## Quick Review: Cancer Of The Large Intestine

## B Phillips, C Perry

## 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 dge 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 !]

## DUKE'S CLASSIFICATION

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

## DUKE'S MODIFICATION

$C_{1}$ - Regional Node Metastasis
$\mathrm{C}_{2}$ - Node Involvement at the Point of Vessel Ligation

## ASTER COLLER MODIFICATION

A - Limited to Mucosa
$B_{1}$ - Extension into the Muscularis Propria
$\mathrm{B}_{2}$ - Extension though the Muscularis Propria
$\mathrm{C}_{1}$ - Limited to the Bowel Wall, with Positive Nodes
$\mathrm{C}_{2}$ - 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
about $70 \%$ of all patients
4. Operative Mortality Rate : 2-6\%
5. Survival Rate of Patients undergoing Curative Resection is $55 \%$
6. Overall Survival Rate (all stages) is $35 \%$

## 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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