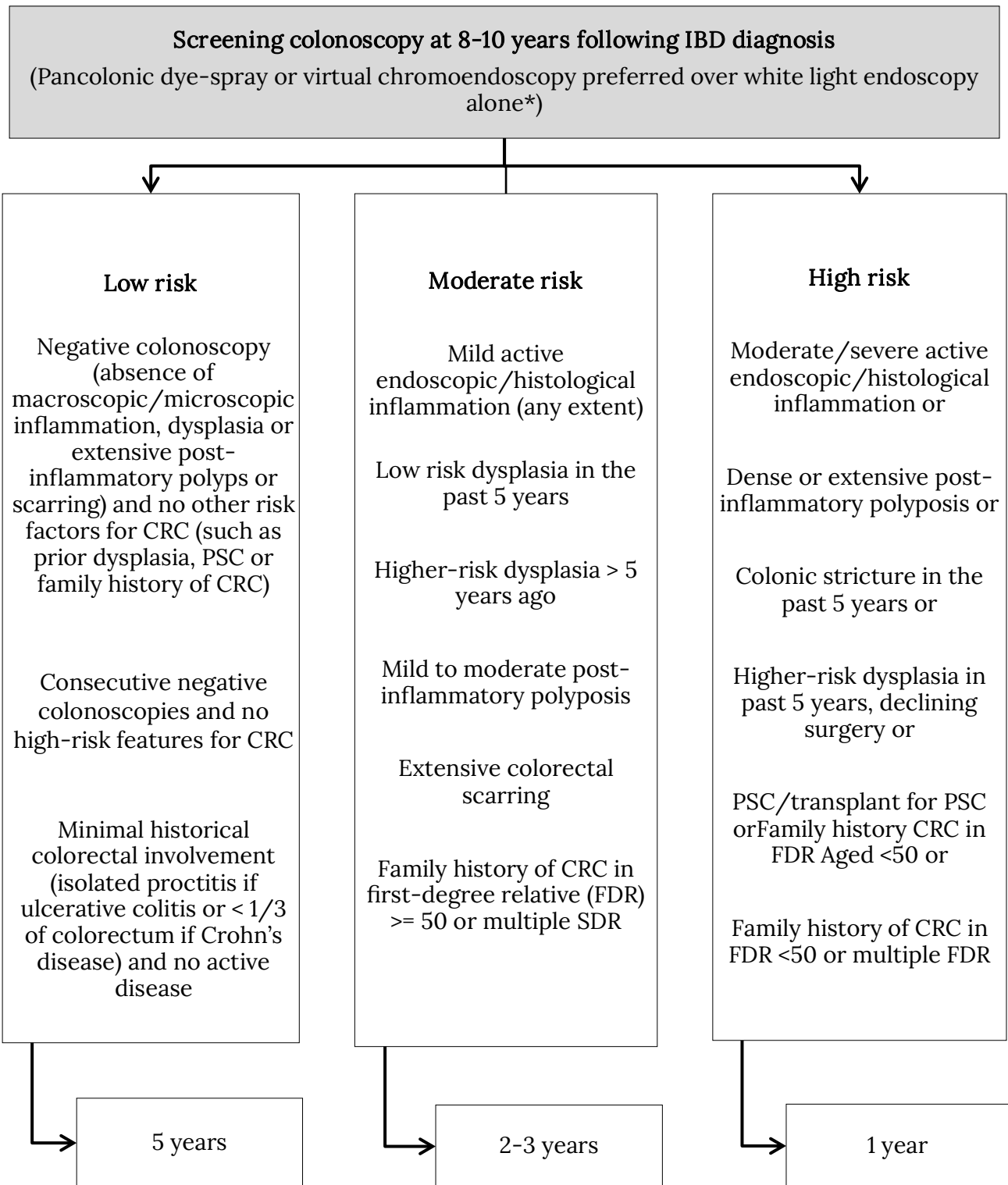
Patient populations	Recommendation
Ulcerative colitis or Crohn's colitis, no primary sclerosing cholangitis	Colonoscopy at 8 years from diagnosis to stage histologic disease extent – continued surveillance in those with UC extending beyond the rectum or Crohn's disease involving 1/3 or more of the colon, with frequency determined by overall CRC risk (see Figure 1) (PACE QPI 11).
Ulcerative colitis or Crohn's disease (of any duration) meeting minimum for extent <u>AND</u> coexisting primary sclerosing cholangitis	Annual surveillance colonoscopy from time of IBD diagnosis (PACE QPI 10).
Ulcerative colitis or Crohn's disease with pathologically confirmed "invisible" dysplasia (dysplasia identified in random biopsies of non-suspicious appearing mucosa) or subtle visible dysplasia with ambiguous borders	Early repeat colonoscopic surveillance using pancolonial dye spray (interval depending on dysplasia risk). Consider surgical referral in very high-risk cases (i.e. high-grade or multi-focal invisible dysplasia) (PACE QPI 19).

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Patient populations	Recommendation
Ulcerative colitis or Crohn's disease has confirmed visible dysplasia	<p>Continued endoscopic surveillance if confirmed complete endoscopic resection (over one or several colonoscopies) and no invasive cancer on histology (interval depending on dysplasia risk) – frequency depending on specific neoplasia/dysplasia findings (i.e. size, morphology, resection completeness) and overall CRC risk.</p> <p>Surgical referral if unable to completely resect lesion with clear borders or if invasive cancer on histology.</p>
Total proctocolectomy with an ileal pouch-anal anastomosis (IPAA)	Surveillance endoscopy according to risk (see Flowchart 2).
IBD with a subtotal colectomy	Consider surgical referral for a completion proctectomy as an alternative to ongoing endoscopic dysplasia surveillance; otherwise, endoscopic surveillance every 1- 5 years, depending on risk factors for colorectal cancer (See Flowchart 1) (PACE QPI 8).

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Flowchart 1: Surveillance recommendations for colonoscopy



*If Available

CRC-Colorectal cancer FDR-First degree relative PSC-Primary sclerosing cholangitis

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Screening/surveillance protocol

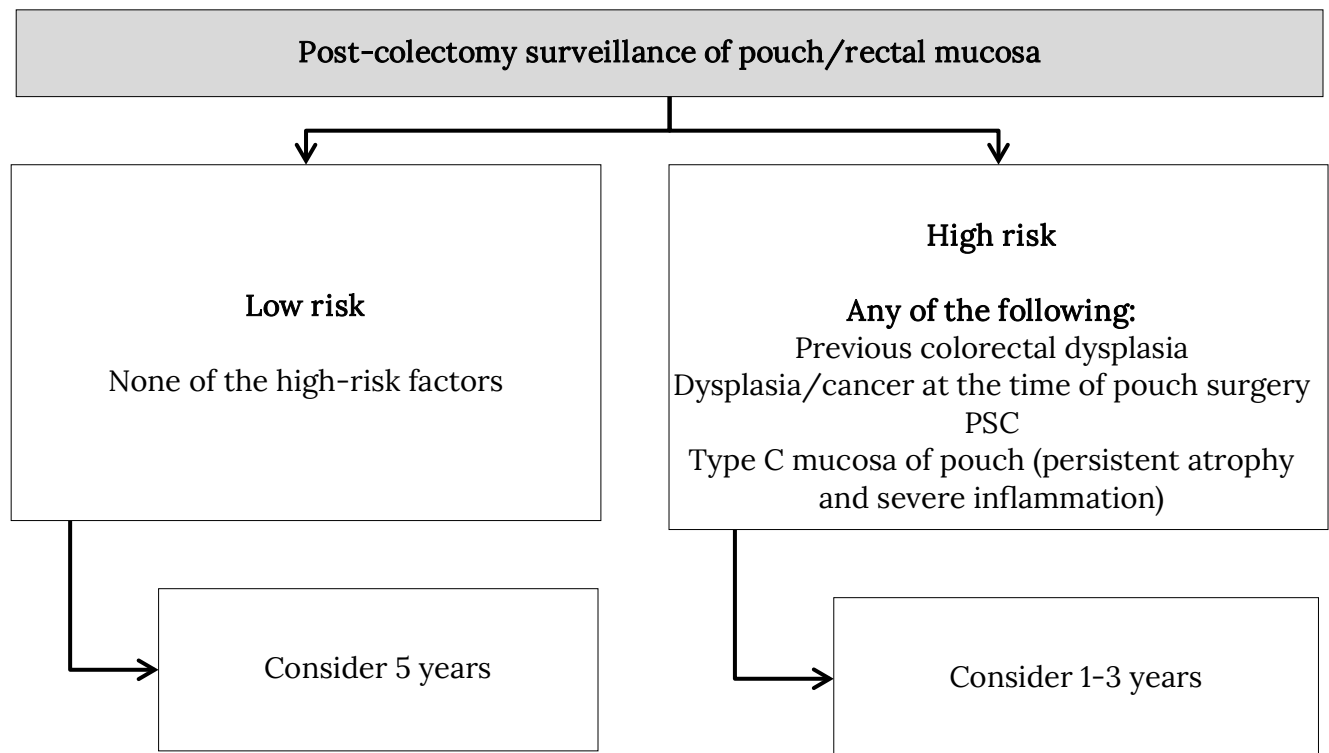
Pancolonic dye spray (if available) or virtual (NBI, BLI, iscan) chromoendoscopy with targeted biopsies/resection of visible abnormalities, with or without extensive non-targeted biopsies.

OR

High-definition white light colonoscopy with targeted biopsies/resection of visible abnormalities and extensive non-targeted biopsies throughout the colorectum (30-40) in individuals with advanced risk factors for colorectal cancer (primary sclerosing cholangitis, prior invisible or ill-defined colorectal dysplasia, severe extensive post-inflammatory polyposis), with or without non-targeted biopsies in individuals without these risk factors.

Other considerations: Patient preference, age, comorbidities and, quality of surveillance exam (high-quality exam = absence of macroscopic inflammation, good-to-excellent bowel preparation and complete to cecum/terminal ileum).

Flowchart 2: Surveillance recommendations post-colectomy



References

Bisschops R, East JE, Hassan C, et al. Advanced imaging for detection and differentiation of colorectal neoplasia: European Society of Gastrointestinal Endoscopy (ESGE) Guideline - Update 2019. *Endoscopy*. 12 2019;51(12):1155-1179. <https://doi.org/10.1055/a-1031-7657>

Cairns SR et al. Guidelines for colorectal cancer screening and surveillance in moderate and high-risk groups (update from 2002). *Gut* 2010;59:666-89. <https://doi.org/10.1136/gut.2009.179804>

Feakins RM. Inflammatory bowel disease biopsies: updated British Society of Gastroenterology reporting guidelines. *Journal of Clinical Pathology* 2013; 66(12):1005-26. <https://doi.org/10.1136/jclinpath-2013-201885>

Lamb et al. British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults. *Gut* 2019; 68:s1-s106. <https://doi.org/10.1136/gutjnl-2019-318484>

Magro F, Gionchetti P, Eliakim R, et al. Third European Evidence-based Consensus on Diagnosis and Management of Ulcerative Colitis. Part 1: Definitions, Diagnosis, Extra-intestinal Manifestations, Pregnancy, Cancer Surveillance, Surgery, and Ileo-anal Pouch Disorders. *J Crohns Colitis*. Jun 2017;11(6):649-670. doi:10.1093/ecco-jcc/jjx008 <https://doi.org/10.1093/ecco-jcc/jjx008>

Murthy SK, Feuerstein JD, Nguyen GC, Velayos FS. AGA Clinical Practice Update on Endoscopic Surveillance and Management of Colorectal Dysplasia in Inflammatory Bowel Diseases: Expert Review. *Gastroenterology*. 09 2021;161(3):1043-1051.e4. <https://doi.org/10.1053/j.gastro.2021.05.063>