

27TH ANNUAL CONFERENCE OF
THE EGYPTIAN SOCIETY OF COLON & RECTAL SURGEONS

COLON & RECTAL



26 - 28 **AUG** 20
HILTON HELIOPOLIS 26

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Business with Intelligence!

Neoplasia in UC: resection versus surveillance/endoscopic resection

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This topic is confusing



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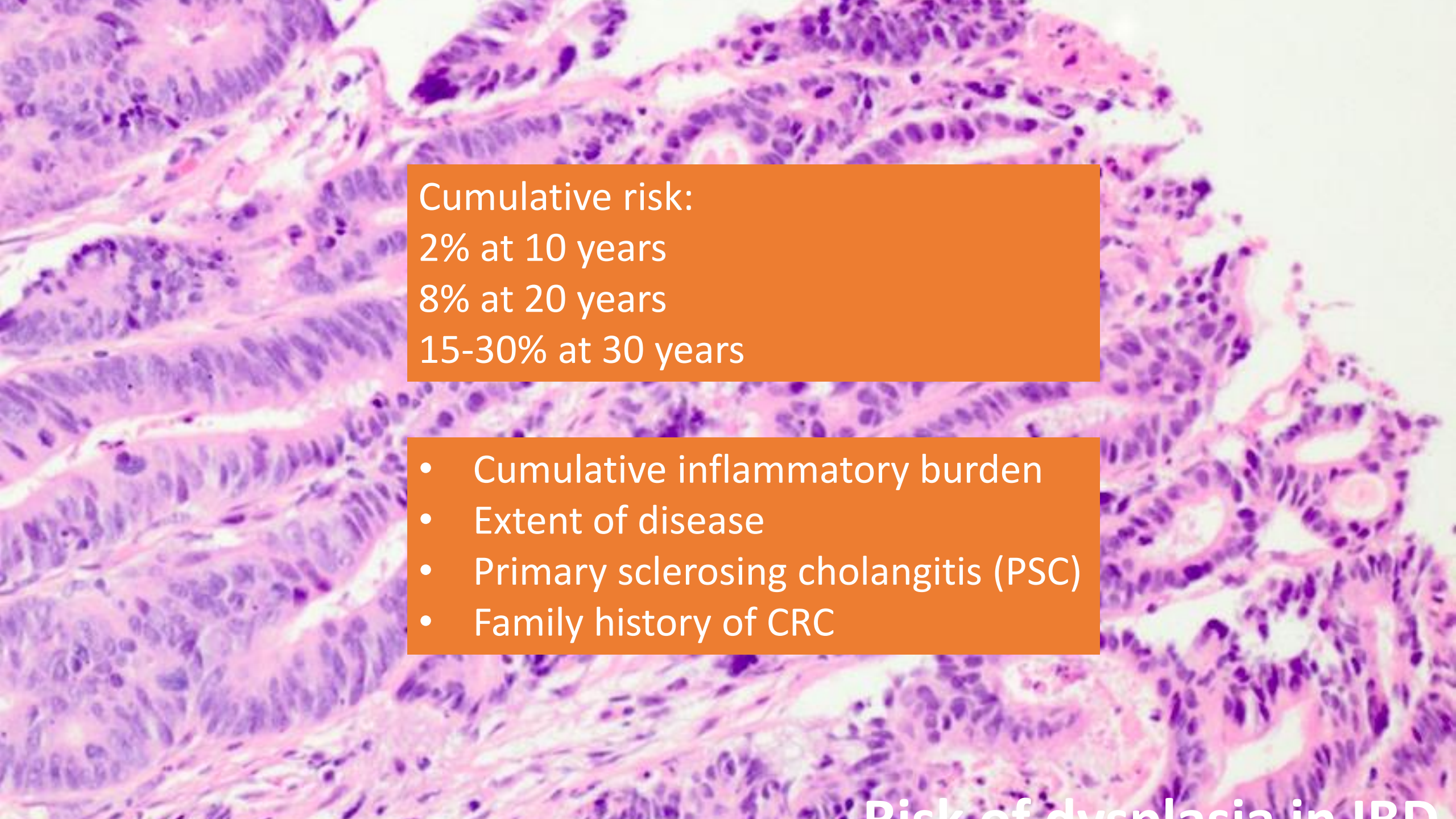
1. When is surveillance indicated?
2. When is endoscopic management indicated?
3. When is surgery indicated?
4. What type of surgery is indicated?

Objectives



IBD-related Colorectal Cancer vs. sporadic CRC

- **Worse Survival Outcomes:** IBD-CRC patients have lower overall survival than sporadic patients
- **Younger Presentation:** Patients with IBD are frequently diagnosed with colorectal cancer at a younger age
- **Crohn's vs. Ulcerative Colitis:** Patients with Crohn's disease-related CRC may face a more unfavourable prognosis compared to those with ulcerative colitis-related CRC



Cumulative risk:
2% at 10 years
8% at 20 years
15-30% at 30 years

- Cumulative inflammatory burden
- Extent of disease
- Primary sclerosing cholangitis (PSC)
- Family history of CRC

Risk of dysplasia in IBD

Options for patients with IBD

Do nothing

Screen endoscopically

Endoscopic therapy

Surgery



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Screening colonoscopy should be offered to all IBD patients 8 years after symptom onset*

ECCO

Lower risk

Colitis affecting <50% colon
Extensive colitis with minimal endoscopic or histological inflammation

Intermediate risk

Extensive colitis with mild to moderate endoscopic and/or histological inflammation
CRC in first-degree family member >50 years

High risk

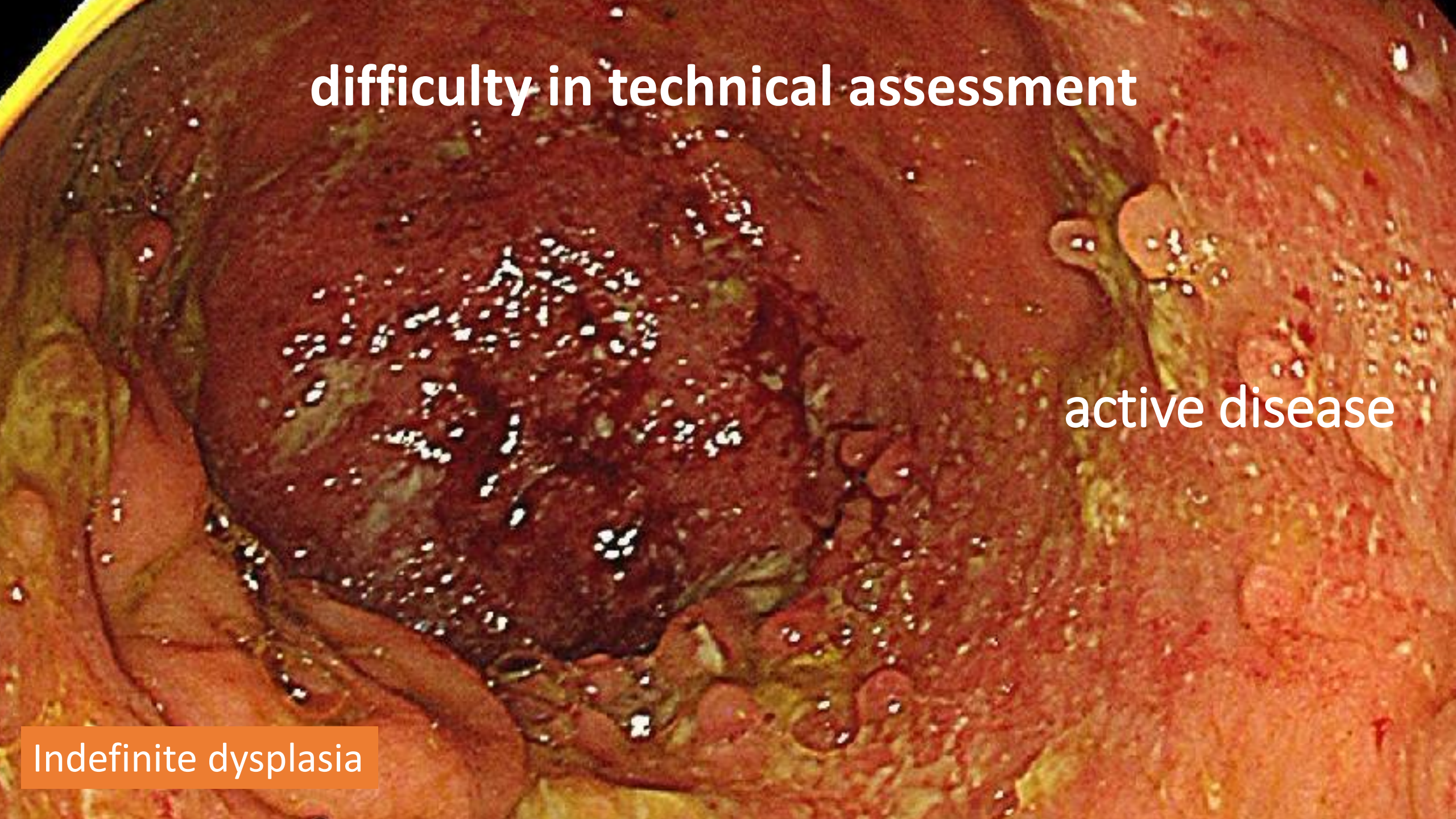
Extensive colitis with severe endoscopic and/or histological inflammation
CRC in first-degree family member ≤ 50 years
PSC**
Stricture in past 5 years
Dysplasia in past 5 years***

Consider additional risk factors, such as age at diagnosis and male gender when possible, surveillance colonoscopy should be performed during remission
DCE, VCE, or HD-WLE**** should be performed, with targeted biopsies

Surveillance colonoscopy
every 5 years

Surveillance colonoscopy
every 2–3 years

Surveillance colonoscopy
annually

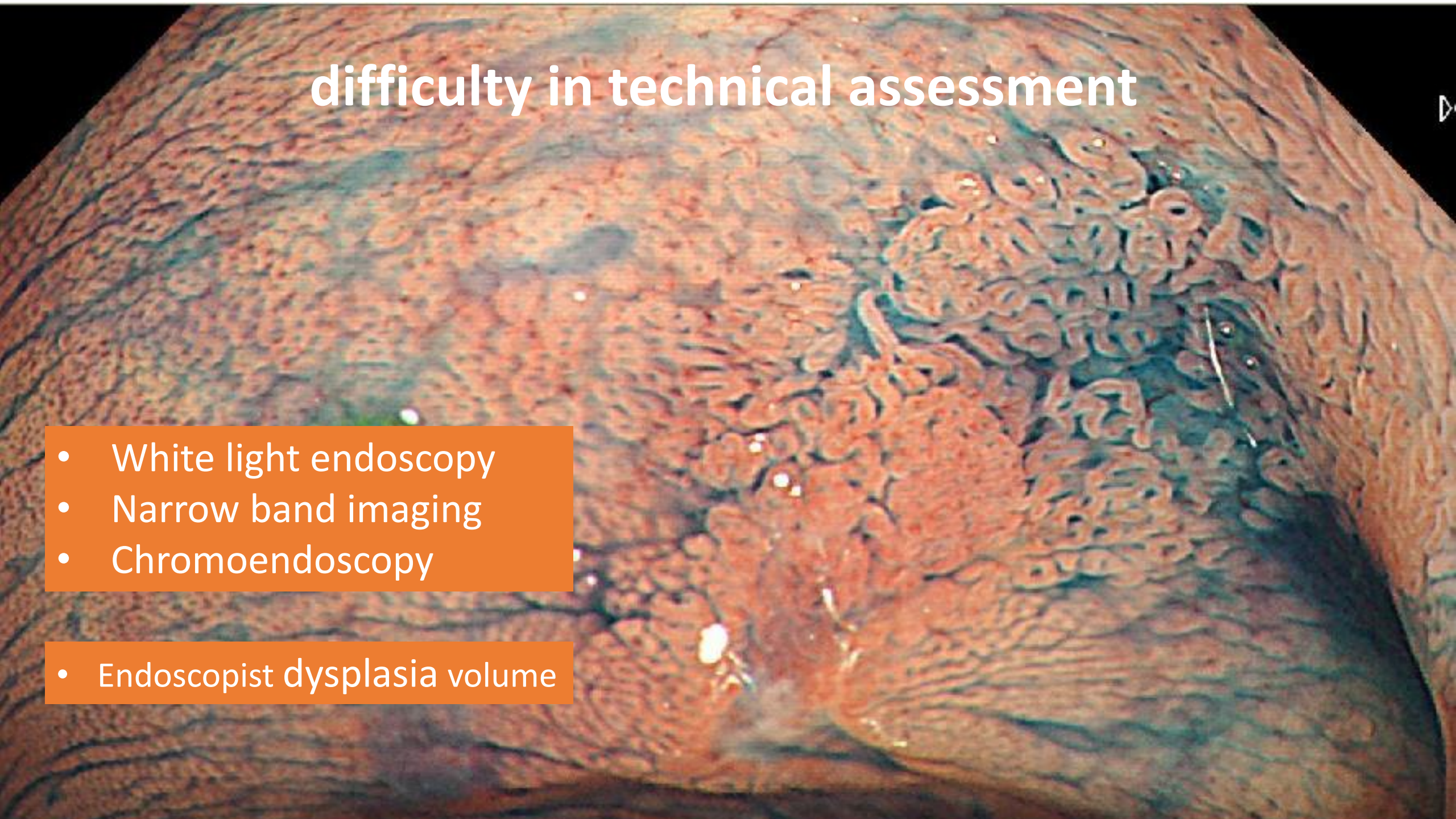
An endoscopic view of the colonic mucosa. A large, dark, ulcerated lesion is visible in the center-left, surrounded by inflamed, reddish mucosal tissue. The lesion has a granular, necrotic appearance. The surrounding mucosa shows signs of active inflammation with redness and some smaller ulcerations.

difficulty in technical assessment

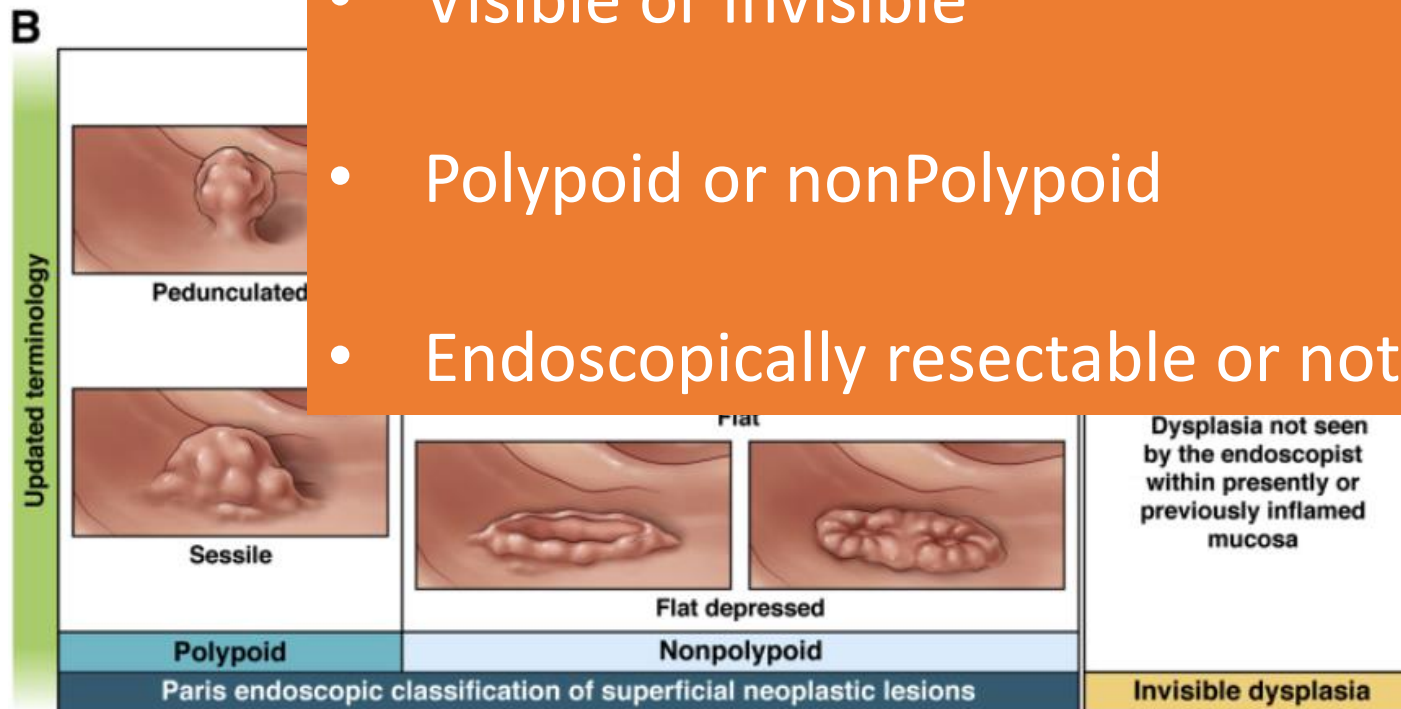
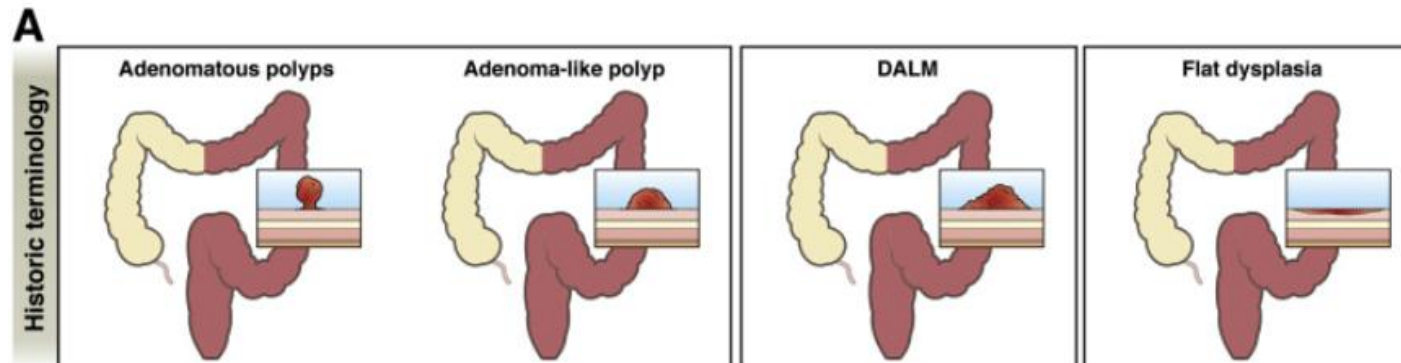
active disease

Indefinite dysplasia

difficulty in technical assessment

The image is an endoscopic view of the colonic mucosa. The mucosal surface is covered with numerous crypts. A specific area on the right side of the frame is highlighted with a blue dye, likely indigo carmine, which is used in chromoendoscopy to enhance the visualization of mucosal abnormalities. This highlighted area shows a more irregular and disorganized crypt architecture compared to the surrounding normal mucosa, which is a characteristic finding of dysplasia. The overall image has a reddish-pink hue from the mucosal color and the blue from the dye.

- White light endoscopy
 - Narrow band imaging
 - Chromoendoscopy
-
- Endoscopist dysplasia volume



- Visible or Invisible
- Polypoid or nonPolypoid
- Endoscopically resectable or not

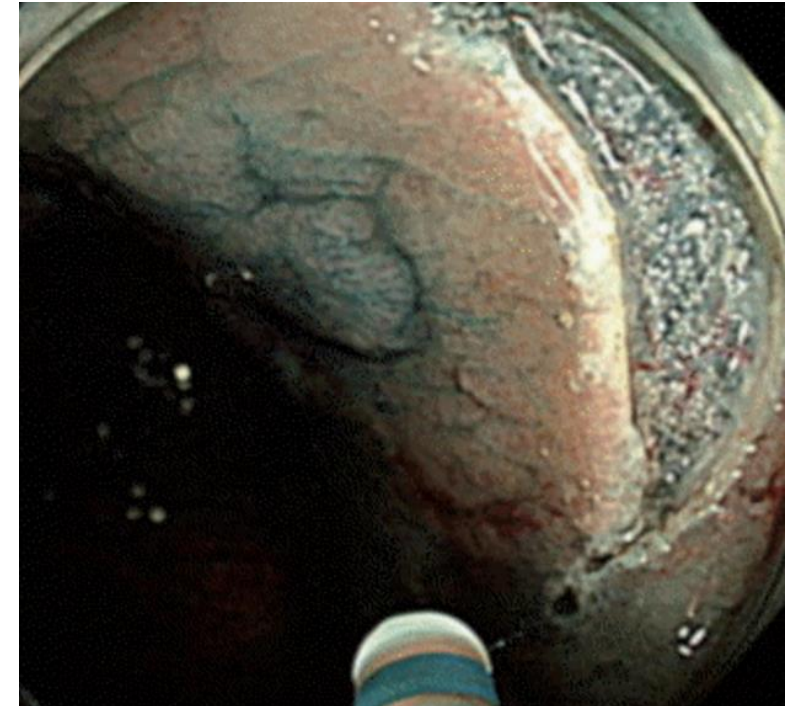
Changing Classification

In addition to Paris classification, report lesion size, morphology, border clarity, ulceration, location, if within area of colitis, completeness of resection, and any special techniques used to visualize.

Endoscopic resection

The SCENIC criteria for endoscopic excision (mucosal resection or submucosal dissection) include the following steps:

- identification of distinct margins of the lesions
- complete removal confirmed after endoscopic resection
- histologic examination of the specimen to confirm complete removal



When is surgery indicated?



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International Guideline recommendations

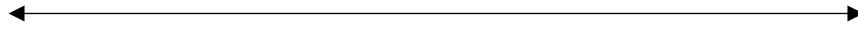
	Visible dysplasia	Invisible dysplasia	Multifocal dysplasia
SCENIC 2015 & BSG 2019	Refer for (procto) colectomy if: Not endoscopically resectable	Confirm histology and repeat chromoendoscopy Manage as per discovered dysplasia	Refer for colectomy
AGA 2021	Refer for colectomy (partial or total) if: - Not endoscopically resectable, i.e. >2cm, no clearly defined margins, signs of invasive malignancy, failure to lift - Invasive cancer on histology Consider colectomy if: - Complex, incomplete resection, local recurrence	Confirm histology and repeat chromoendoscopy Refer for colectomy if: - Persistent unifocal HGD - Multifocal invisible dysplasia	Refer for colectomy
ECCO 2023	Refer for (total/subtotal/IPAA) colectomy if: - Not endoscopically resectable - Invasive cancer on histology Consider colectomy if: - Non-polypoid large lesion >2cm, no distinctive border, signs of invasive malignancy, or fibrosis	Confirm histology and repeat chromoendoscopy Refer for surgery if: - Persistent unifocal HGD - Multifocal invisible dysplasia	Refer for surgery if: Not amenable to endoscopic resection in selected cases

Does surgery always need to be radical?

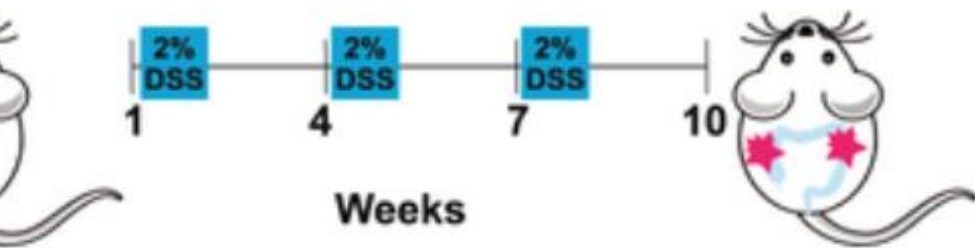


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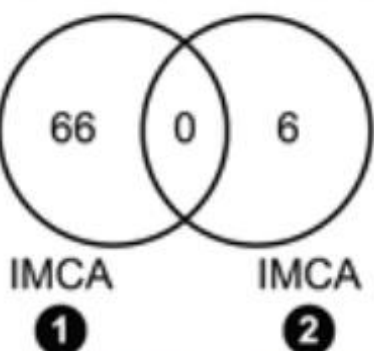
endoscopy



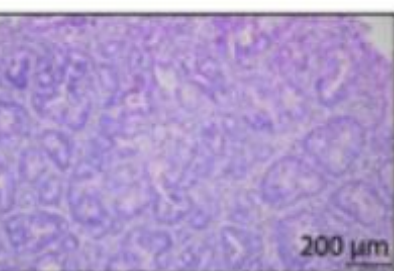
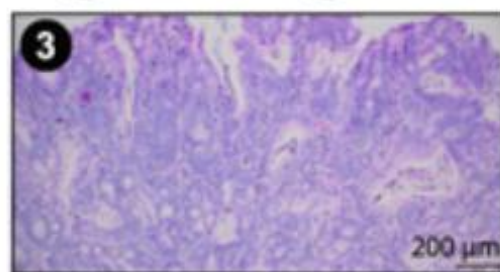
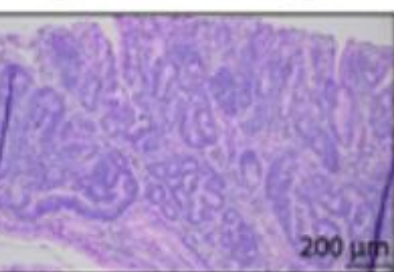
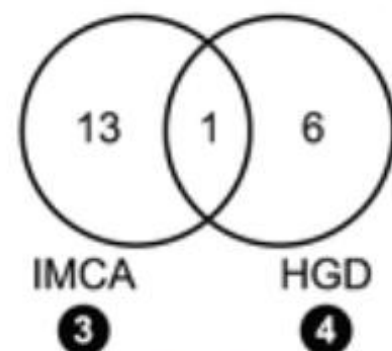
PROCTO-
COLECTOMY



Number of Mutations

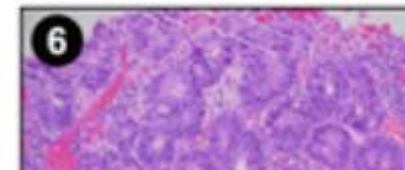
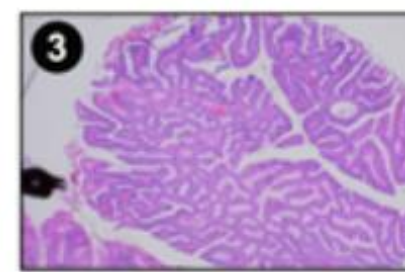
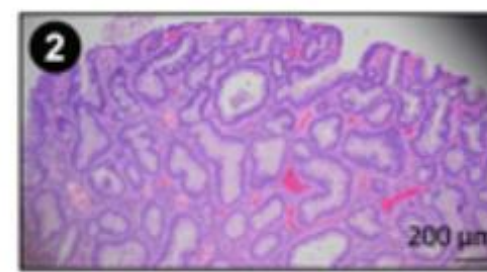
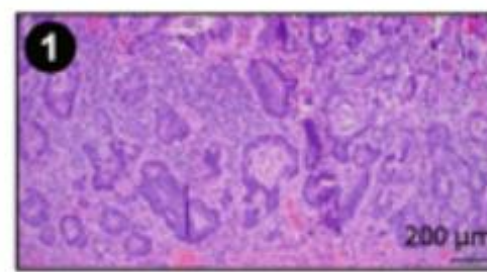
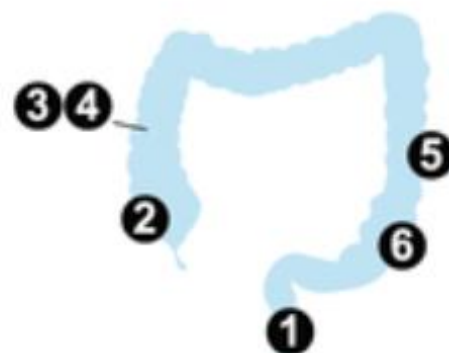
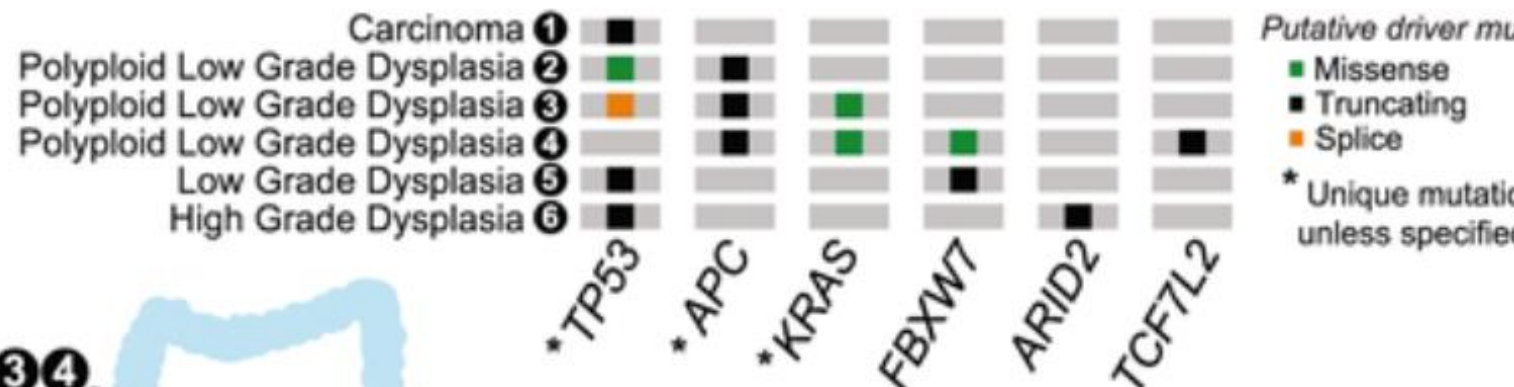


Number of Mutations



b

Age 63 years at CAC diagnosis
<10 year history of Crohn's Disease



Single focus or 'field change'?

What is the likelihood of synchronous lesions?

Dysplasia prognosis

Pooled estimates (5 studies) for **incidental synchronous cancers found at colectomy** performed for a preoperative diagnosis of:

- | | |
|----------------------------------|-------|
| • VISIBLE HIGH grade dysplasia | 13.7% |
| • INVISIBLE HIGH grade dysplasia | 11% |
| • VISIBLE LOW grade dysplasia | 2.7% |
| • INVISIBLE LOW grade dysplasia | 2.4% |

Study ID	Segmental Resection cohort size	Disease duration at colectomy (years)	Length of Follow-up	Total metachronous lesions reported		Time to recurrence	Stage of recurrent lesions	
				Cancer (%)	Dysplasia (%)		Cancer	Cancer
Klos et al., 2016	6	SR: Median 24 (range 9-30)	Median 2.7 years (IQR 1.3 - 10.1)	2 (33.3)	ns	<2 years	Metastatic – 2	ns
Bogach et al., 2021	678	ns	Median 5.9 years	ns	ns	ns	ns	ns
Birch et al., 2022	2858	ns		ns	ns	Cumulative rates of cancer recurrence: 1.6% within 3 years 6.3% within 15 years	ns	ns
Frontali et al., 2020	72	ns	600 months)	5 (4.2)	5 (4.2)	Median 1.58 years (range 0.2 -13.2 years)	Unknown – 3	Unknown - 3
Maser et al., 2013	75	Median 11 (range 0-38)	Mean 5.3 years; median 2.9 years (range 0-38yrs)	22 (29.3)	4 (5.3)	Median 3 years (1 – 38 years)	Localised – 20 Regional – 3 Metastatic – 2 (25 total recurrences, 3 synchronous)	LGD – 2 HGD – 2
Krugliak Cleveland et al., 2019	17	Median 20.5 (range 5–46)	Median 17 months (range 3-228)	0	4 (23.5)	-	0	LGD – 4
Khan et al., 2017	25	SR: Median 7	Median 9 years	0*	ns	-	Metastatic – 1 (liver)	ns
Lindberg et al., 2006	22	SR: Median 13 (range 0-39) SR and later PC: Median 8 (range 1-36)	ns	0	3 (13.6)	-	0	LGD - 3

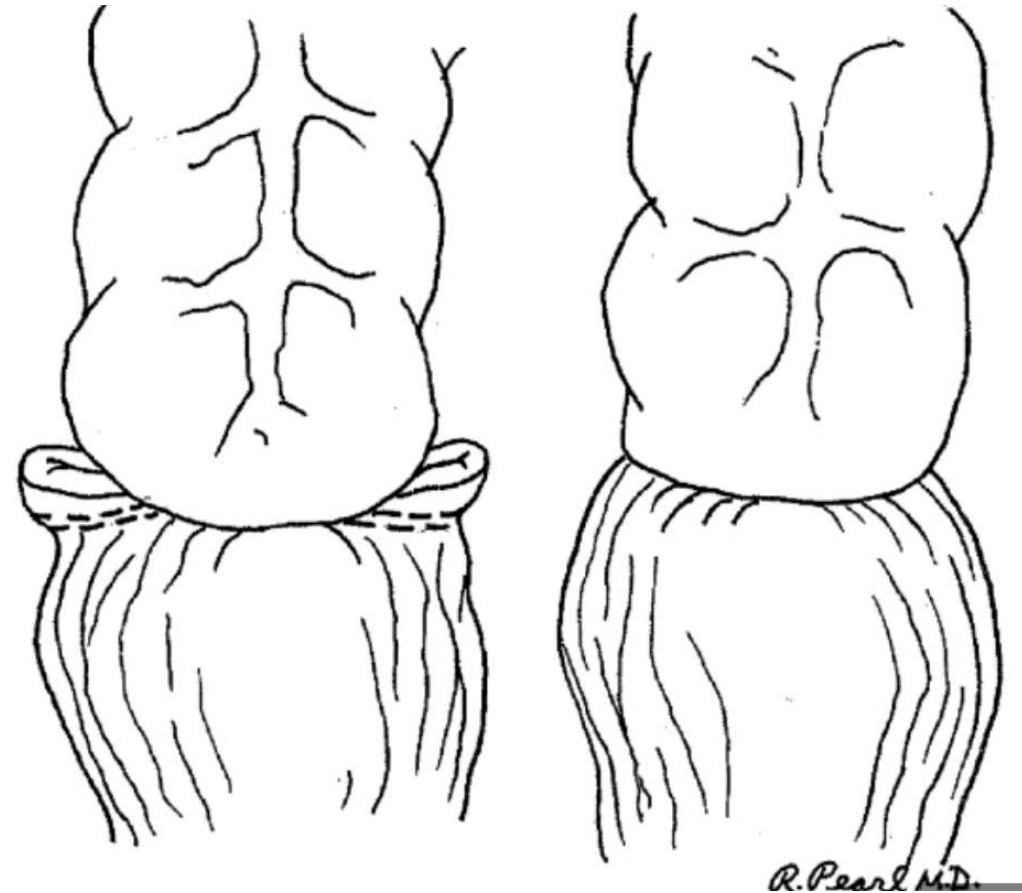
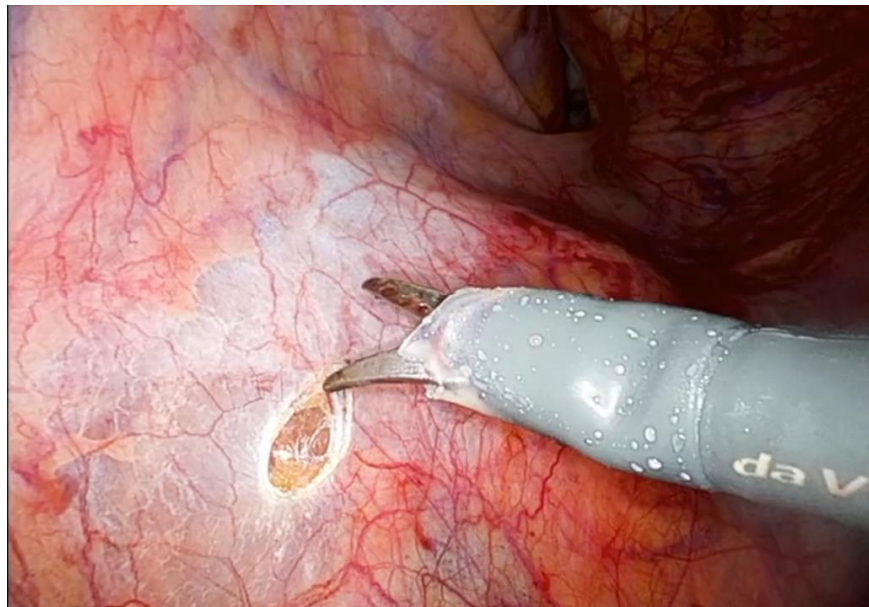
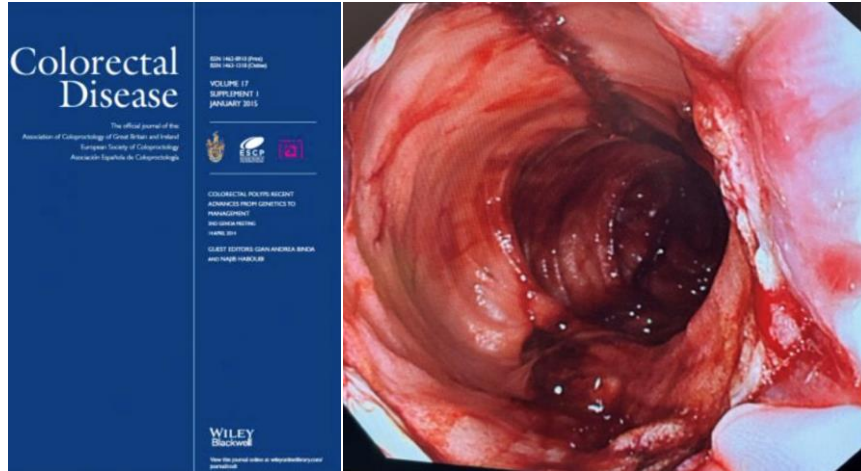
What should we be doing surgically and what are we actually doing?



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An early experience in Robotic Ileoanal Pouch surgery with Robotic intracorporeal Single Stapled Anastomosis (RISSA) at a tertiary referral centre

Mohammed Deputy, Francesca Pitman, Kapil Sahnan, Danilo Miskovic, Omar Faiz



RISSA



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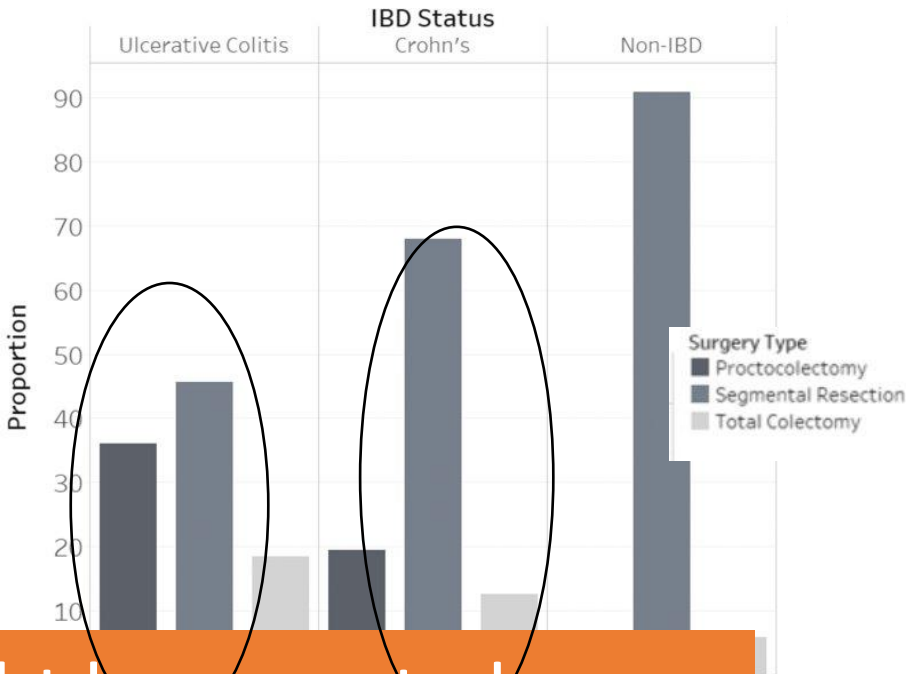
What are we actually doing?

	IBD		No IBD		P value	Crohn's		UC	
	n	%	n	%		n	%	n	%
Type of major resection									
Total colectomy	1,345	36.3	7,823	2.9	<0.01	171	15.4	977	44.1
Segmental	2,358	68.7	261,059	97.1		937	84.6	1,240	55.9
Total	385,945		5,141			1,512		3,123	

CRC, colorectal cancer; IBD, inflammatory bowel diseases; IBD-U, IBD unclassified; NHS, National Health Service.

^aCounts <

^bFull route



- Not as many proctocolectomies as might be expected
- Overall survival similar in segmental vs extended resection

ENGLAND



CANADA



Extensive resection
indicated when neoplasia
coupled with:

- Multifocal disease
- Invisible dysplasia

Segmental resection
considered in:

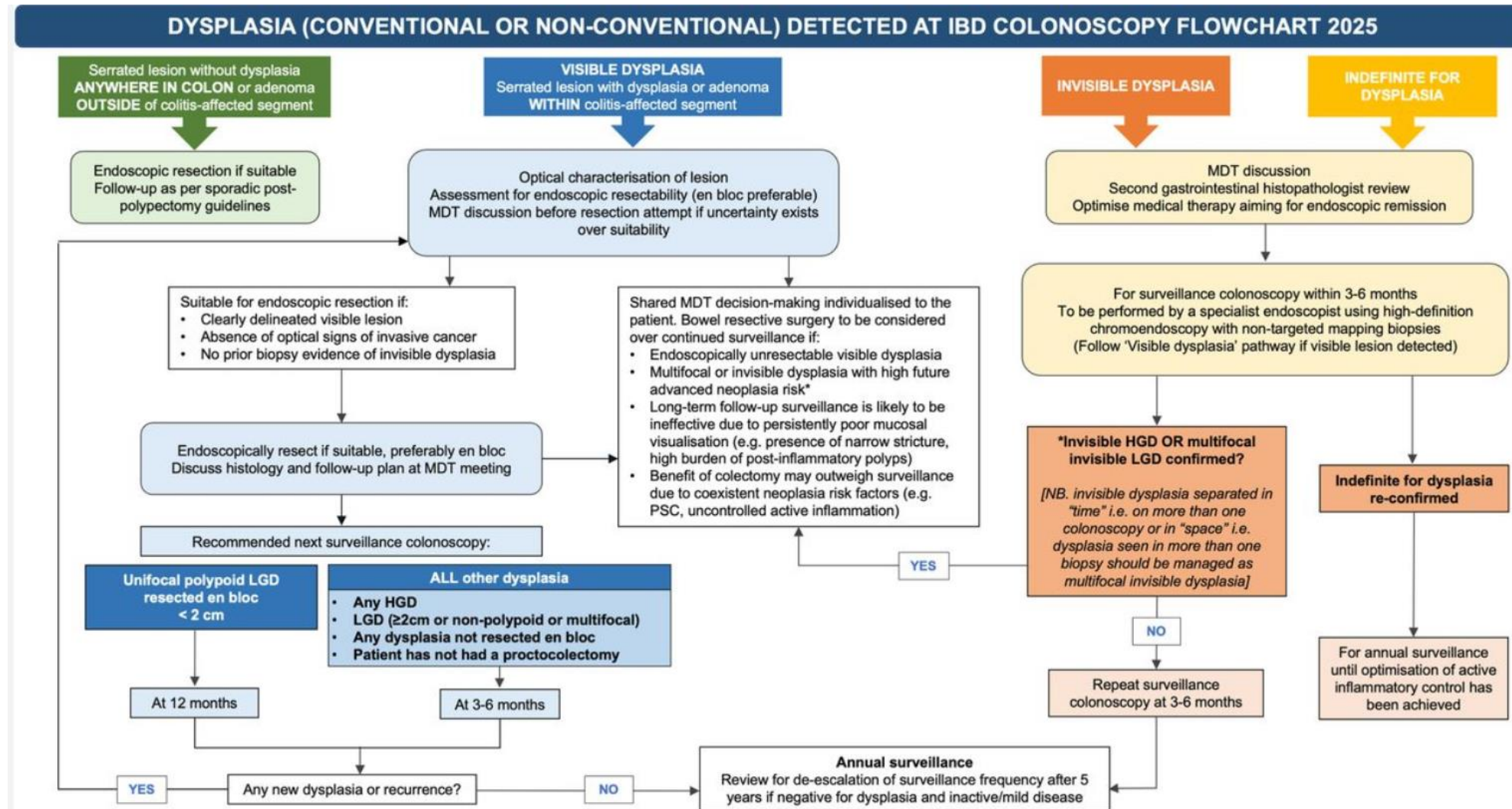
- Unifocal disease
- Quiescent inflammation
- Well counseled patient

Summary



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BSG Guidelines for dysplasia management - summary



1. When is surveillance indicated?

- *use national IBD screening guidelines*

2. When is endoscopic management indicated?

- *wherever possible and clear margins achieved*

3. When is surgery indicated?

- *when endoscopic management not appropriate:
cancer, endoscopically unresectable HGD, multifocality and invisibility*

4. What type of surgery is indicated?

- *Extensive – true multifocality or invisibility, extensive inflammation*
- *Segmental – localized neoplasia and risks of synch or metachronous cancer understood by patient*

Conclusions

- A pragmatic approach to IBD neoplasia surgery is often necessary to achieve the holistic goals of a patient

Thank you

