Colorectal Cancer Update: Incidence, screening and what you need to know for your patients

Fall CME Event
October 27, 2020

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Colon & Rectal Surgery
Nothing to disclose
Colorectal Cancer: by the numbers

• 4\textsuperscript{th} most common cancer by incidence
  – Lifetime risk 4.4% men, 4.1% women

• 3\textsuperscript{rd} leading cause of cancer related deaths in both men and women

• >55 years incidence decreasing by 3.6% each year
  – Improved screening/polyp removal before becomes a cancer

• Overall mortality rate decreasing
  – Improved screening (early detection), improved treatment
Colorectal Cancer: Special Populations

African Americans

- Incidence 20% higher for African Americans
- Mortality 40% higher for African Americans

- Unclear the specific reason for the disparity
- Studies show inequity in screening, diagnostic follow up and treatment strategies
Colorectal Cancer: Special Populations

Young / Age <50

• Incidence is increasing by 2.2% every year
  – 12% of colon cancer diagnoses are patients <50 years old
  – 18% of rectal cancer diagnoses are patients <50 years old
  – 90% increase colon cancer in 20-34 year-olds by 2030
  – 124% increase rectal cancer in 20-34 year-olds by 2030

• Mortality is increasing by 1.3% every year

• Only 15-25% of cases are familial or hereditary
Colorectal Cancer: Special Populations

Young / Age <50

• Multifactorial: Diet, physical activity, smoking, alcohol, microbiome, environmental exposures
  – Not unique to the young

International Agency for Research on Cancer – 2015
World Health Organization

- Eating 50g of processed red meat per day increases risk of colorectal cancer by 18%
  - Classified red meat as probable carcinogen
  - Equivalent of 4 strips of bacon or 1 hot dog
Diagnosis

Symptomatic Patient (Targeted Evaluation) vs Asymptomatic Patient (Screening)
Colorectal cancer symptoms

- 50% experienced constipation
- 49% experienced rectal bleeding
- 56% experienced abdominal pain
- 61% experienced fatigue
- 68% experienced blood in stool
- 58% experienced flatulence
- 30% experienced unexplained weight loss
- 28% experienced nausea/vomiting

43% experienced bloated stomach
Symptomatic Patient: Misdiagnosis

479 (54%) out of 885 patients/survivors total reported being misdiagnosed with one or more conditions.

Number of Patients/ Survivors

- Hemorrhoids: 209
- Anemia: 78
- Irritable Bowel Syndrome (IBS): 56
- Mental Health Issues: 55
- Other Misdiagnoses: 81

OTHER: Appendicitis, diverticulitis, gluten allergy
Symptomatic Patient: <50 years of age

75% said they saw at least two different doctors

- 25% saw 1 doctor
- 39% saw 2 doctors
- 19% saw 3 doctors
- 17% saw 4 doctors or more

9% saw 5+ physicians prior to diagnosis
40% felt their symptoms were dismissed
Symptomatic Patient: <50 years of age

How long did it take to be diagnosed with colorectal cancer after you first sought medical attention for your symptoms?

1. 45.5% 1 month
2. 19% 2 months
3. 18% 3-6 months
4. 6.5% 6-12 months
5. 10% More than 12 months
**Symptomatic Patient:** <50 years of age

How long did you experience symptoms before going to the doctor?

- 37.5% of patients experienced symptoms for 6-12 months.
- 20% experienced symptoms for >12 months.
- 20% experienced symptoms for 3-6 months.
- 14% experienced symptoms for <3 months.
- 8.5% experienced symptoms for >24 months.

Anticipate longer times during *COVID*.
Symptomatic Patient

Heightened level of concern...

• Bleeding that is unresolved or persistent
• Unable/uncomfortable to perform anorectal exam
• Concerning associated symptoms
  – Weight loss, fatigue, obstructive symptoms

Remember...

...It’s NEVER wrong to refer
...the most common thing actually IS hemorrhoids, and we treat those too!
Diagnosis

Symptomatic Patient (Targeted Evaluation)

vs

Asymptomatic Patient (Screening)
Screening Guidelines: Who/When

Current Standard of Care
• Average risk screening for individuals aged 50-75
• Individualized screening for ages 76-86
  – Expected life expectancy (>10 years)
  – Especially if no prior screening

US Preventive Services Task Force (2016)
US Multi-Society Task Force of Colorectal Cancer (2017)
  – American College of Gastroenterology
  – American Gastroenterological Association
  – American Society for Gastrointestinal Endoscopy
Screening Guidelines: Who/When

Average Risk Screening begin at **Age 45**

American Cancer Society (2018)

American Society of Colon & Rectal Surgeons (2018)

**American Cancer Society – May 30, 2018**

- Recommended colon cancer screening at age 45
  - “Simulation modeling of CRC incidence demonstrated favorable benefit-to-burden balance of screening at age 45”
  - Current risk for CRC in those ages 45-49 is nearly identical to the 50-54 age group when age 50 was first recommended
  - 51% increase in CRC in <50 age group since 1994
  - 2x lifetime risk if born in 1990 than those born in 1950


**Screening: Special Populations**

- **African Americans:**
  - *American College of Gastroenterology* (2005): 45 years
  - *American College of Physicians* (2012): 40 years
  - *American Society of Colon & Rectal Surgeons* (2018): 45 years
  - *American Cancer Society* (2018): 45 years

**Consensus recommendation at 45 years of age in otherwise average risk African American**
Screening: Special Populations

- **Family History**: 1st degree relative with...
  - Colorectal cancer, any age:
    - age 40 or 10 years prior to age of diagnosis (whichever earlier)
    - Repeat every 3-5 years if relative <60, every 10 years if >60
  - Adenomatous Polyps, <60 years:
    - age 40 or 10 years prior to age of diagnosis (whichever earlier)
    - Repeat every 5 years
  - Adenomatous Polyps, >60 years:
    - Standard Screening
**Screening:** Special Populations

- **Personal History of Polyps:**
  - Dependent on number, size, histologic features, adequacy of bowel preparation
  - May be 1, 3, 5, 7 or 10 years.

- **Personal History of Ulcerative Colitis/Crohn’s Disease:**
  - Individualized by gastroenterology provider

- **Hereditary Syndromes**
  - Familial Adenomatous Polyposis: 10-12 years
  - Hereditary nonpolyposis colon cancer (HNPCC) / Lynch: 20-25 years
Screening Approach: How

• Emphasis on maximizing screening efficacy and screening compliance

• **Sequential approach**: Recommend gold standard (colonoscopy) and offer other options if declined
  – Average risk populations
What You Need to Know: Colorectal Cancer

Early Detection Is Key!

Of cancers affecting both men and women, colorectal cancer is the second leading cancer killer in the United States, and it doesn’t have to be. Colon cancer is highly preventable and treatable. Yet more than 140,000 people are diagnosed with and more than 50,000 people die from colon cancer each year. The key to improving these statistics is to ensure every person completes a routine colon cancer screening test, which can stop the disease before it starts.

Several methods can be used. Each test has advantages and disadvantages. Please talk with your healthcare provider to determine which test is best for you based on your preferences.

If you’re healthy and between 50 – 75 years old, with a referral from your primary care provider, you can call directly to schedule your screening colonoscopy. We have made the scheduling easier, so you do not need to first schedule an office visit with a specialist. Many patients appreciate this option as they save on co-pays and time away from work. Call your primary care provider at 425.690.3535 for a screening colonoscopy referral or ask for one at your next visit.

Avoid Surprise Costs

If you have a screening test other than colonoscopy and the result is positive (abnormal), you will need to have a colonoscopy. Some insurers consider this to be a diagnostic (not screening) colonoscopy, so you may have to pay the usual deductible and copay. Before you get a FIT or FIT/DNA screening test, check with your insurance carrier about what it might mean if you need a colonoscopy as a result of the screening test, and how much you should expect to pay for it.

<table>
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<th>COLONOSCOPY</th>
<th>FIT</th>
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<tr>
<td><strong>Who Is A Good Candidate For This Test?</strong></td>
<td>Most people are good candidates. This test is the best way to find and remove polyps early. Polyps can be precancerous.</td>
<td>A great option for people hesitant about colonoscopy.</td>
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<td><strong>What Is It?</strong></td>
<td>The patient is sedated so a doctor can examine the inside of the colon for precancerous polyps. Bowel prep is required and you do need an adult driver for transportation.</td>
<td>A stool-based Fecal Immunochemical Test (FIT) can be performed at home and sent to a lab, which looks for trace amounts of blood.</td>
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<td><strong>How Much Does It Cost?</strong></td>
<td>Varies by insurance. Screening tests must be covered by insurance and are less expensive than diagnostic tests.</td>
<td>Low cost option</td>
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<td><strong>When Should It Be Repeated?</strong></td>
<td>Every 10 years</td>
<td>Annually</td>
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<td><strong>Where Is It Performed?</strong></td>
<td>Outpatient surgical center or hospital</td>
<td>Test kit provided by the provider and completed in the patient’s home</td>
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<td><strong>Are There Any Risks Or Negatives?</strong></td>
<td>Complications are rare but include bleeding, infection and bowel wall injury.</td>
<td>No physical risks. A positive test means that a diagnostic colonoscopy is required.</td>
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Screening Approach: How

- Colonoscopy
  - Direct endoscopic visualization of the colon

- Advantages
  - Gold standard test for screening and prevention of CRC
  - High sensitivity for cancer and precancerous lesions
  - Diagnostic and therapeutic
  - Repeated every 10 years if normal study, average risk patient

- Disadvantages
  - Full mechanical bowel preparation
  - Invasive procedure with risks (bleeding, perforation)
  - Sedation involved
Screening Approach: How

- **FIT (Fecal Immunohistochemistry Test)**
  - Measures hemoglobin in the stool

- **Advantages**
  - Noninvasive test, convenient, low cost (~$20)
  - No bowel preparation
  - Moderate cancer detection rate 74-79%

- **Disadvantages**
  - Repeated testing, annually
  - Low adenoma detection rate, 24-30%
  - Positive test warrants diagnostic colonoscopy (may be more expensive than screening colonoscopy)
**Screening Approach: How**

- **FIT-Fecal DNA test (Cologuard)**
  - Combination of FIT and detection of abnormal DNA

  - **Advantages**
    - Noninvasive test, convenient
    - No bowel preparation
    - Improved cancer detection rate 92-94%

  - **Disadvantages**
    - Cost $500-600
    - Low adenoma detection rate, 42%
    - Lower specificity compared to FIT alone (~89% vs 96%)
    - Positive test warrants diagnostic colonoscopy (may be more expensive than screening colonoscopy)
Screening Approach: How

- **Fecal occult blood test**
  - Low specificity and sensitivity
  - Interactions with diet and medications
  - No longer routinely recommended

- **CT Colonography**
  - High sensitivity for lesions >10mm, expensive
  - Not therapeutic
  - Still requires bowel preparation
  - May be beneficial for incomplete colonoscopy
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What to know after diagnosis
Prognosis

- Stage I-II (Localized): 90+% 5 year survival
Prognosis

• Stage I-II (Localized): 90+% 5 year survival
• Stage III (Regional): ~70% 5 year survival
Prognosis

- Stage I-II (Localized): 90+% 5 year survival
- Stage III (Regional): ~70% 5 year survival
- Stage IV (Distant): 15% 5 year survival
Treatment

- Robotic and minimally invasive surgery
  - Reduce patient trauma

- Advanced endoscopic resection and transanal minimally invasive surgery
  - Reduce need for colectomy

- Sphincter sparing approaches
  - Reduce ostomy creation

- Surgical management for stage IV disease
  - Expand surgical management in select patients

- Enhanced Recovery After Surgery (ERAS)
  - Improve patient recovery
Treatment

• Multidisciplinary tumor board

• Focus on quality of life, Survivorship, caregiver support

• Future Rectal Cancer Treatments
  – Are we over treating?
  – Removing radiation
  – Removing surgery
  – National Accreditation Program for Rectal Cancer
Survivorship

- Emotional Health
  - Depression, anxiety, withdrawn, fear of recurrence
  - Fatigue, exhaustion
  - Difficulty coping, loss of joy
- Pain – interferes with family and day-to-day life
- Sexual Health –
  - Men - loss of sexual function (retrograde ejaculation or inability to achieve/maintain erection)
  - Female - pain with intercourse, vaginal dryness/atrophy
  - Ostomy
- Fertility – egg harvesting, sperm retrieval
- Financial Health, bills/debt, employment, insurance
Caregivers

• ~1 in 7 adults provides some type of unpaid care to another adult
  – Bathing, bill paying, dressing, eating, home maintenance, medical care, transportation
Caregivers

- 26.8%: Made our relationship/friendship stronger
- 25.8%: Strained our relationship
- 13.9%: Ended our relationship/friendship
- 31.5%: Other

- 67%: Concerned about their mental health
- 68%: Needed help for depression
- 66%: Withdrew from other people
- 73%: Needed help for panic and anxiety
- 71%: Often felt sadness
- 30%: Stated they lost hope
- 32%: Reported fatigue

- 2.0%: Loss of intimacy
Caregivers

• ~1 in 7 adults provides some type of unpaid care to another adult
  – Bathing, bill paying, dressing, eating, home maintenance, medical care, transportation

• Emotional exhaustion, financial stress, time away from work, consequences of sexual dysfunction/fertility

Patient and Caregiver stressors all exacerbated by COVID
Conclusions

- Colorectal cancer incidence and mortality is going down overall
  - Both are increasing in the <50 year old population

- Symptoms of colorectal cancer are varied
  - Pay particular attention to bleeding and unresolved symptoms

- Average risk screening at ages 50 - 75
  - Some societies recommending age 45
  - Individualized screening for ages 76-86

- African Americans screen at age 45

- Colonoscopy is the gold standard study
  - Other reasonable options if average-risk patient refuses colonoscopy
  - *Overall compliance is goal*
Conclusions

• 5 year survival is excellent (90+%) for localized colorectal cancer – *Early detection is KEY!*

• Treatment strategies are improving success rates and minimizing trauma to our patients

• Shifting focus to survivorship for both patient and caregivers
  – Emotional stress
  – Financial stress
  – Strained relationships
  – *Emphasized during COVID pandemic*

Always reach out if you are unsure! We’re here for you!!
Referring a patient...

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EPIC
REF17 – Colorectal Surgery Referral
REF300 – Screening Colonoscopy
Colon & Rectal Surgery Clinic

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