



CROHN'S & COLITIS
FOUNDATION OF AMERICA

Update on Colorectal Cancer: Knowledge Is Prevention

An educational virtual lecture for patients,
caregivers, and healthcare professionals



March 1, 2007

1:00 PM - 2:15 PM ET

Cosponsored by Robert Michael Educational Institute LLC and Postgraduate Institute for Medicine



Postgraduate Institute
for Medicine

Supported by an educational grant from
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Program Overview



TARGET AUDIENCE

This activity has been designed to meet the educational needs of nursing professionals who are involved in the diagnosis, treatment, and education of patients with ulcerative colitis or Crohn's disease.

ACTIVITY PURPOSE

This activity is intended to assist nursing professionals in understanding the latest advances in the diagnosis, treatment, and prevention of colorectal cancer (CRC).

STATEMENT OF NEED

Colorectal cancer is the second leading cause of cancer-related deaths in the United States. Although patients who have ulcerative colitis or Crohn's disease are at highest risk of contracting CRC, until now very little guidance has been available on how to identify, monitor, and treat these patients. This activity is intended to improve the quality of care regarding surveillance and prevention in patients with ulcerative colitis or Crohn's disease at risk for CRC.

EDUCATIONAL OBJECTIVES

At the conclusion of this activity, participants should be better able to:

- List the risk factors for colorectal cancer (CRC) in patients with ulcerative colitis or Crohn's disease
- Identify the symptoms of CRC
- Compare the characteristics of CRC in patients with ulcerative colitis or Crohn's disease with the characteristics in the general public
- Describe an effective surveillance program for CRC in patients with ulcerative colitis or Crohn's disease
- Explain ways to teach patients with ulcerative colitis or Crohn's disease how to reduce their risks for CRC

STATEMENT OF SUPPORT

This activity is cosponsored by Robert Michael Educational Institute LLC and Postgraduate Institute for Medicine, in collaboration with the Crohn's & Colitis Foundation of America, and is supported by an educational grant from Procter & Gamble Pharmaceuticals.



FACULTY



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Fernando S. Velayos, MD, MPH, is currently on the faculty at the University of California, San Francisco (UCSF), as Associate Director of Translational Research at the Center for Crohn's and Colitis. He received a medical degree from UCSF and remained there to complete his medical residency, chief residency, and gastroenterology fellowship. Dr. Velayos received additional training in inflammatory bowel disease (IBD) at the Mayo Clinic in Rochester, Minnesota, and clinical research at the University of California, Berkeley.

Dr. Velayos' clinical and research interests involve novel therapies for IBD as well as methods for early detection and prevention of colorectal cancer in IBD. He currently has a K-12 Career Development Award to identify novel biomarkers that are predictive of future cancer risk and to examine the effect of 5-ASA agents on colorectal cancer risk in patients with IBD. He is a member of the Editorial Board of the *Inflammatory Bowel Disease* journal and is an active member of the Crohn's and Colitis Foundation of America, serving on the National Patient Education Committee.



NURSING CONTINUING EDUCATION ACCREDITATION STATEMENT

CNA/ANCC

This educational activity for 1.0 contact hour is provided by Postgraduate Institute for Medicine (PIM).

PIM is an approved provider of continuing nursing education by the Colorado Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

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- **Fernando S. Velayos, MD, MPH**, has asked that we advise participants in this activity that he has affiliations with Procter & Gamble Pharmaceuticals and Shire Pharmaceuticals (*Advisory Board*).

The following planners and managers have the following to disclose:

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- **Staci Pacetti, PharmD**, has no affiliations with commercial interests to disclose.
- **Jessica G. Parenti** has no affiliations with commercial interests to disclose.
- **Patricia C. Walter** has no affiliations with commercial interests to disclose.
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- **Trace Hutchison, PharmD**, has no affiliations with commercial interests to disclose.

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DISCLAIMER


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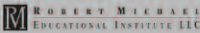


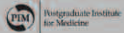
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Learning Objectives

- Identify the symptoms of colorectal cancer
- Compare the characteristics of colorectal cancer in people with ulcerative colitis (UC) or Crohn's disease (CD) with the characteristics in the general public
- List the risk factors for colorectal cancer in people with UC or CD
- Describe an effective surveillance program for colorectal cancer in people with UC or CD
- Explain ways to teach people with UC or CD how to reduce their risks for colorectal cancer

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U.S. Statistics on Colorectal Cancer¹

- Colorectal cancer is the third most common cancer
- Colorectal cancer is the second leading cause of death from cancer
- Estimates for 2006
 - 107,000 new cases of colon cancer
 - 42,000 new cases of rectal cancer
 - 55,000 deaths from colorectal cancer

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Risk Factors for Colorectal Cancer

- Age older than 50 years¹
- Family history of colorectal cancer¹
- Personal history of colorectal polyps²
- Personal history of chronic UC or CD
 - Well-established link between UC and colorectal cancer²
 - Increased risk for colorectal cancer in people with CD^{3,4}

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Risk Factors in People with UC or CD

- Chronic inflammation¹
 - Extensive disease (entire colon)
 - Disease lasting more than 8 to 10 years
- *Primary sclerosing cholangitis* (inflammation and scarring of bile ducts)²
- Family history of colorectal cancer (independent of personal history of UC or CD)³

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What Is Colorectal Cancer?

- Cancer involves the uncontrolled growth of abnormal cells that form a mass of tissue (*tumor*)
- *Colorectal cancer* is cancer that develops in the colon or rectum, which make up the large bowel, also called the large intestine
- Tumors
 - Can be *benign* (noncancerous)
 - Can be *malignant* (cancerous)
 - Malignant tumors can spread (*metastasize*)

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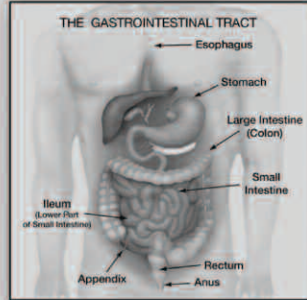
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What Is Colorectal Cancer? (Cont)

- Abnormal cells that cause cancer form in the
 - Colon
 - Rectum
 - Anus



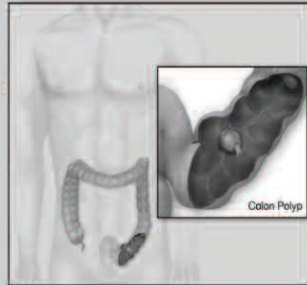
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How Colorectal Cancer Develops

- Most colorectal cancer develops from benign growths on the lining of the colon or rectum called *colorectal polyps*¹



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How Colorectal Cancer Develops (Cont)^{1,2}

- Colorectal polyps usually
 - Are not malignant
 - Do not cause symptoms
 - Are called *adenomas*
- Adenomas typically take more than 10 years to develop into cancer


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UC or CD and Colorectal Cancer

- People with UC or CD have a high risk of colorectal cancer,¹ even if the disease is in remission
- Regular screenings and early detection are critical

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Development of Colorectal Cancer in the General Population Compared with People with UC or CD¹

- In the general population, colorectal cancer is preceded by polyps
- In people with UC or CD, colorectal cancer
 - May be preceded by polyps or may arise from flat mucous membranes, thus requiring more intensive and more frequent colonoscopies
 - Is more often multiple and uniformly distributed throughout the colon
 - Often occurs in younger people

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Detection Through Proactive Screening

- Because often there are no symptoms¹
 - Regular screenings and early detection are important for people who
 - Are at average risk
 - Have a higher risk, such as those with UC or CD
- Symptoms that do occur depend on the location of the cancer in the gastrointestinal (GI) tract

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Symptoms of Colorectal Cancer in the General Population¹

- Change in bowel habits
- Diarrhea or constipation, or decreased stool thickness
- Blood in stool
- Feeling the bowel is not completely emptied
- Cramps, gas pains, or a feeling of fullness
- Feeling as if there is a “lump” in the rectum


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Symptoms of Colorectal Cancer in People with UC or CD

- Signs and symptoms of colorectal cancer can mimic the typical symptoms of UC or CD in the general population; thus, it can be difficult to recognize in people with UC or CD¹
- Regular screening and surveillance are particularly important for people with UC or CD

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Importance of Screening and Surveillance

- *Screening*: testing performed BEFORE symptoms develop¹
- *Surveillance*: examinations after the first screening
- Goals^{1,2}
 - Identify and remove precancerous polyps to prevent colorectal cancer
 - Detect cancerous lesions early
 - Prevent deaths from colorectal cancer

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Menu of Screening and Surveillance Tests¹⁻³

- Fecal occult blood test
 - Every year
 - Detects hidden (*occult*) blood in stool
 - If blood is present, colonoscopy is recommended
- Sigmoidoscopy
 - Every 5 years
 - Views last portion of colon
 - Does not always detect cancer


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Menu of Screening and Surveillance Tests (Cont)¹⁻³

- Colonoscopy
 - Every 10 years
 - Views entire colon and rectum
 - Polyps can be removed (*polypectomy*)
 - Analysis of tissue specimen (*biopsy*) can be performed
 - Preferred method

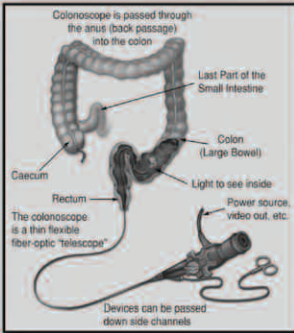
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Screening with Colonoscopy

- *Colonoscopy*: procedure examines both the rectum and large intestine
- Colonoscopy is the gold standard for detection of colorectal cancer
- *Colonoscope*: uses a long, flexible, lighted tube that transmits a video image
- Patient is mildly sedated
- Discomfort is minimal



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Screening with Colonoscopy (Cont)

- Permits finding
 - Inflamed tissue
 - Ulcers
 - Abnormal growth/polyps (and their removal)
- Tissue specimen may be taken and analyzed (*biopsy*)
- Often allows for accurate diagnosis and treatment



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Screening with Colonoscopy (Cont)¹

- General population
 - Beginning at age 50, thereafter based on
 - Risk factors
 - Whether or not polyps are found
- People at increased risk
 - Begin earlier
 - Age 40 *or*
 - 10 years before age at which youngest family member was diagnosed
 - Performed more frequently
 - Every 3 to 5 years



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Screening and Surveillance in UC or CD: Colonoscopy

- Colonoscopy is the method for screening and surveillance in people with UC or CD
 - Having a regular annual colonoscopy is the most effective way to detect colorectal cancer
 - Beginning after the disease has lasted for 8 to 10 years
 - Routine follow-up colonoscopy every 1 to 2 years

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Subsequent Examinations¹

- People with UC or CD: after the first screening colonoscopy at 8 to 10 years after symptoms began
 - Subsequent examinations every 1 to 2 years
 - Regularly scheduled colonoscopy with biopsy
 - Regular evaluation of symptoms and medication use

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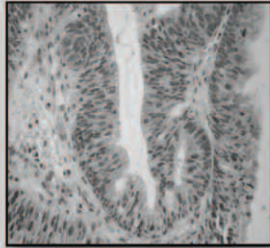
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Dysplasia

- *Dysplasia* is abnormal cell growth, *not* cancer
- Indefinite, low-grade, or high-grade
- Surgery is always recommended for high-grade and often for low-grade dysplasia
- 67% risk of cancer after high-grade dysplasia¹



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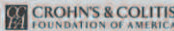
Differences Between Colonoscopy for UC or CD and for Surveillance

	Colonoscopy for UC or CD	Colonoscopy for Surveillance
Equipment	Colonoscope	Colonoscope
Is disease active at time of procedure?	Yes	No
Number of biopsy specimens taken	Few	Many
Reasons	Evaluate symptoms Confirm flare-up Exclude infection	Detect dysplasia Detect cancer



Colorectal Cancer is Treatable When Found Early!

- High survival rate when treated in earliest stages¹
- Treatment depends on tumor size, location, and extent
 - Surgery is most common
 - To remove tumor and surrounding tissue
 - Chemotherapy or radiation therapy
 - When cancer has spread beyond the colon or is difficult to reach
 - May be combined with surgery


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Prevention of Colorectal Cancer

- Colorectal cancer is one of the most preventable types of cancer, even in people with UC or CD¹
- Early detection and regular screenings are vital
- 93% survival rate when treated in earliest stages²

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Prevention of Colorectal Cancer (Cont)¹⁻³

- Healthy habits can lower the risk of colorectal cancer
 - Maintain a normal weight
 - Exercise regularly
 - Eat as healthy a diet as possible
 - High in fiber
 - Low in fat
 - Limited in red meat



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Healthy Dietary Habits

- People with UC or CD should learn their own food tolerances and follow their specific diet that focuses on
 - Hydration
 - Electrolyte balance
 - Adequate nutrient intake and replacement when needed
 - Modification of foods to manage GI symptoms



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Reducing Your Risk

- In addition to screening, some studies have shown that certain pharmacologic agents may help prevent development of cancerous polyps (*chemoprevention*)
 - Should be monitored regularly by a physician
- These medications and supplements should not take the place of regular surveillance colonoscopy

(Note. These agents have not been FDA-approved for use in preventing colorectal cancer.)



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Reducing Your Risk in the General Population¹

- Aspirin and other nonsteroidal anti-inflammatory drugs (called NSAIDs) such as ibuprofen or naproxen
 - May provide a protective benefit through a variety of mechanisms
 - May reduce the incidence of adenomas
 - Require patients to have regular monitoring because of risk of ulcer or GI bleeding
 - Are recommended to be taken with food

(Note. These agents have not been FDA-approved for use in preventing colorectal cancer.)

Information on chemoprevention of colorectal cancer taken from the proceedings of a conference convened by CCFA and attended by some of the world's leading experts on colorectal cancer and inflammatory bowel disease: Itzkowitz SH, Present DH; for the Crohn's and Colitis Foundation of America Colon Cancer in IBD Study Group. Consensus Conference: Colorectal Cancer Screening and Surveillance in Inflammatory Bowel Disease. *Inflamm Bowel Dis.* 2005;11:314-321.



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Reducing Your Risk: Supplements that May Help (General Population and in UC or CD)

- Studies have shown these supplements may help prevent or decrease the risk of development of colorectal cancer
- Folic acid¹⁻³
 - Low intake: increased risk for colorectal cancer
 - High intake: beneficial
- Calcium^{4,5}
 - Use of supplements to moderately reduce risk of recurrence of colorectal cancer

(Note. These agents have not been FDA-approved for use in preventing colorectal cancer.)



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Reducing Your Risk: Other Medications that May Help (For UC and CD)

- Medications for UC or CD
 - 5-ASA agents (mesalamine)¹
 - Studies have shown mesalamine may reduce dysplastic lesions and cancer
 - Ursodeoxycholic acid for primary sclerosing cholangitis³
 - Studies have shown a reduced risk of colorectal dysplasia or cancer

(Note. Although these medications are FDA-approved for ulcerative colitis and Crohn's disease and primary sclerosing cholangitis, respectively, they have not been FDA-approved for use in preventing or reducing the risk of colorectal cancer.)




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Treatment Adherence is Critical

- Medications are important
- Even inactive UC or CD increases the risk of colorectal cancer
- Treatment adherence and treatment compliance may¹
 - Decrease the risk of colorectal cancer
 - Prevent disease progression
 - Provide symptom relief



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Factors Affecting Adherence¹⁻³

- Extent, duration, and severity of disease
- People more likely to adhere to therapy
 - Have more disease flare-ups
 - Are more knowledgeable about their treatment
- Healthcare professionals should provide
 - Clear instructions
 - Educational materials

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Other Factors Affecting Adherence¹⁻³

- Adverse reactions to medications
- Need for many medications
- Effectiveness of treatment
- Convenience of treatment

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To Increase Treatment Adherence¹⁻³

- Simplify the treatment regimen
- Find support for emotional and social issues
- Stay well informed
- Discuss options with your physician

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Summary and Conclusions

- Colorectal cancer is preventable and treatable when found early
- It is important to
 - Recognize your risks
 - Reduce your risks when possible
 - Be adherent to medications
 - Follow your recommended surveillance program
- Screening and surveillance are the keys to prevention!

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