EDITORIAL

Endoscopic submucosal dissection for nonpolypoid colorectal dysplasia in patients with inflammatory bowel disease: in medias res

The implementation of the Surveillance for Colorectal Endoscopic Neoplasia Detection and Management in Inflammatory Bowel Disease (IBD) Patients: International Consensus Recommendations (SCENIC) is under way.[1] The recommendations are being incorporated into practice.[2] The chromoendoscopy and targeted biopsy technique continues to be disseminated in gastroenterology meetings. Training sessions[2] and methods to perform chromoendosopy and targeted biopsy have been conducted and described, respectively.[3,4] The SCENIC publications are well referenced. The SCENIC classification of superficial dysplasia (Fig. 1) has been used in many newly published studies, replacing the terms "dysplasia-associated" mass or lesion, "adenoma-like," and "non–adenoma-like."[5] An image atlas[6] and videos of how to perform chromoendoscopy and targeted biopsy[7,8] are freely available.

In this issue of *Gastrointestinal Endoscopy*, we are particularly pleased that Kinoshita et al[9] fill, in part, the gap in the literature on the potentials of endoscopic resection in the management of nonpolypoid colorectal dysplasia (NP-CRD). Their publication is needed for the full implementation of SCENIC. Although the SCENIC recommendations include the following statement, "After complete removal of endoscopically resectable nonpolypoid dysplastic lesions, surveillance colonoscopy is suggested rather than colectomy," the authors of SCENIC recognized that the quality of evidence was very low. In addition, they were cognizant that NP-CRD could confer a higher risk of colorectal cancer (CRC) and that removal of NP-CRD could be more technically difficult, requiring EMR or endoscopic submucosal dissection (ESD).[10,11]

The detection of NP-CRD is the first step in the prevention of CRC in patients with IBD. Thus, these lesions must be detected early and completely, and preferably they are amenable to endoscopic resection.[12] To achieve early detection, we need the right mindset: a mindset that is open to the idea that NP-CRD can occur in all patients with colonic IBD and that chromoendoscopy enhances the yield to detect it. For example, 20% of the patients in the study by Kinoshita et al[9] had disease limited to the left side of the colon. The patients also had widely variable lengths of colitis.

In the context of detecting NP-CRD, the indigo carmine and methylene blue dyes function as contrast agents, which enhance the appearance of the lesions (Fig. 2). The dye highlights the border of the lesion by pooling at its periphery. In addition, the dye fills the innominate grooves (the fine mucosal creases) of the colon mucosa. Because NP-CRD lesions interrupt the innominate grooves, the borders of NP-CRD can be traced to where the grooves suddenly end. The dye makes the morphology of the lesion stand out by pooling into depressions or ulcerations.[13]

The need for ESD to remove large sessile lesions and NP-CRD poses a major problem to patients with colonic IBD in many Western countries because ESD has not become universally available. There are, however, reasons to be optimistic.

The differential staining between the NP-CRD and the surrounding tissue allows us to better visualize the lesion itself (Fig. 3). The NP-CRD appears redder, whereas the surrounding area is bluer. This phenomenon, which we call the red-in-blue sign, probably occurs because dysplasia often has shallower and narrower glands. In addition, it is likely that the slight elevation contributes to the lesion having less dye on its surface. Although we use it in our practice, at present, unfortunately, the sensitivity and specificity of this red-in-blue sign has not been described.

Historically, detailed analysis of the pit patterns of colorectal lesions by the use of chromoendoscopy and interpretation of a lesion's histologic features has been based on the classification by Kudo et al.[14] The criteria were developed primarily from observations of surface patterns in noncolitic colorectal lesions. However,

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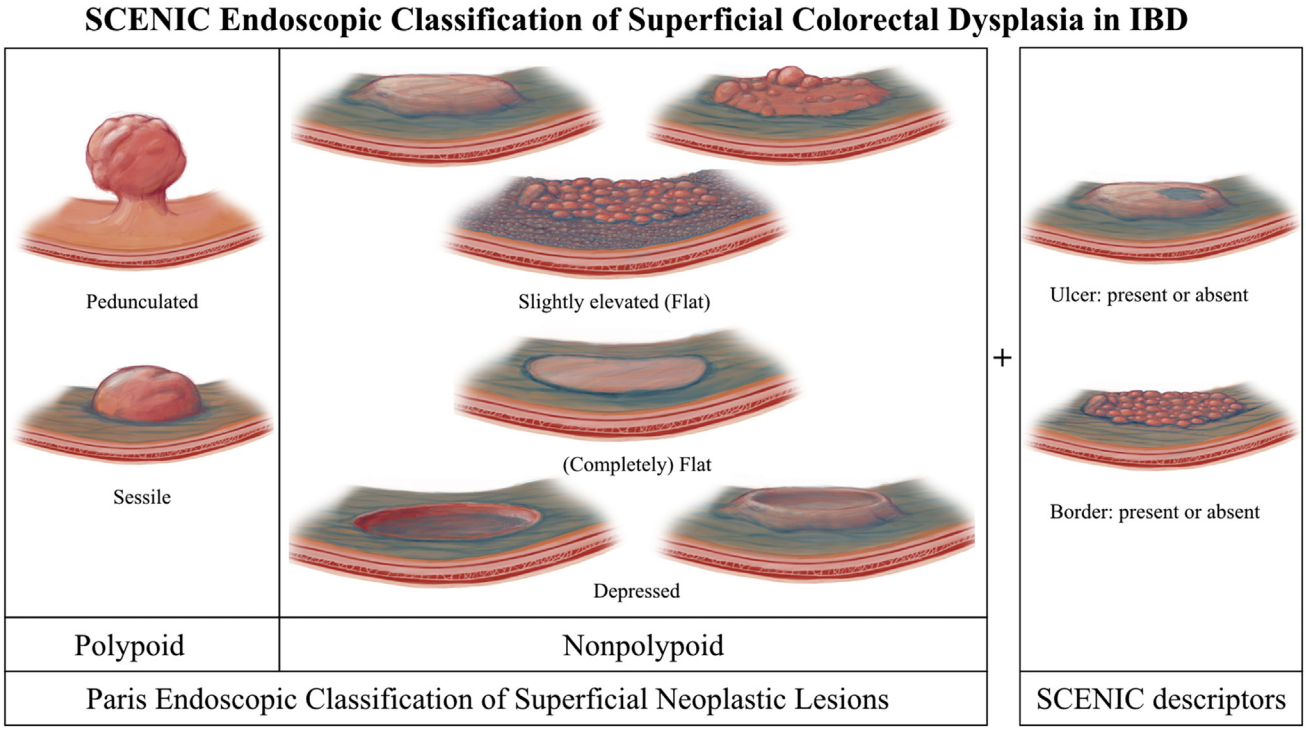

Figure 1. Surveillance for Colorectal Endoscopic Neoplasia Detection and Management in Inflammatory Bowel Disease Patients: International Consensus Recommendations (SCENIC) endoscopic classification of superficial colorectal dysplasia in patients with inflammatory bowel disease (IBD). The classification is a modification of the Paris endoscopic classification of superficial neoplastic lesions. The modifications included the addition of terms (presence or absence) to describe ulceration and border of the lesion. The SCENIC classification replaces the terms dysplasia-associated lesion or mass and adenoma-like and non–adenoma-like. Note that in patients with IBD, the nonpolypoid colorectal dysplasia in IBD is often completely flat (or the same level) compared with the surrounding mucosa. This is different from patients without IBD, who rarely have completely flat dysplasia. Thus, in patients without IBD "flat lesion" is colloquially used to describe lesions that are slightly (superficially) elevated in comparison with the surrounding mucosa. Descriptions of the terms are listed below.

Term	Description
Visible dysplasia	Dysplasia identified on targeted biopsy specimens 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 to the mucosa by a stalk; entire base is contiguous with the mucosa
Nonpolypoid	Lesion with little (<2.5 mm) or no protrusion above the mucosa
Superficial elevated	Lesion with protrusion but <2.5 mm above the lumen (less than the height of the closest cup of a biopsy forceps)
Flat	Lesion without protrusion above the mucosa
Depressed	Lesion with at least a portion depressed below the level of the mucosa
General descriptors	
Ulcerated	Ulceration (fibrinous-appearing base with depth) within the lesion
Border	
Distinct border	Lesion's border is discrete and can be distinguished from surrounding mucosa
Indistinct border	Lesion's border is not discrete and cannot be distinguished from surrounding mucosa
Invisible dysplasia	Dysplasia identified on random (nontargeted) biopsy specimens of colon mucosa without a visible lesion

Modified from Soetikno et al, Dig Endosc 2016;28:266-73, and Laine et al, Gastrointest Endosc 2015;81:489-501e26.

colorectal lesions in patients with IBD have proved a challenge to interpret. Kinoshita et al[9] and others showed that applying the classification by Kudo et al[14] in the evaluation of NP-CRD in patients with IBD was as good as a coin flip in predicting low-grade dysplasia, (ie, approximately one half of the lesions they diagnosed by endoscopy to be low grade were actually high-grade dysplasia or cancer).[4] A recent image analysis study of