# How Does Colorectal CA (CRC) Effect Genders & Ethnicities?

# **Colorectal Cancer Prevention and Cure Symposium**

Ako D. Bradford, M.D., FACP 22 March 2024

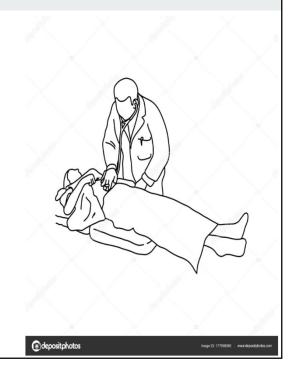
#### "Blood in the stools; constipated..."

- Mrs. "NotHerName", a 33 y.o. WF w/ 1 month of bloody stools (attributed to hemorrhoids from prior pregnancies) and acute worsening of "lifelong" constipation
- OTC stool softeners, increased hydration and fruits & veggies improve the constipation but bloody stools continue



#### "Here's our plan..."

- On exam, VSS; BMI = 27; nonsurgical belly with quiet bowel sounds; no acute abdominal findings
- DRE DEFERRED
- Gave bowel regimen; discussed Linzess (GB is PRESENT); KUB showed non-obstructive large stool burden in D-colon & part of T-colon; discussed redundant colon w/up due to "lifelong" constipation



#### "Let's get aggressive ..."

- At 3 mos. follow-up, the bowel regimen was effective. Now, hematochezia is persistent; and, limited food intake results in profound defecatory urge.
- VSS remain stable; no weight loss; belly exam is unchanged
- REFER TO COLORECTAL SURGEON FOR C'SCOPE (IBD vs. redundant colon vs. IBS??)



#### "Here we go ..."

- <u>C'scope</u>: Friable, ulcerated, circumferential sigmoid mass
- Patho: Mod. diff. adenoCA;
  2/17 (+) mesenteric LNs
- Intra-Op: Segmental resection;
  (-) margins but (+) pericolorectal tissue invasion => Stage IIIb
- Heme-Onc: Completed 12 rounds of chemotx; f/up CTimaging & tumor markers (-)



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Tomorrow's Reality: Disease doesn't always "read the literature."

"Listen to your patient; [s]he is telling you the diagnosis."

— **Sir William Osler** (One of the "Big Four" Founders of Johns Hopkins Hospital; Founding Professor of Medicine, Johns Hopkins School of Medicine)

## **CRC** - Incidence

- Globally, the highest CRC incidence rates are in Australia and New Zealand, Europe, and North America<sup>1</sup>
- In the United States, CRC incidence is higher in males than in females and in Black Americans than in White Americans<sup>2</sup>

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Our patient? Lives in North America; female; identifies as a White American

#### **CRC** - Incidence

- A gradual shift toward right-sided (proximal) colon cancers has been observed in the United States, with the greatest relative increase in incidence seen in cecal primaries<sup>3,4</sup>
- Death rates from CRC have declined progressively since the mid-1980s in the United States<sup>5,6</sup>. However, notably, in the United States the declining mortality overall is masking trends in younger adults.

## **CRC** - Incidence

SEER Database of the NCI: <u>CRC mortality rates</u> per 100,000 population among individuals <u>under age 50</u> declined by approximately 2 percent per year from 2000 to 2004, and then <u>increased by 1 percent annually through 2018</u>. The increase was <u>limited to White and Hispanic individuals</u>; by contrast among Black individuals and Asian/Pacific Islander individuals, mortality rates were either stable or declined over this same time period<sup>7</sup>

# CRC - early onset

- A global epidemiologic trend towards early onset colorectal cancer (EOCRC)
- In the United States, the proportion of new CRC cases among adults under the age of 55 years increased from 11 to 20 percent between 1995 and 2019

# CRC - early onset

- These findings are being driven predominantly by left-sided cancers and rectal cancer<sup>8</sup>
- Likely that the increased incidence of EOCRC is real and not representative of a shift in age at diagnosis attributable to earlier detection<sup>9-11</sup>

## **CRC** - risk factors

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- Environmental and genetic factors can increase the likelihood of developing CRC
- The majority of CRCs are sporadic rather than familial

## **CRC** - risk factors

- Black Americans, Native Americans, and Alaskan Native individuals have among the highest incidence and mortality rates for CRC of all racial and ethnic groups in the United States<sup>8</sup>
  - CRCs occur at a younger age, as there is a higher frequency of CRC under age 50<sup>12</sup>
  - There also appears to be a more proximal distribution of both CRCs and adenomas
- CRC mortality is approximately 33 percent higher in males than in females<sup>8</sup>
  - Both colonic adenomas and CRCs appear to have a more proximal distribution in females

#### **CRC** - risk factors

- Screening strategies do not differ with regard to race
- None of the major United States organizations recommend that screening be stratified by gender

#### **SUMMARY**

- North America has one of the highest CRC incidence rates globally
- In the U.S., CRC incidence males >> females; Black Americans
  >> White Americans; and, involves right-sided (proximal / cecal) cancers
- Progressively declining CRC death rates in the U.S. since the mid-1980s is *masking a trend in young adults*

#### **SUMMARY**

- **Early onset colorectal CA (EOCRC)** CRC mortality rates **increased** 1% annually through 2018 in Whites & Hispanics under 50 y.o.
- New CRC U.S. cases in adults < 55 y.o. *increased* from 11 to 20% between 1995 and 2019
- In aggregate, in the U.S. → the highest incidence AND mortality rates for CRC of all racial and ethnic groups: Black Americans, Native Americans, and Alaskan Natives
  - More CRC incidences < 50 y.o.; 33% higher mortality in males vs. females; and CRC distribution is more likely to be proximal colon

#### **SUMMARY**

- Screening strategies do not differ with regard to ethnicity
- None of the major United States organizations
  recommend that screening be stratified by gender

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