AGA Clinical Practice Update on Endoscopic Surveillance and Management of Colorectal Dysplasia in Inflammatory Bowel Diseases: Expert Review

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The Emoroid Digest
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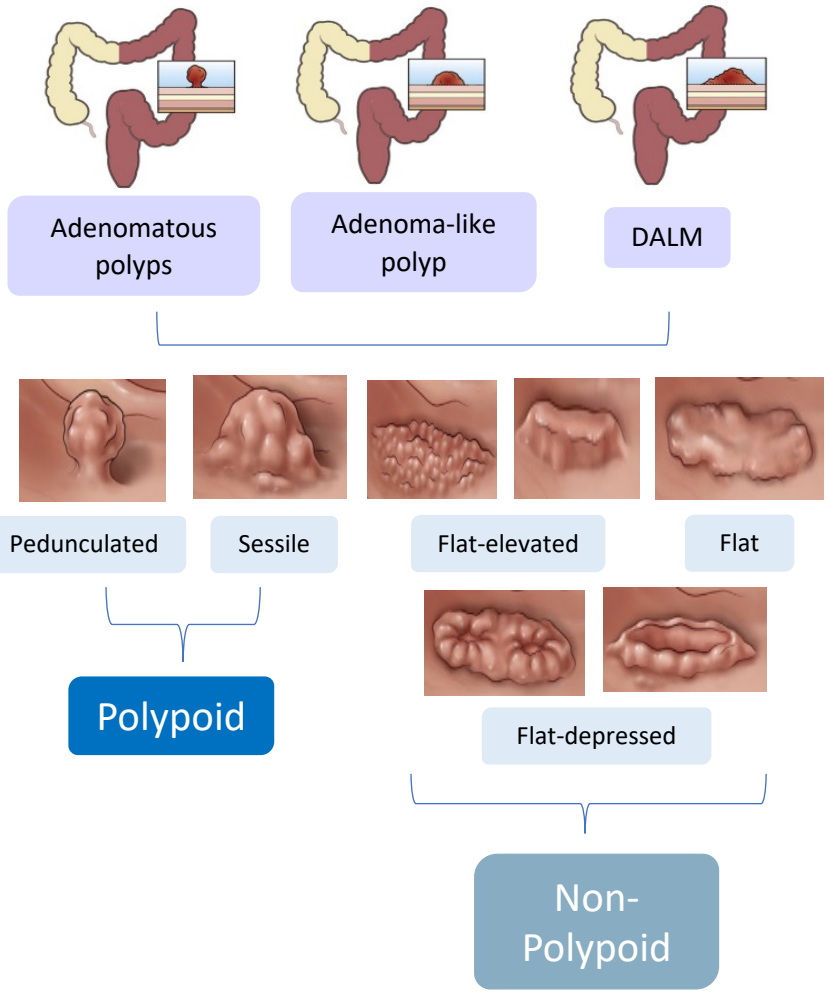
Nomenclature

- Adenomatous polyp, adenoma-like mass, dysplasia-associated lesion or mass (DALM), and flat dysplasia are old terminology and should no longer be used
- Precancerous colorectal lesions in IBD should be described as:
  - **Polypoid**→ protrudes ≥ 2.5 mm above mucosa (pedunculated or sessile)
  - **Non-polypoid**→ protrudes <2.5 mm above mucosa (flat elevated, flat, or flat depressed)
  - **Invisible**→ detected on non-targeted biopsy (not seen by endoscopist)
- Visible precancerous lesions should be described based on:
  - Size, morphology, clarity of borders, presence of ulceration, location, presence within an area of past or current colitis, perceived completeness of resection, and whether any special techniques were used for visualization

Dysplasia Detection

- **Screening Initiation:** At 8-10 years after disease dx and immediately on dx of PSC
- **Optimizing Detection:**
  - All inflammatory disease should be well controlled
  - High definition endoscopes +/- dye spray chromoendoscopy (90% detection) > standard definition endoscopes (80% detection)
  - Excellent bowel prep, careful inspection, targeted samples of suspicious mucosa
  - Endoscopic resection > biopsies, when lesions are clearly demarcated without stigmata of invasive cancer or submucosal fibrosis
- **Types of biopsies to obtain:**
  - **Targeted**→ suspicious or subtle mucosal abnormalities to r/o dysplasia
  - **Non-targeted**→ nonsuspicious areas to r/o invisible dysplasia
  - **Staging**→ macroscopically inflamed and uninflamed areas to assess histologic extent and disease activity

Reporting



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. 2021; 161:1043-1051.

Enhancing Detection

- Dye spray chromoendoscopy (DCE, with indigo carmine or methylene blue), should be considered, especially if using standard-definition endoscope or history of dysplasia
  - With DCE, 2x more dysplasia seen than standard; 1.6x more than high-definition
- If using high definition endoscope, virtual chromoendoscopy is a suitable alternative
  - NBI for Olympus, *i*-scan for Pentax, Fuji intelligent color enhancement for Fujifilm
- Extensive nontargeted biopsies (4 biopsies/10 cm) should be taken from flat mucosa in areas previously affected by colitis when white light endoscopy is used without DCE or virtual chromoendoscopy but not routinely required if done with high definition endoscope
  - Should still consider extensive non targeted biopsies if history of dysplasia/PSC

Management of Visible and Invisible Dysplasia

Endoscopic Assessment	Management	Next Colonoscopy
<2 cm + resectable (no submucosal fibrosis/invasion) + no histologic features of invasive cancer	Endoscopic resection with continued surveillance	3-6 mos: HGD/ incomplete resection 12 mos: >1 cm, LGD 24 mo: <1 cm or pedunculated, LGD
≥2 cm, complex, incomplete resection, local recurrence	Endoscopic resection with intensive surveillance v surgery	q3-6 mo for first year (if resected)
Unresectable or invasive cancer on histology	Surgery	
Invisible dysplasia (non-targeted bx) or poorly delineated lesion (targeted bx)	Confirm histology with 2nd pathologist Treat inflammation Perform DCE	Use DCE to unmask subtle lesions If no lesion seen, take nontargeted bx in areas of prior dysplasia

Management When No Visible Dysplasia on DCE

Endoscopic Assessment	Management	Next Colonoscopy
Persistent high grade or multifocal invisible dysplasia	Surgery	3-6 mo: prior HGD/multifocal dysplasia 6-12 mo: prior LGD Continue surveillance until 2 consecutive negative high quality DCE exams
Persistent unifocal low grade invisible dysplasia or no histologic dysplasia	Intensive surveillance with DCE	

Timing of Next Colonoscopy If No Dysplasia

- **Repeat colonoscopy in 1 year if:** Moderate/severe inflammation, PSC, FH of CRC in FDR age <50, dense pseudopolyposis, history of invisible dysplasia or higher risk visible dysplasia <5 years ago

- **Repeat colonoscopy in 2/3 years if:** Mild inflammation, strong FH of CRC (but no FDR age <50), features of prior severe colitis (moderate pseudopolyps, extensive scarring), history of invisible dysplasia or higher risk visible dysplasia >5 years ago, history of lower risk visible dysplasia <5 years ago

- **Repeat colonoscopy in 5 years if:** continuous disease remission since last colonoscopy with mucosal healing on current exam + either: ≥2 consecutive exams without dysplasia **or** minimal historical colitis extent (ulcerative proctitis or <1/3 colon in CD)

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