

# Quick Review: Cancer Of The Large Intestine

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## Citation

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## Abstract

150,000 new cases of Colorectal CA are diagnosed each year in the United States and 60,000 people die of this disease annually. The actual incidence increases with age: at age 50, 0.39 per 1000 persons/yr; at age 80, 4.5 per 1000 persons/yr. Carcinoma of the colon (particularly the right side) is more common in women while carcinoma of the rectum is more common in men.

## RIGHT COLON

- Unexplained Weakness or Anemia
- (+) Occult Blood
- Dyspeptic Symptoms

## LEFT COLON

- Change in Bowel Habits
- (+) Gross Blood
- Obstructive Symptoms

## RECTUM

- Rectal Bleeding
- Intrarectal Tumor
- Sigmoidoscopic Findings

## INCIDENCE

150,000 New Cases of Colorectal CA are Diagnosed Each Year in the USA

60,000 People Die of this Disease Each Year

Incidence Increases with Age:

- Age 50, 0.39 per 1000 persons/yr
- Age 80, 4.5 per 1000 persons/yr

1. Carcinoma of the Colon (particularly the Right Side) is More Common in Women
2. Carcinoma of the Rectum is More Common in Men

## GENETIC PREDISPOSITION HAS BEEN WELL DOCUMENTED

1. Familial Adenomatous Polyposis (Chromosome 5)
2. Cancer Family Syndrome (Lynch II): Early Onset (age 20 -30) Proximal Dominance Endometrial Carcinoma
3. Hereditary Site-Specific Colon Cancer (Lynch I)
4. Ulcerative Colitis
5. Crohn's Colitis
6. Schistosomal Colitis
7. Exposure to Radiation

## MECHANISMS OF SPREAD

Direct Extension [Carcinoma grows Circumferentially]

Hematogenous Metastasis [Portal Venous Blood to the Liver]

Regional Node Metastasis [Most Common Form]

Transperitoneal Metastasis ["Seeding" - through the Serosa]

Intraluminal Metastasis [Rare !]

about 70 % of all patients

**DUKE'S CLASSIFICATION**

1. Limited to the Bowel Wall
2. Extension through the Bowel Wall with Negative Nodes
3. Regional Node Metastasis

4. Operative Mortality Rate : 2 - 6 %
5. Survival Rate of Patients undergoing Curative Resection is 55 %
6. Overall Survival Rate (all stages) is 35 %

**DUKE'S MODIFICATION**

C<sub>1</sub> - Regional Node Metastasis

C<sub>2</sub> - Node Involvement at the Point of Vessel Ligation

**ASTER COLLER MODIFICATION**

A - Limited to Mucosa

B<sub>1</sub> - Extension into the Muscularis Propria

B<sub>2</sub> - Extension though the Muscularis Propria

C<sub>1</sub> - Limited to the Bowel Wall, with Positive Nodes

C<sub>2</sub> - Involvement of the Entire Bowel Wall, with Positive Nodes

“D” - Distant Metastases or Unresectable Lesions  
(Not Formally Included in Any Classification)

**AVERAGE 5-YR. SURVIVAL RATES USING DUKE'S**

- Stage A - 80 %
- Stage B - 60 %
- Stage C - 30 %
- Stage D - 5 %

**SOME POINTS**

1. Approximately 10 % of lesions are Not Resectable at the time of operation
2. An Additional 20 % of patients have liver or other distant metastases
3. Operation, for Cure, can only be performed on

**TNM CLASSIFICATION OF COLORECTAL CANCER**

**PRIMARY TUMOR (T)**

Tx: Primary Tumor Cannot Be Assessed

To: No Evidence of Primary Tumor

Tis: Carcinoma in situ

T1 : Tumor invades the Submucosa

T2 : Tumor invades the Muscularis Propria

T3 : Tumor invades into the Subserosa

T4 : Tumor perforates the Visceral Peritoneum (or directly invades other organs)

**REGIONAL LYMPH NODES (N)**

Nx : Regional lymph nodes can not be assessed

No : No regional lymph node metastasis

N1 : Metastasis in one to three pericolic or perirectal lymph nodes

N2 : Metastasis in four or more pericolic or perirectal lymph nodes

N3 : Metastasis in any lymph node along the course of a named vascular trunk

**DISTANT METASTASIS (M)**

Mx : Presence of metastasis cannot be assessed

Mo : No Distant Metastasis

M1 : Distant Metastasis

**References**

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