3rd IBDHORIZONS UPDATES FOR APP

IBDH

King Street Ballroom, October 29, 202

CANCER SCREENING AND IBD: RATIONALE AND REVIEW

IBDH

ARS QUESTION 1

Which is **TRUE** regarding surveillance of dysplasia in IBD

A. Standard definition endoscopy is not an acceptable screening method
B. Virtual chromo-endoscopy is a valid surveillance method
C. Recommended surveillance intervals for both pancolitis and proctitis are the same
D. Presence of any dysplasia is indication for urgent total colectomy

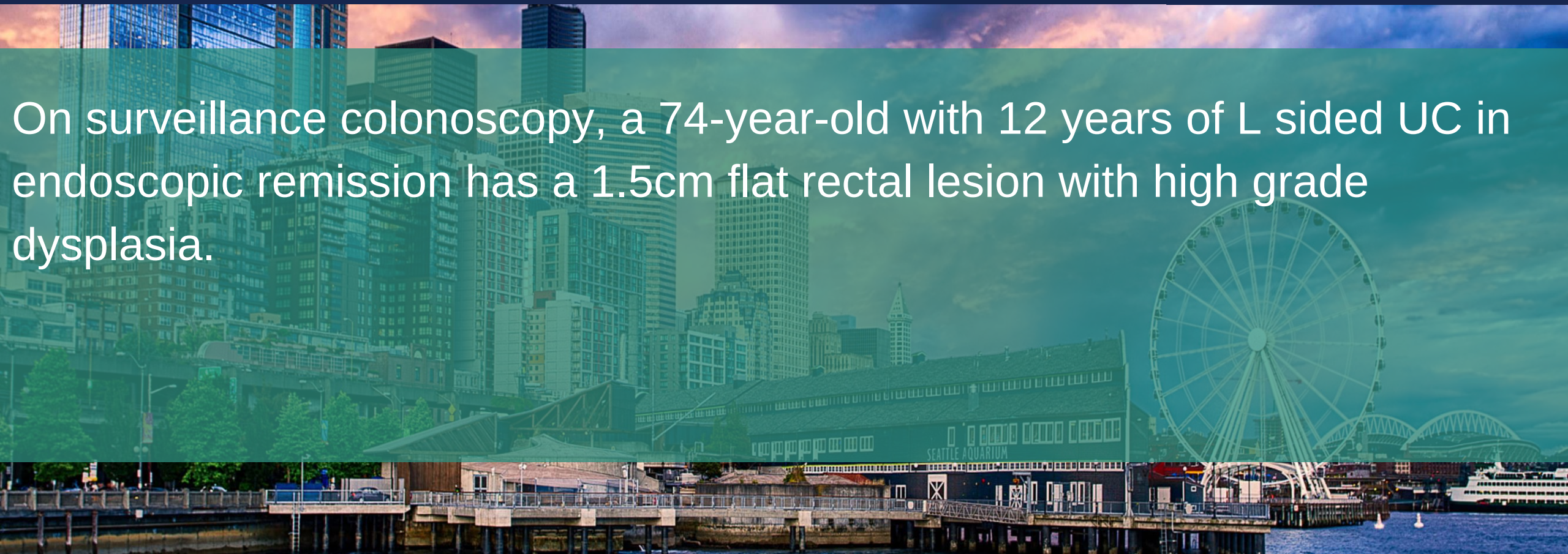
ARS QUESTION 2

Which statement is TRUE:

A. Most dysplastic lesions in IBD are not endoscopically visible
B. Colectomy is indicated in all cases of high-grade dysplasia
C. Disease duration, extent, and activity are associated with risk of dysplasia
D. Having PSC reduces risk of dysplasia

CLINICAL CASE 5

IBDH



On surveillance colonoscopy, a 74-year-old with 12 years of L sided UC in endoscopic remission has a 1.5cm flat rectal lesion with high grade dysplasia.

Cancer Screening and IBD: Rationale and Review

Jason Harper, MD
Clinical Associate Professor, UW Department of Gastroenterology

Clinical Director, Harborview IBD Clinic

@daleleemd

JASON HARPER

Dr. Jason Harper is Director of the Harborview Medical Center Inflammatory Bowel Disease (IBD) program and is a UW Clinical Assistant Professor.
He is a member of the Crohn's and Colitis Foundation and is presently on the regional Medical Advisory Committee.
Dr. Harper's clinical and research interests include IBD (ulcerative colitis and Crohn's disease).

IBDHORIZONS

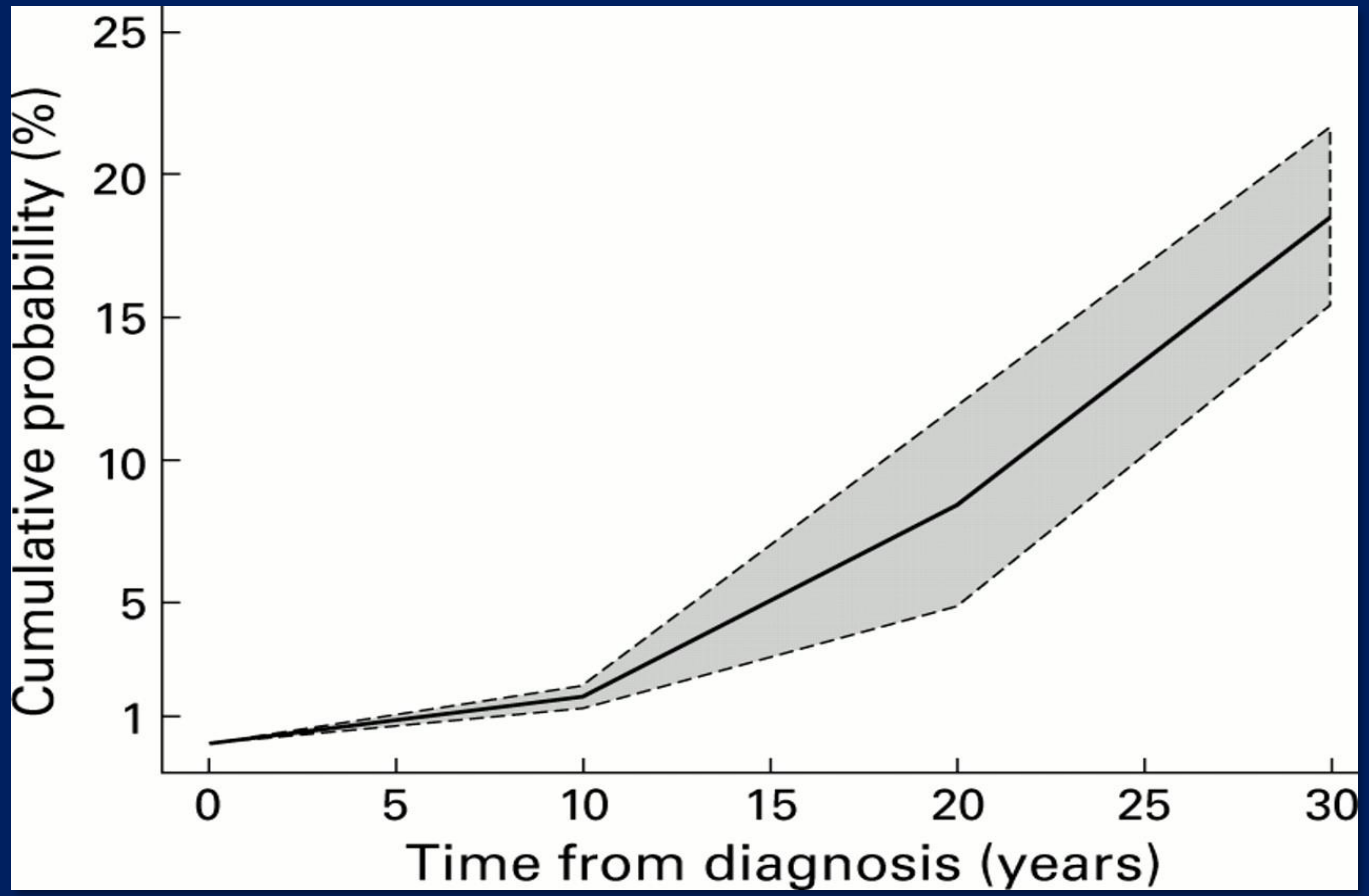
DISCLOSURES

- No relevant financial relationships to disclose

Outline

- Historical Perspective: Why?
- Risk stratification and planning: When?
- Special scenarios: Who?
- Review of Modalities: How?

Cumulative risk of developing colorectal cancer for any patient with ulcerative colitis based on stratified data (using stratified incidence, n=19)



GUT

J A Eaden et al. Gut 2001;48:526-535

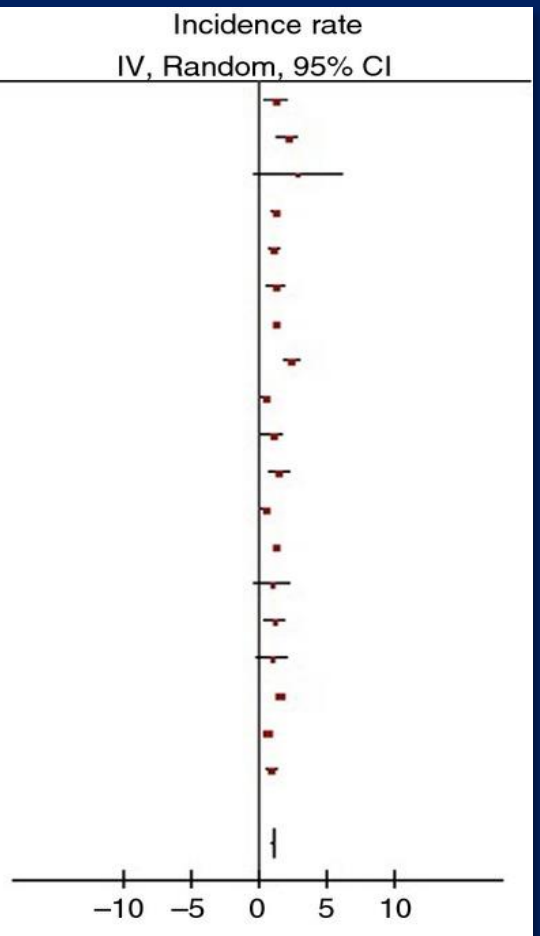
IBDHorizons

Systematic review with meta-analysis: the declining risk of colorectal cancer in ulcerative colitis

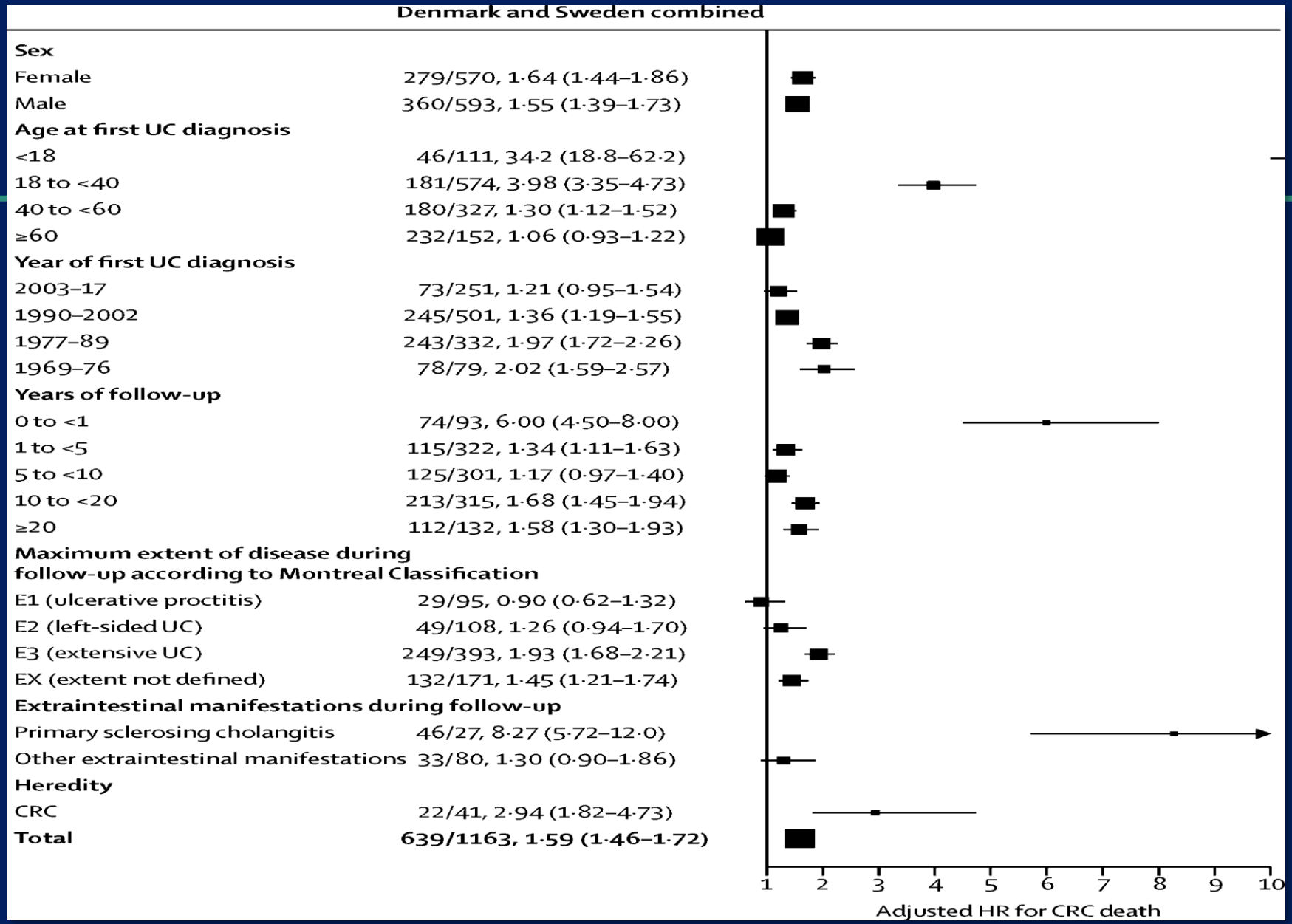
Study	Year	Incidence rate	SE	Weight	Incidence rate IV, Random, 95% CI
Hendriksen	1985	1.3343499	0.504	3.3%	1.33 [0.35, 2.32]
Gilat.	1988	2.18432328	0.42791292	4.0%	2.18 [1.35, 3.02]
Rutegard	1989	2.9440628	1.69725	0.4%	2.94 [–0.38, 6.27]
Mellemkjaer	1995	1.28357935	0.19793344	7.0%	1.28 [0.90, 1.67]
Karlen	1999	1.178133	0.21497008	6.7%	1.18 [0.76, 1.60]
Palli	2000	1.26951885	0.4012022	4.3%	1.27 [0.48, 2.06]
Askling	2001	1.32904941	0.13086808	7.9%	1.33 [1.07, 1.59]
Bernstein	2001	2.49173659	0.35551861	4.8%	2.49 [1.79, 3.19]
Winther	2004	0.58322118	0.16170927	7.5%	0.58 [0.27, 0.90]
Jess	2006	1.07777977	0.43976457	3.9%	1.08 [0.22, 1.94]
Lakatos	2006	1.51798225	0.42069286	4.1%	1.52 [0.69, 2.34]
Jess.	2007	0.59854639	0.15992037	7.5%	0.60 [0.29, 0.91]
Soderlund	2009	1.36363636	0.11728308	8.0%	1.36 [1.13, 1.59]
Jakobsen	2009	0.999001	0.70604744	2.1%	1.00 [–0.38, 2.38]
Manninen	2011	1.19850187	0.4234804	4.1%	1.20 [0.37, 2.03]
Jess	2012	1.050086	0.6411	2.4%	1.05 [–0.21, 2.31]
Kappelman	2013	1.593814	0.0761817	8.4%	1.59 [1.44, 1.74]
Jess	2013	0.6642458	0.1714505	7.3%	0.66 [0.33, 1.00]
Manninen	2013	1.023345	0.2557053	6.2%	1.02 [0.52, 1.52]
Total (95% CI)				100.0%	1.24 [1.01, 1.47]

Heterogeneity: $Tau^2 = 0.16$; $Chi^2 = 86.36$, df = 18 ($P < 0.00001$); $I^2 = 79\%$

Test for overall effect: $Z = 10.59$ ($P < 0.00001$)



Aliment Pharmacol Ther, Volume: 39, Issue: 7, Pages: 645-659, First published: 09 February 2014, DOI: (10.1111/apt.12651)



Olen et al. Lancet 2020

IBDHorizons

Summary of Risk

- Old risk estimates of CRC for UC were over-estimated
- Population level data still demonstrates increased risk, by a factor of about 50% above population risk
- Preponderance of data is for UC → less robust data with Crohn's, but similar risk estimates noted

Surveillance Recommendations

- All major GI society guidelines recommend dysplasia screening in specific IBD populations
  - UC, disease extent beyond the rectum OR
  - Crohn's colitis, >1/3rd to 50% of the colon involved
  - AND disease duration > 8 years
    - This does NOT mean wait 8 years for repeat scope!
- No prospective data to guide these recommendations

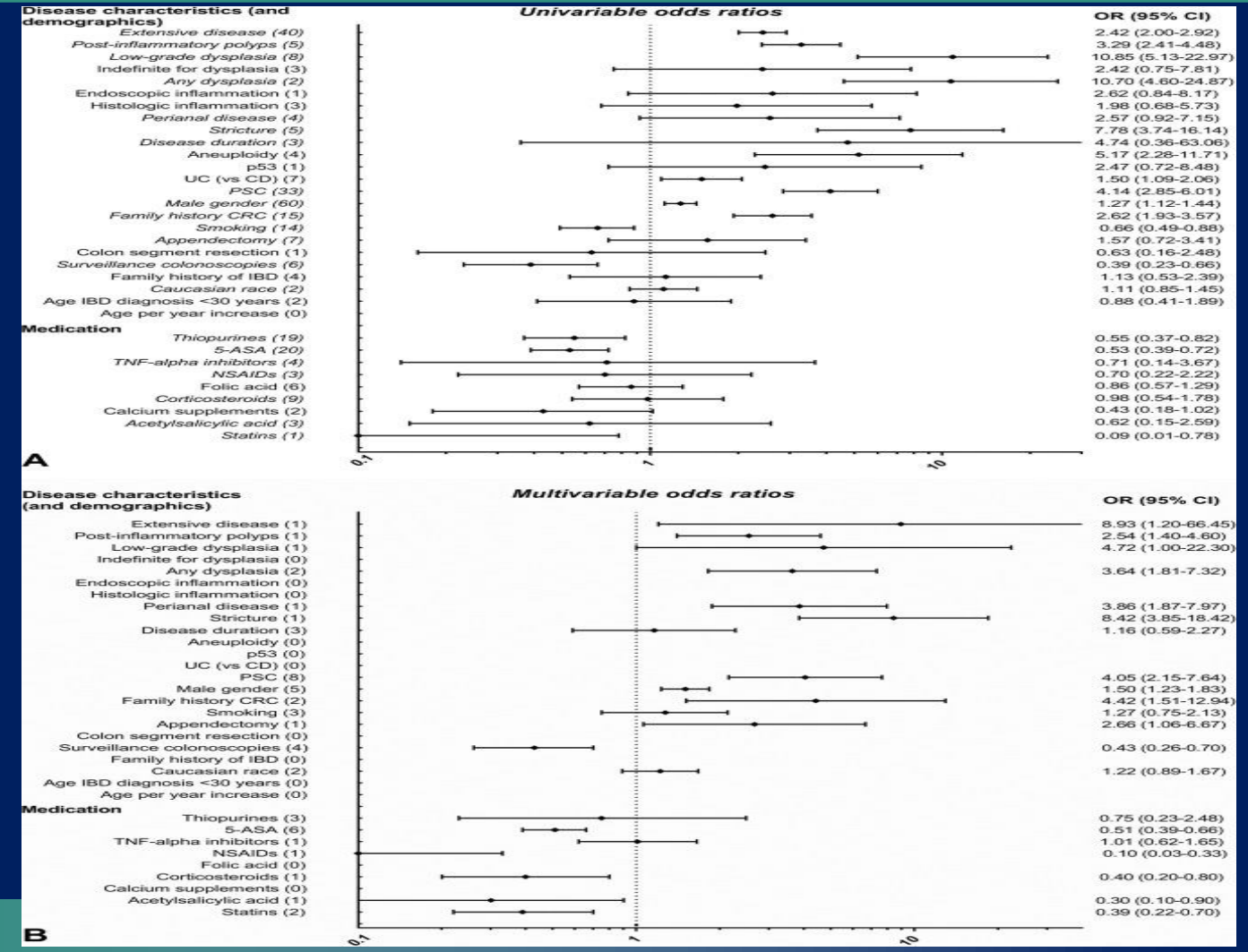
Guideline Examples

- ACG 2019: Annual in PSC, q1-3year otherwise
  - Adjust based on risk factors
- ASGE 2015: Annual for high risk; every 1-3 years for average risk; “beyond 3 years” if two negative exams sequentially w/o endoscopic/histologic inflammation

AGA 2022 Guidance

C	Timing of next colonoscopy when no dysplasia detected at present colonoscopy	
Physicians should err towards the more frequent surveillance category if at least one higher risk factor exists. Timing based on past and ongoing CRC risk factors and mucosal features that may obscure dysplasia.		
1 year	**2 or 3 years**	**5 years**
• Moderate or severe inflammation (any extent) • PSC • Family history of CRC in first degree relative (FDR) age < 50 • Dense pseudopolyposis • History of invisible dysplasia or higher-risk visible dysplasia < 5 years ago	• Mild inflammation (any extent) • Strong family history of CRC (but no FDR < age 50) • Features of prior severe colitis (moderate pseudopolyps, extensive mucosal scarring) • History of invisible dysplasia or higher-risk visible dysplasia > 5 years ago • History of lower risk visible dysplasia < 5 years ago	Continuous disease remission since last colonoscopy with mucosal healing on current exam, plus either of: • ≥ 2 consecutive exams without dysplasia • Minimal historical colitis extent (ulcerative proctitis or < 1/3 of colon in CD)

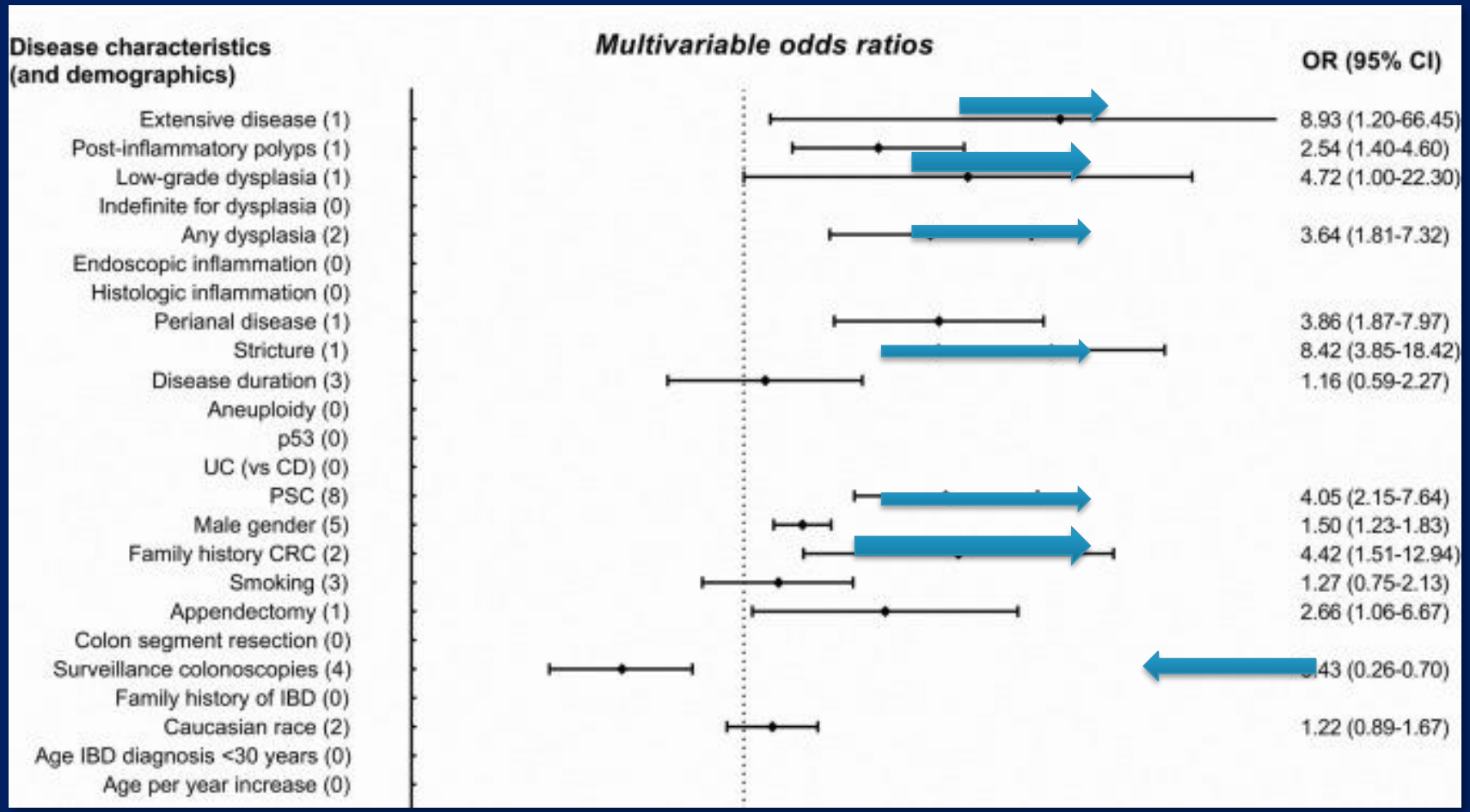
Dysplasia Risk Factors



Wijnands et al. Gastro 2021

IBDHorizons

Dysplasia Risk Factors



Wijnands et al. Gastro 2021

IBDHorizons

Summary of Screening Guidelines

In general:

- Decide who needs screening
  - Most UC (unless just proctitis)
  - Crohn's **colitis** (not isolated ileal or minimal colonic)
- Decide on an interval based on risk factors and mutual decision making
  - Longer intervals only appropriate for very select patients
- Screening is different from restaging
  - Folks with IBD are going to need periodic scopes for reasons OTHER than dysplasia screening
    - Difference in modality

Pseudopolyps

- Traditionally recognized as a risk factor for dysplasia in IBD
- Reflective of prior burden of inflammation
  - Present in about 15-30% of UC patients
- Do not appear to independently predict disease when adjusted for other risk factors (Mahmoud et al. Gastro 2019)
- Make screening more challenging if dense
- Consider referral to specialized center for surveillance

Serrated Epithelial Change (SEC)

- Describes background change in the appearance of the colon, typically with long-standing UC
- Often seen in non-targeted biopsies
- Marker for substantial dysplasia/neoplasia risk
  - Should be clarified with pathology to avoid confusion with non-concerning findings

PSC: Special Case

- Well recognized and significant association with colonic neoplasia in IBD/PSC
- Rates upwards of > 30% CRC risk/lifetime
- Warrant annual screening **from the time of diagnosis**
- May benefit from multimodal screening techniques (e.g non-targeted biopsies **plus** DCE or NBI)

Prior Dysplasia

A Management of visible and invisible dysplasia within a colitis field*		
Endoscopic assessment	**Management**	**Next colonoscopy and comments**
• < 2cm + resectable (clear border, no features of submucosal invasion or fibrosis) + no histologic features of invasive cancer	Endoscopic resection with continued surveillance	• 3–6 months: high-grade dysplasia or incomplete resection • 12 months: > 1cm, low-grade dysplasia (LGD) • 24 months: < 1cm or pedunculated, LGD
• Large (≥ 2cm) • Complex (i.e. lateral spreading, highly irregular or indistinct border) • Incomplete resection after several attempts • Local recurrence	Endoscopic resection with intensive surveillance vs surgery	• Every 3–6 months for first year (if resect) • Decision to resect based on lesion details, local expertise, disease activity
• Unresectable due to size, location, features of invasive cancer or submucosal fibrosis • Invasive cancer on histology	Surgery	
• Invisible dysplasia (non-targeted biopsy) or subtle/ poorly delineated lesion (targeted biopsy)	• Confirm histology with second pathologist • Treat inflammation • Perform dye spray chromoendoscopy (DCE)	• Use DCE to unmask subtle lesions. If no lesion seen, take extensive non-targeted biopsies in area of prior dysplasia. Use box A or B to manage.

Dysplasia, cont.

- Management of dysplasia in IBD is evolving rapidly
  - Polypoid versus non-polypoid
  - Resectable versus non-resectable
  - Visible versus invisible
  - Indefinite (versus atypia) → LGD → HGD
- Key point → Any history of dysplastic lesions in an IBD patient aside from “sporadic” type adenomas should be reviewed at specialty center
  - Follow up should usually be no later than 6-12 months

Ileoanal Pouch Neoplasia

- Generally rare (risk of adenocarcinoma of ileal pouch ~3% at 20 years, Derickx et al, Gastro 2014)
- Risk factors include prior neoplasia as indication for colectomy and PSC
- Periodic pouch surveillance is recommended but no consensus on frequency

Ileal Crohn's + Neoplasia

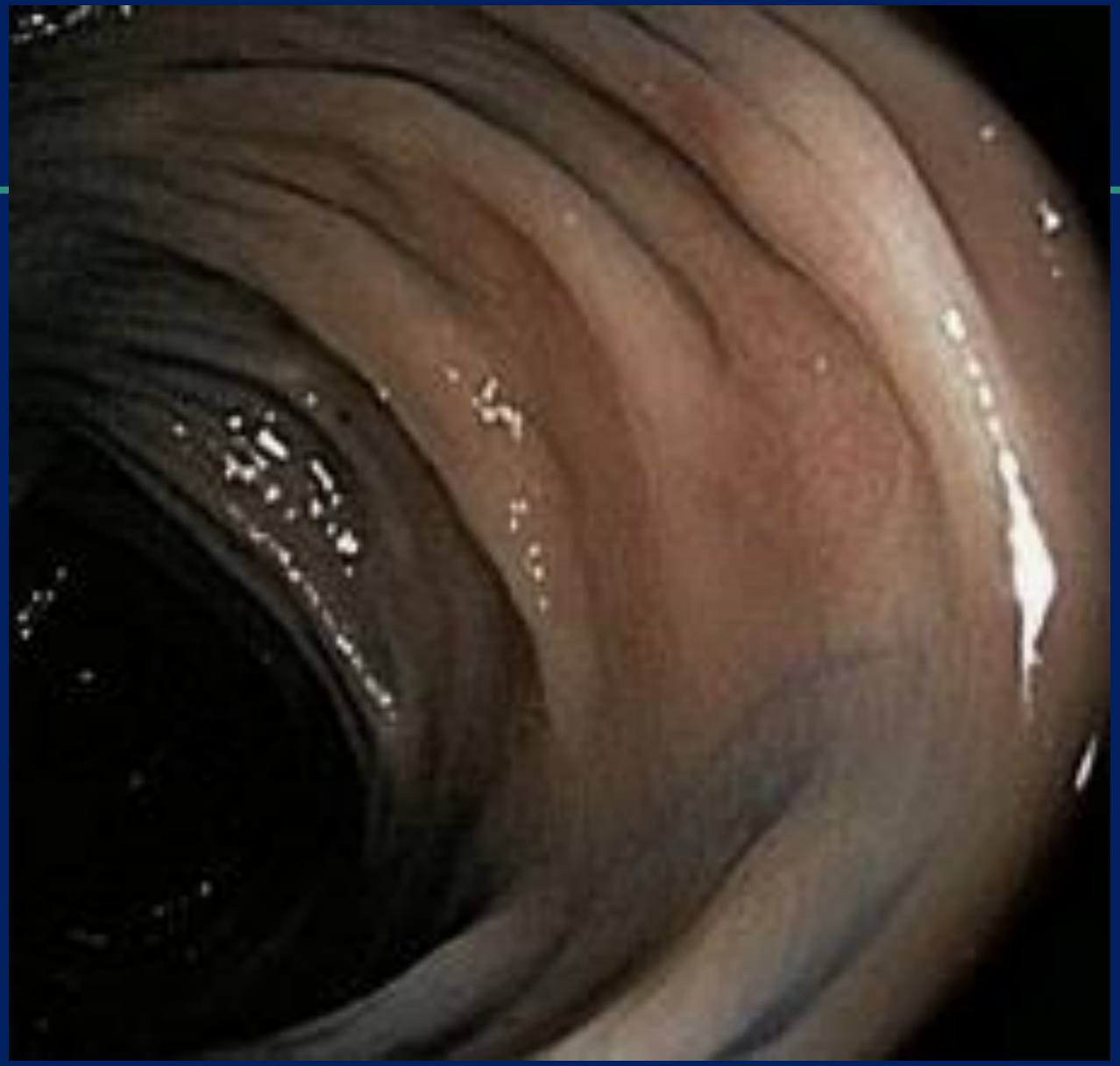
- Small bowel adenocarcinoma is more common among patients with Crohn's disease (5-10x aHR)
- However, overall this diagnosis is very rare (rates are < 1 case/10,000 people per year among pts with Crohn's)
- No role for screening given rarity but need to consider in any patient with long-standing small bowel Crohn's with notable clinical or radiographic changes
  - Tends to arise in areas of chronic ulcerative stenoses/fistulas

When to stop?

- No clear guidelines in the literature as our patient population ages
- Needs to be individualized based on underlying health status
  - Reasonable to stop if life expectancy < 5-10 years

Screening Modalities

- Only current recommended screening modality is colonoscopy
- IBD-associated dysplasia can be harder to visualize than polypoid dysplasia in non-IBD patients
- **Most important surveillance modality is the one that actually occurs**
  - Most dysplasia that is found is visible



Recommended Modalities

- Standard definition colonoscopy not recommended
- If available, dye chromoendoscopy or virtual chromoendsocopy (NBI, iScan) preferable to HD-WLE (white light endoscopy)
- Non-targeted biopsies (every 10 cm x 4) yield is low
  - Would still recommend if not doing dye/virtual chromo OR in very high risk individuals
    - PSC, prior invisible dysplasia

Cancer Screening and IBD: Rationale and Review

Jason Harper, MD
Clinical Associate Professor, UW Department of Gastroenterology

Clinical Director, Harborview IBD Clinic

@daleleemd

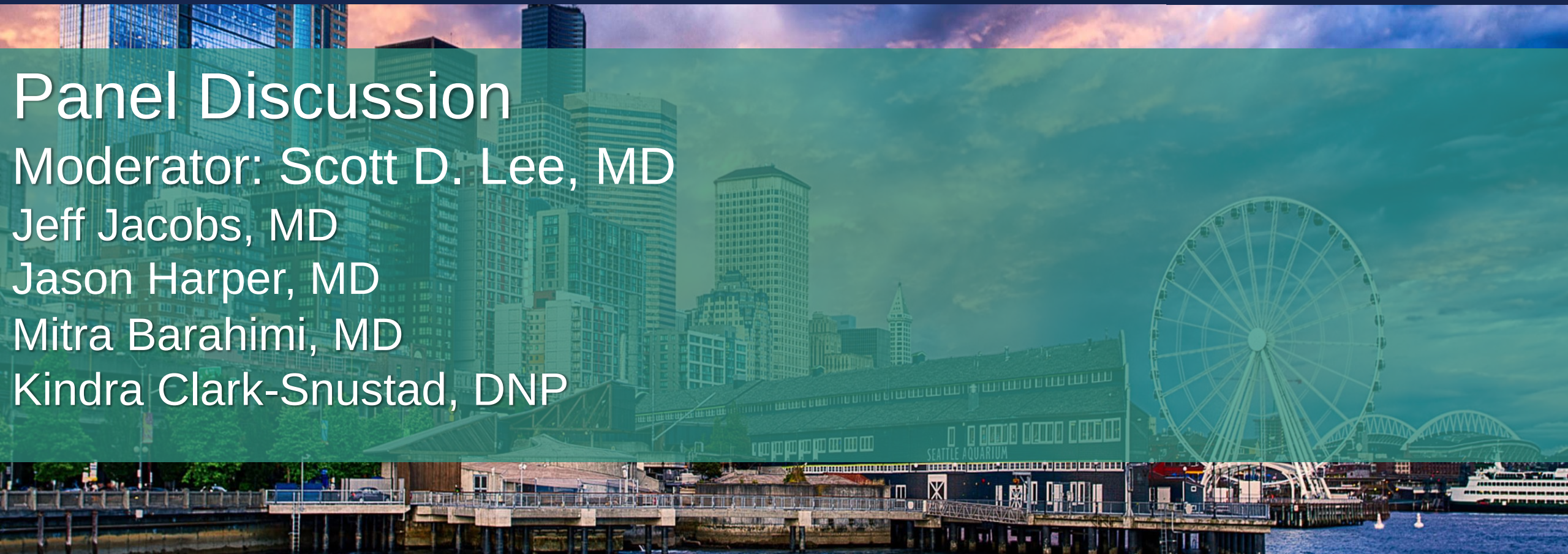
JASON HARPER

Dr. Jason Harper is Director of the Harborview Medical Center Inflammatory Bowel Disease (IBD) program and is a UW Clinical Assistant Professor.
He is a member of the Crohn's and Colitis Foundation and is presently on the regional Medical Advisory Committee.
Dr. Harper's clinical and research interests include IBD (ulcerative colitis and Crohn's disease).

IBDHORIZONS

PANEL DISCUSSION

IBDH



Panel Discussion

Moderator: Scott D. Lee, MD

Jeff Jacobs, MD

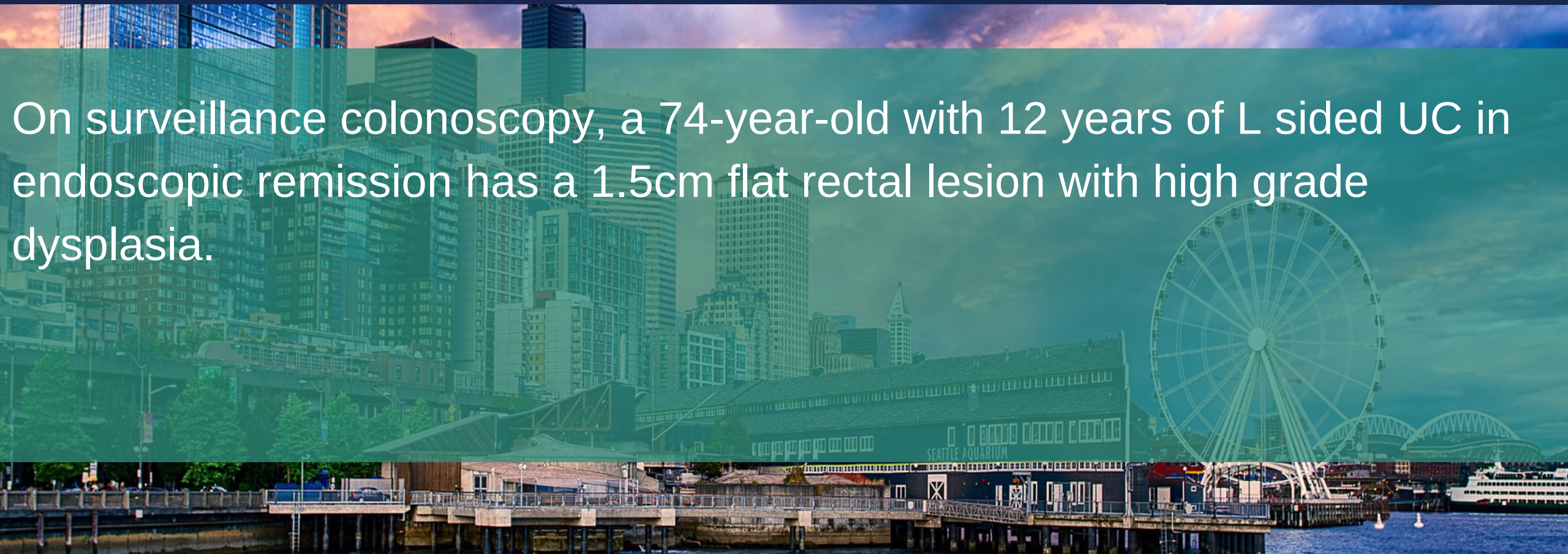
Jason Harper, MD

Mitra Barahimi, MD

Kindra Clark-Snustad, DNP

CLINICAL CASE 5

IBDH



On surveillance colonoscopy, a 74-year-old with 12 years of L sided UC in endoscopic remission has a 1.5cm flat rectal lesion with high grade dysplasia.

ARS QUESTION 1

Which is TRUE regarding surveillance of dysplasia in IBD

A. Standard definition endoscopy is not an acceptable screening method
B. Virtual chromo-endoscopy is a valid surveillance method
C. Recommended surveillance intervals for both pancolitis and proctitis are the same
D. Presence of any dysplasia is indication for urgent total colectomy

ARS QUESTION 1

Which is TRUE regarding surveillance of dysplasia in IBD

A. Standard definition endoscopy is not an acceptable screening method
B. Virtual chromo-endoscopy is a valid surveillance method
C. Recommended surveillance intervals for both pancolitis and proctitis are the same
D. Presence of any dysplasia is indication for urgent total colectomy

ARS QUESTION 2

Which statement is TRUE:

A. Most dysplastic lesions in IBD are not endoscopically visible
B. Colectomy is indicated in all cases of high-grade dysplasia
C. Disease duration, extent, and activity are associated with risk of dysplasia
D. Having PSC reduces risk of dysplasia

ARS QUESTION 2

Which statement is TRUE:

A. Most dysplastic lesions in IBD are not endoscopically visible
B. Colectomy is indicated in all cases of high-grade dysplasia
C. Disease duration, extent, and activity are associated with risk of dysplasia
D. Having PSC reduces risk of dysplasia

3rd IBDHORIZONS UPDATES FOR APP

IBDH

King Street Ballroom, October 29, 202