

Dysplasia in IBD

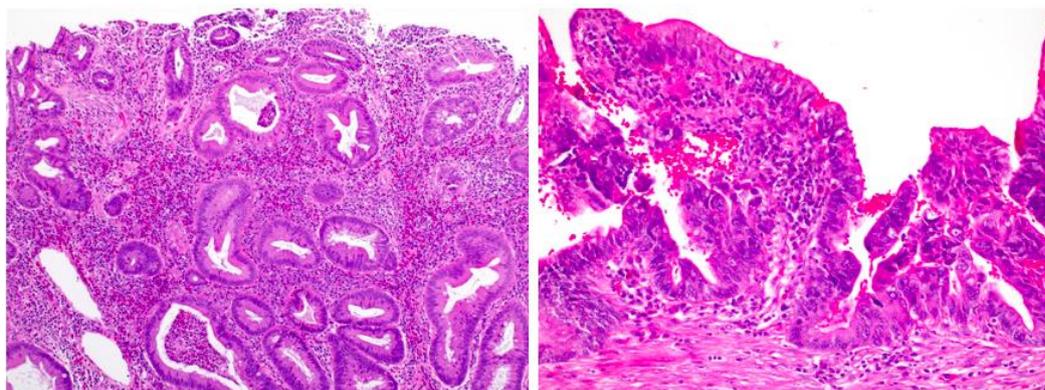
Recommendations from the **SCENIC International Consensus Statement** (2015) ¹ are:

- The terms 'DALM' and 'non-adenoma-like' should be abandoned
- Chromoendoscopy is recommended over white-light endoscopy
- High-definition endoscopy is recommended over standard-definition endoscopy
- Colonoscopic findings in IBD surveillance distinguishes visible or invisible dysplasia. Visible lesions are further subclassified as polypoid and non-polypoid.

Term	Definition
Visible dysplasia	Dysplasia identified on targeted biopsies from a lesion visualized at colonoscopy
Polypoid	Lesion protruding from the mucosa into the lumen ≥ 2.5 mm
Pedunculated	Lesion attached to the mucosa by a stalk
Sessile	Lesion not attached by a stalk: entire base contiguous with the mucosa
Non-polypoid	Lesion with little (< 2.5 mm) or no protrusion above the mucosa
Superficial elevated	Lesion with protrusion but < 2.5 mm above the lumen
Flat	Lesion without protrusion above the mucosa
Depressed	Lesion with at least a portion depressed below the level of the mucosa
Invisible dysplasia	Dysplasia identified on random (non-targeted) biopsies of colon mucosa without a visible lesion

Application of this system obviously requires communication between the colonoscopist and the pathologist as to the clinical findings. The role of the pathologist is to identify dysplasia or invasive adenocarcinoma. Dysplasia is graded as 'indefinite for dysplasia', 'low-grade dysplasia', and 'high-grade dysplasia' ².

A descriptor is added to the histological diagnosis (e.g. 'Polypoid high-grade dysplasia' or 'Invisible low-grade dysplasia'). A lesion is considered completely resected if biopsies from mucosa immediately adjacent to the resection site are clear or if margins from a resection specimen received intact are clear.



Left image: Polypoid low-grade dysplasia. Right image: Non-polypoid high-grade dysplasia.

Management of dysplasia discovered on surveillance colonoscopy

A lesion is considered *resectable* if 1) distinct margins of the lesion could be identified, 2) the lesion appears to be completely removed on visual inspection after endoscopic resection, 3) histologic examination of the resected specimen is consistent with complete removal, and 4) biopsy specimens taken from mucosa immediately adjacent to the resection site are free of dysplasia on histologic examination.

1. Visible lesion – endoscopically resectable:

- a) Polypoid dysplasia with complete resection – surveillance colonoscopy is recommended.
- b) Non-polypoid dysplasia with complete resection – surveillance colonoscopy is suggested. Previous guidelines have suggested colectomy because some non-polypoid dysplastic lesions may not be amenable to endoscopic resection.

For patients with lesions removed in piecemeal or by EMR or ESD – initial follow-up 3-6 months after resection is recommended.

2. Visible lesion – endoscopically unresectable:

Colectomy is recommended due to the high risk of associated invasive carcinoma that may not have been sampled in the biopsy specimen.

3. Endoscopically invisible dysplasia:

The histological diagnosis should be confirmed by a GI pathologist and referral is suggested to an endoscopist with expertise in IBD surveillance using chromoendoscopy with high-definition colonoscopy.

- a) If a visible lesion is identified in the same region of the colon as the invisible dysplasia – endoscopic resection and surveillance colonoscopy if complete resection.
- b) If no visible dysplasia is identified – discuss colectomy versus intensive surveillance.

4. Lesions reported as ‘indefinite for dysplasia’:

Repeat biopsy after therapy to reduce the inflammatory background that can obscure histological interpretation is recommended.

Sporadic polyps (conventional adenoma and serrated polyps) do frequently occur in IBD and are not considered by this consensus statement. They are managed in accordance with standard polyp guidelines.

References

1. Laine L, Kaltenbach T, Barkun A, et al. SCENIC international consensus statement on surveillance and management of dysplasia in inflammatory bowel disease. *Gastroenterology* 2015;148:639-651 e628.
2. Chiu K, Riddell RH, Schaeffer DF. DALM, rest in peace: a pathologist's perspective on dysplasia in inflammatory bowel disease in the post-DALM era. *Mod Pathol* 2018.