

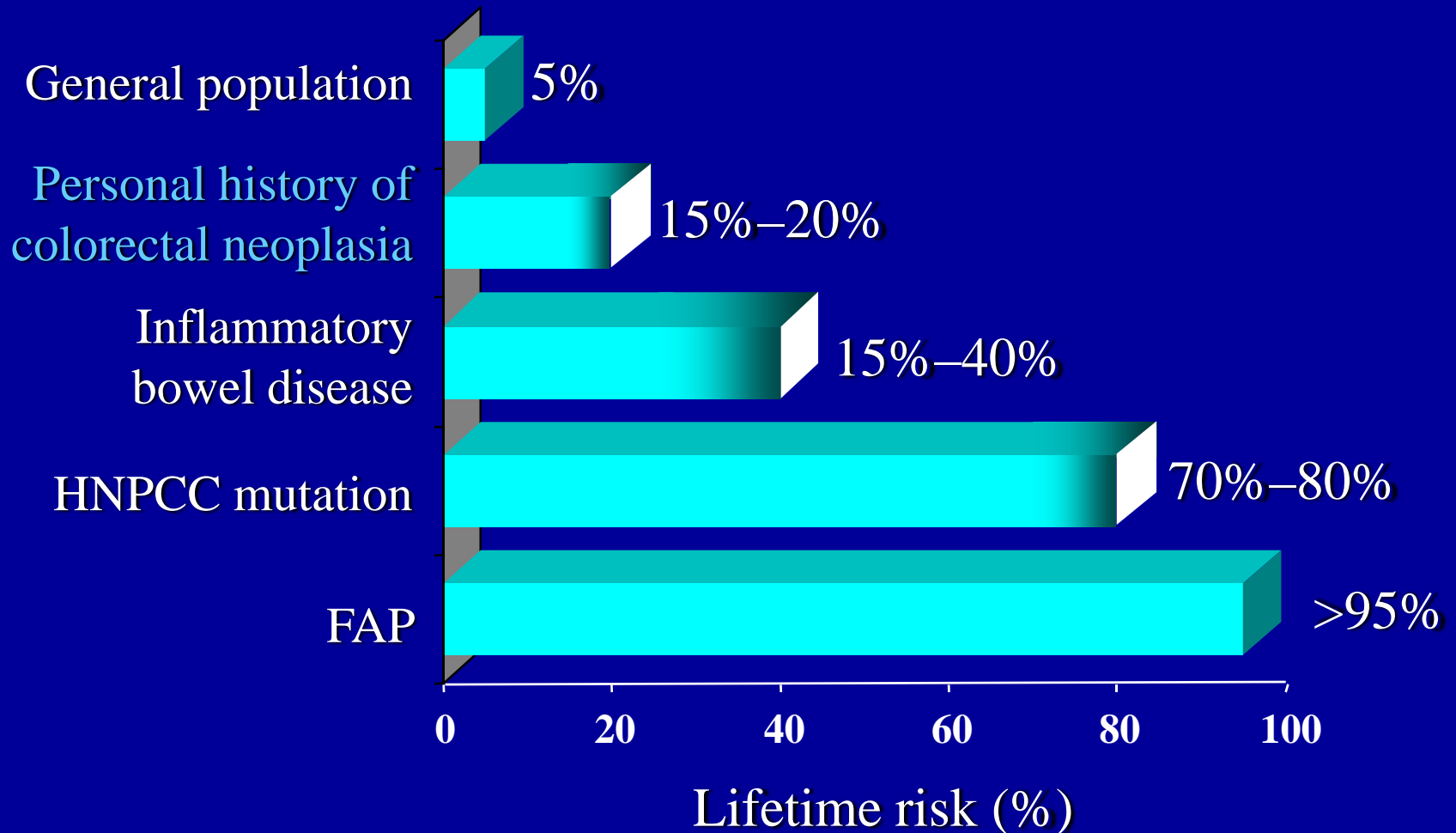
4<sup>th</sup> Annual  
Focus on Gastrointestinal Cancers  
Rectal Cancer

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# Rectal Cancer

- 40,800 Americans /year with the new diagnosis
- Majority are cancers arising from mucosa (inner lining of the lumen) - adenocarcinomas

# Risk of Colorectal Cancer



# Rectal Cancer

- Initial symptoms
  - Abdominal pain
  - Change in bowel habits
  - Blood in stool
  - Weakness
  - Anemia
  - Weight loss
  
- Usually more than one symptom
- Symptomatic earlier than Colon Cancer

# Rectal cancer

- Diagnosed on tests for evaluation of one or more symptoms

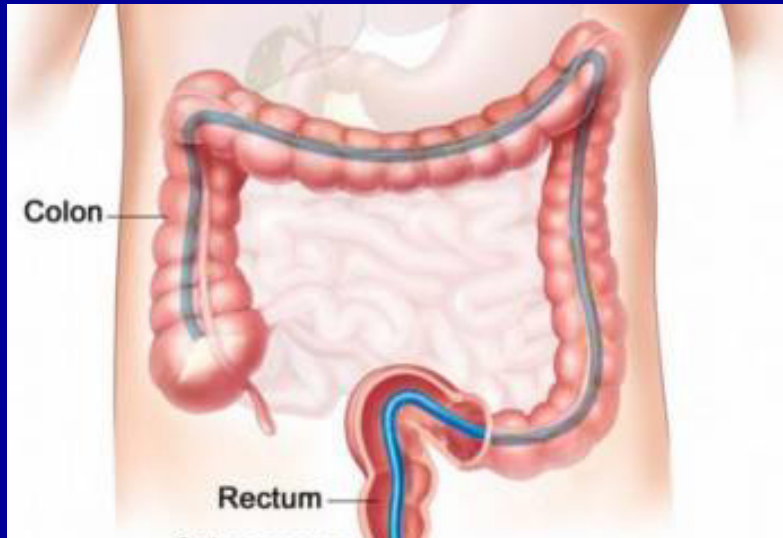
Or

- During a routine screening test
- **Colonoscopy is the single best diagnostic test**
- Alternatives are Flexible sigmoidoscopy and Barium enema
- CT scan

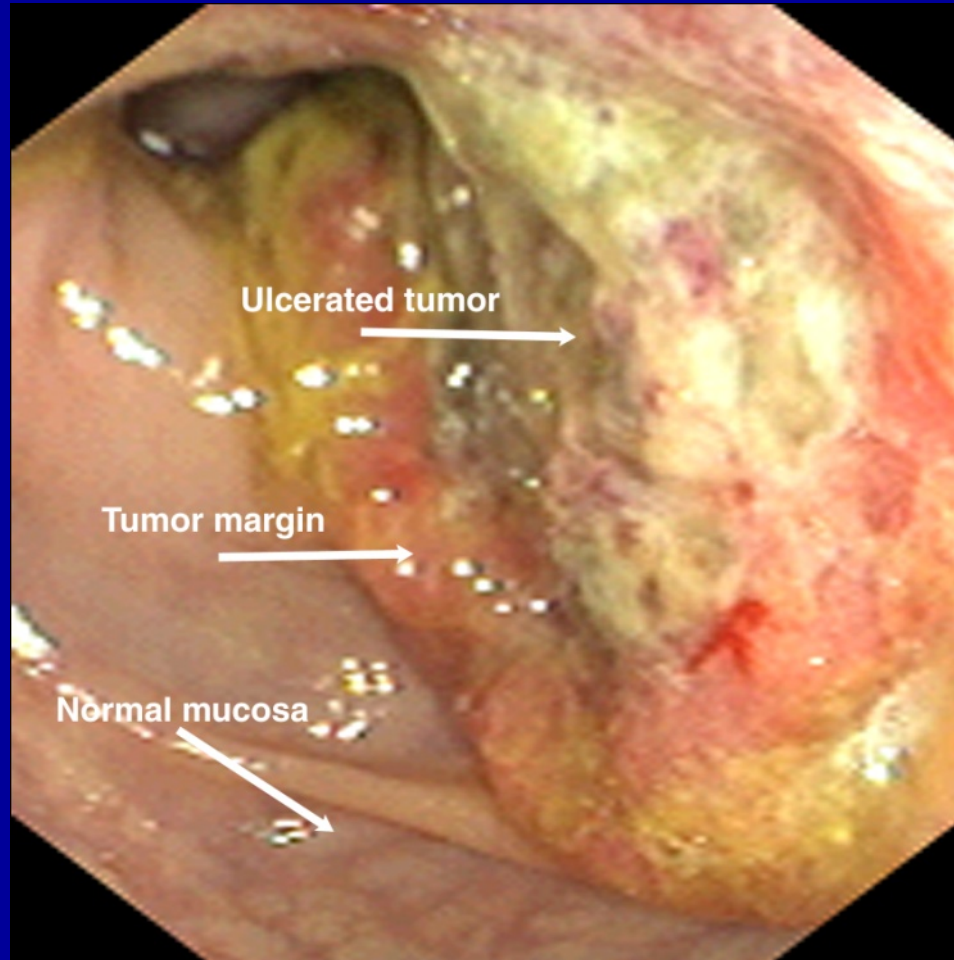
# Rectal Cancer

- Colonoscopy
  - Identify the tumor and obtain biopsies
  - Identify and remove polyps in other areas of the colon
  - Rule out any other tumors in the proximal areas of the large bowel

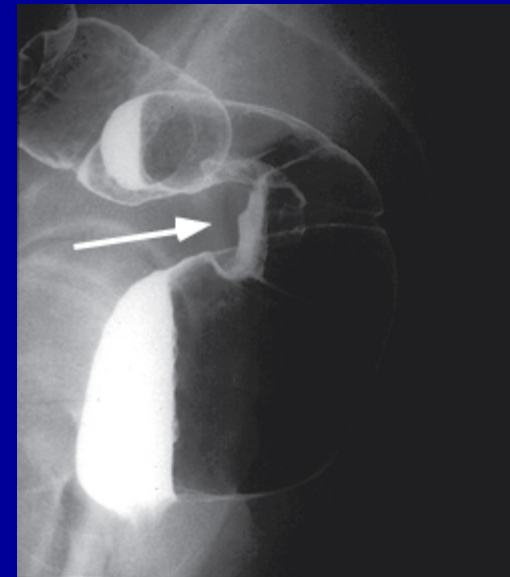
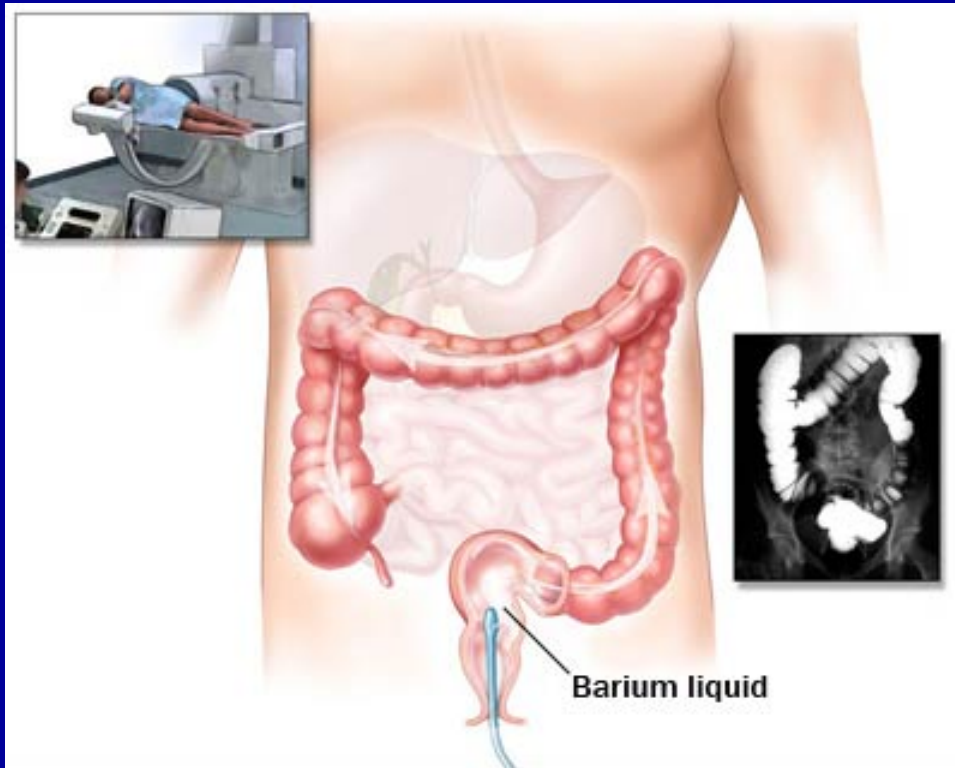
# Colonoscopy



# Colonoscopy Rectal Carcinoma



# Barium Enema



# Treatment of Rectal Cancer

- Multi-modality approach
- Surgery is the cornerstone of therapy
- Need for chemotherapy/Radiotherapy before or after surgery depends on stage of cancer at diagnosis

# Rectal Cancer staging

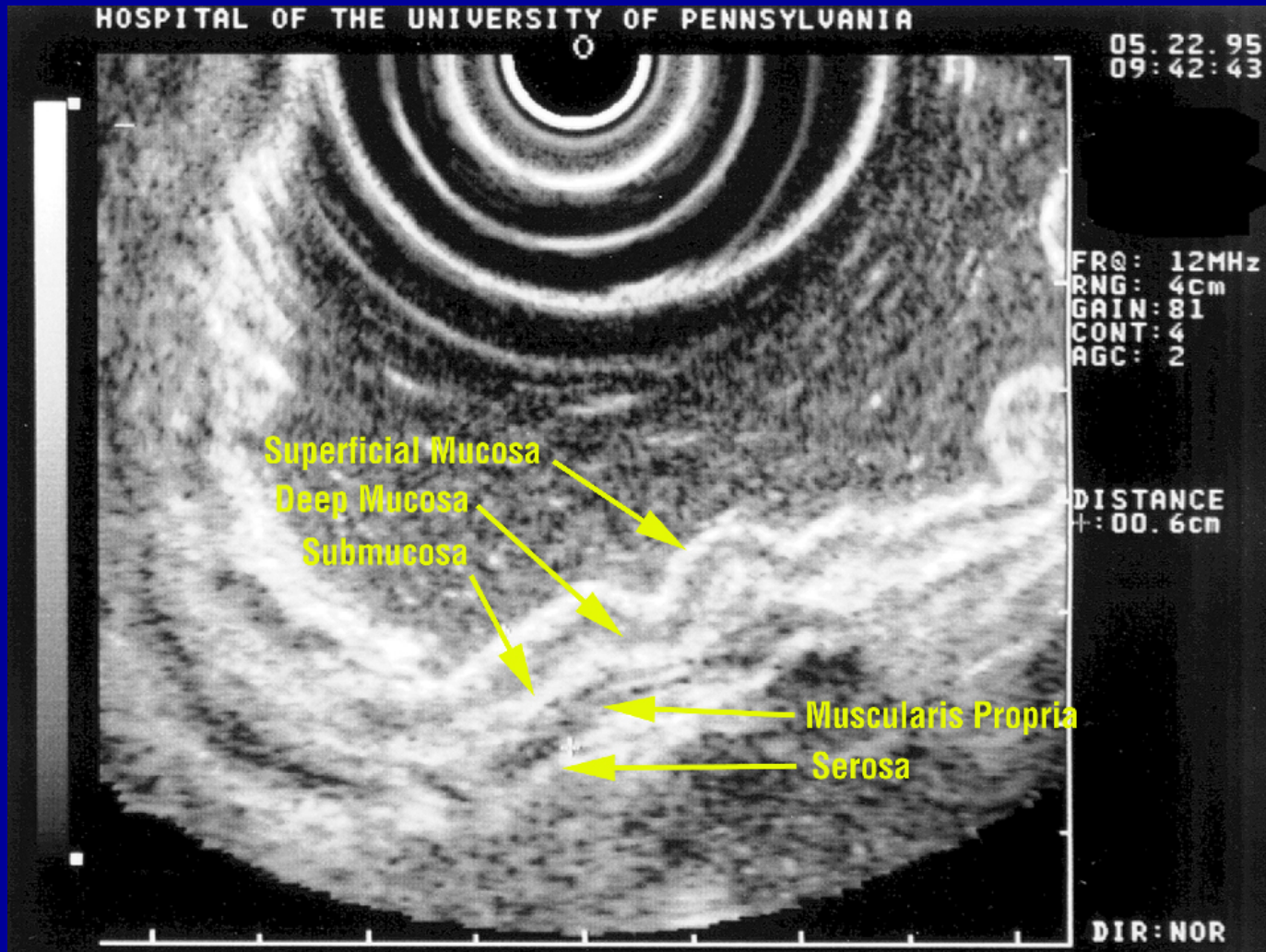
- Localized disease – Stage I or II (confined to mucosa/ submucosa/ muscle layer)  
44%
- Lymph node involvement –Stage III 40%
- Distant spread-Stage IV -16%

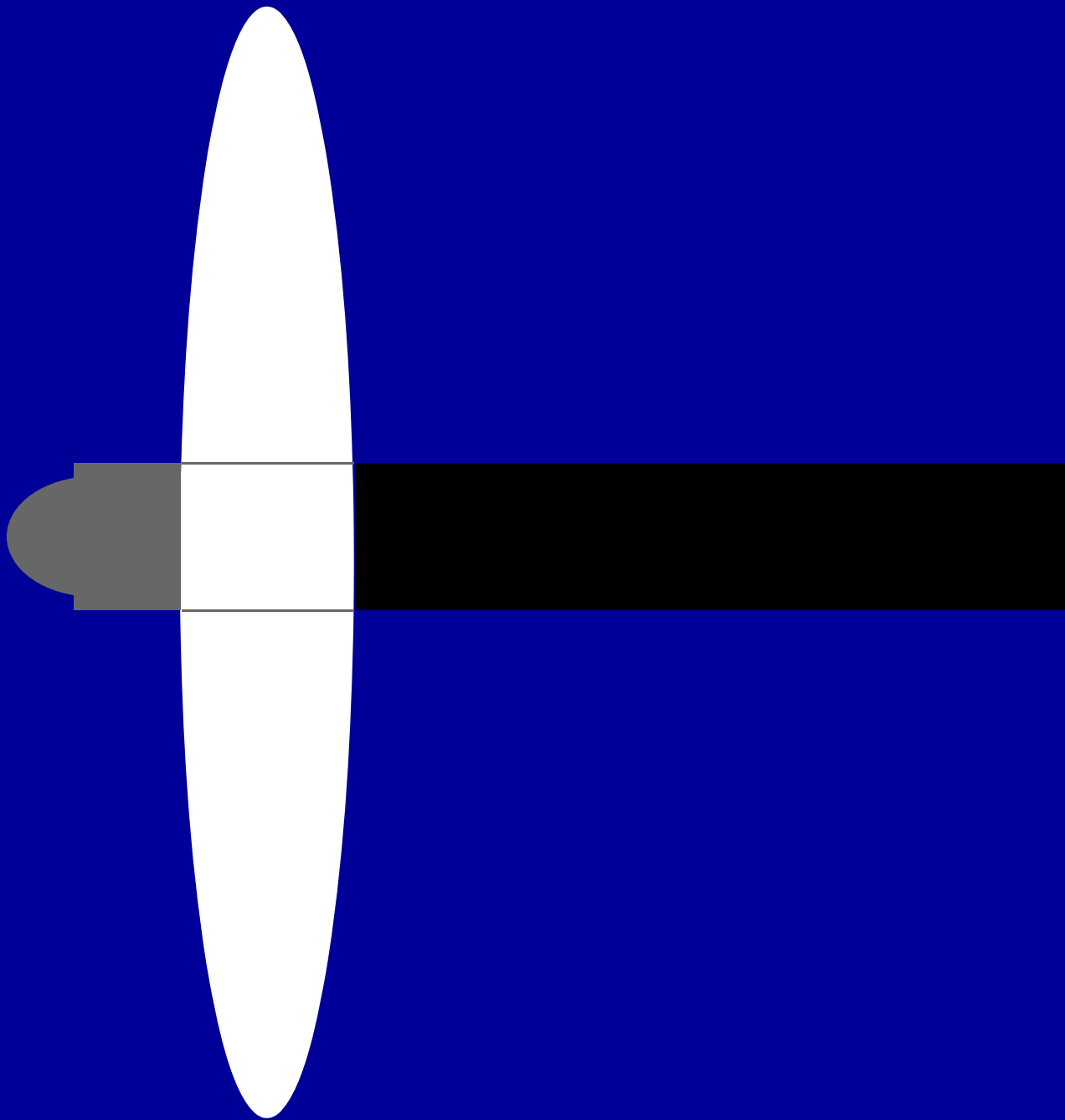
# Rectal Cancer

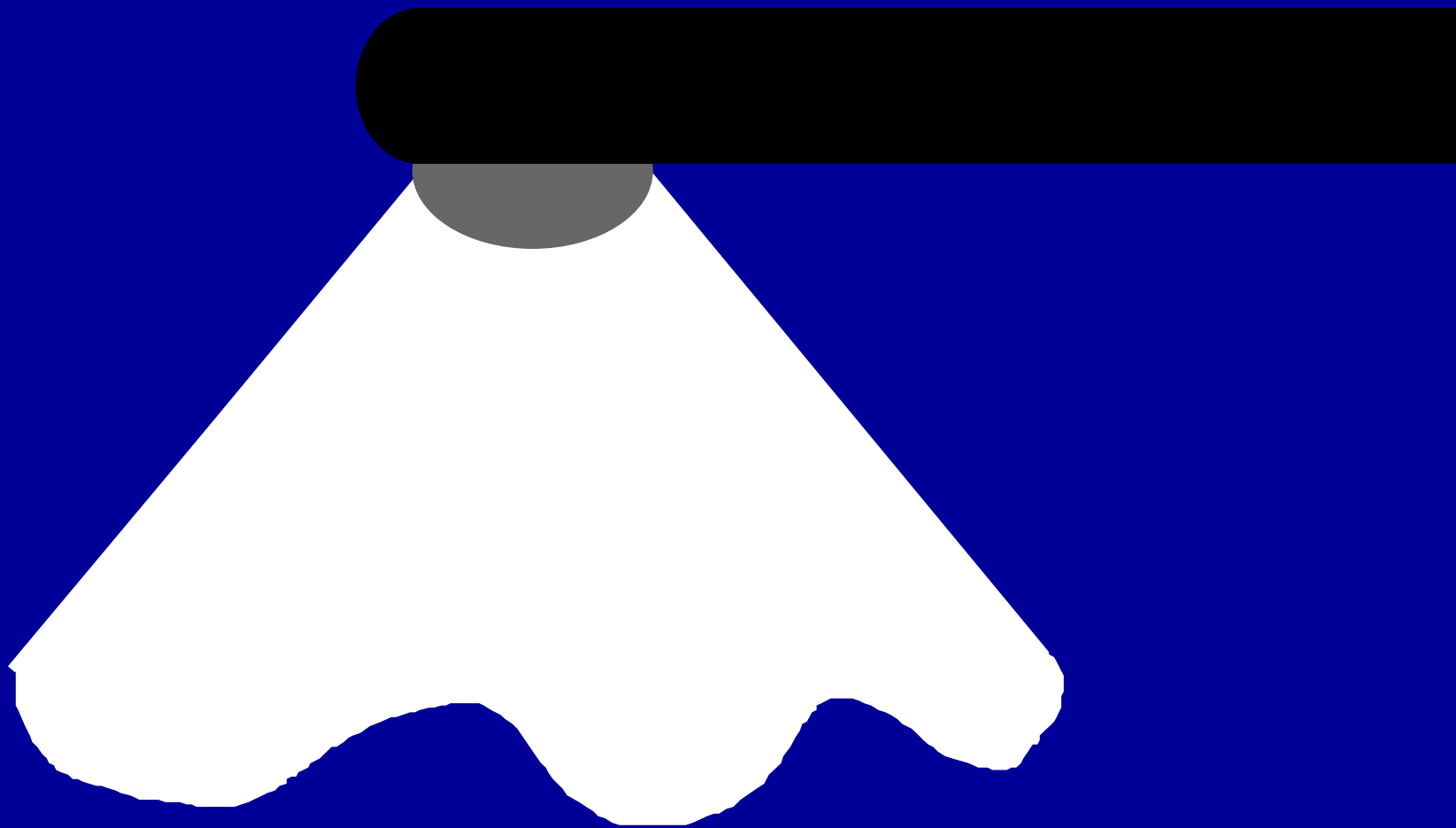
## Tests for Pre –operative Staging

- CT scan
- MRI
- **Transrectal / Endoscopic Ultrasound**
- PET scan –does not routinely add more information than CT
- Most Cost effective strategy is the combination of abdominal CT (for distant spread) and EUS (for local staging)

# EUS Wall Layers



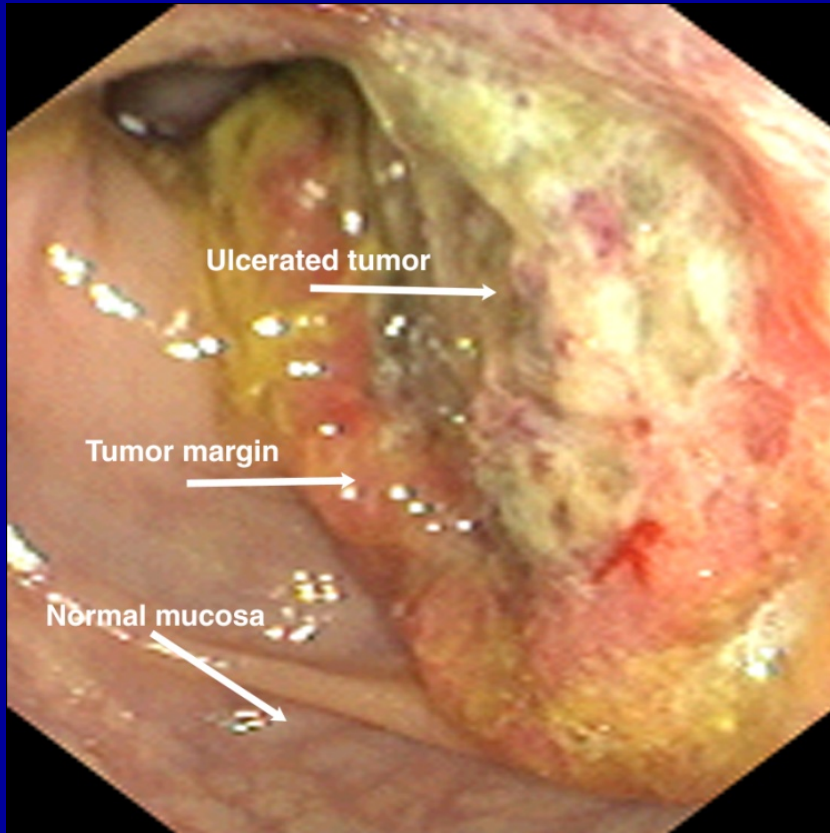




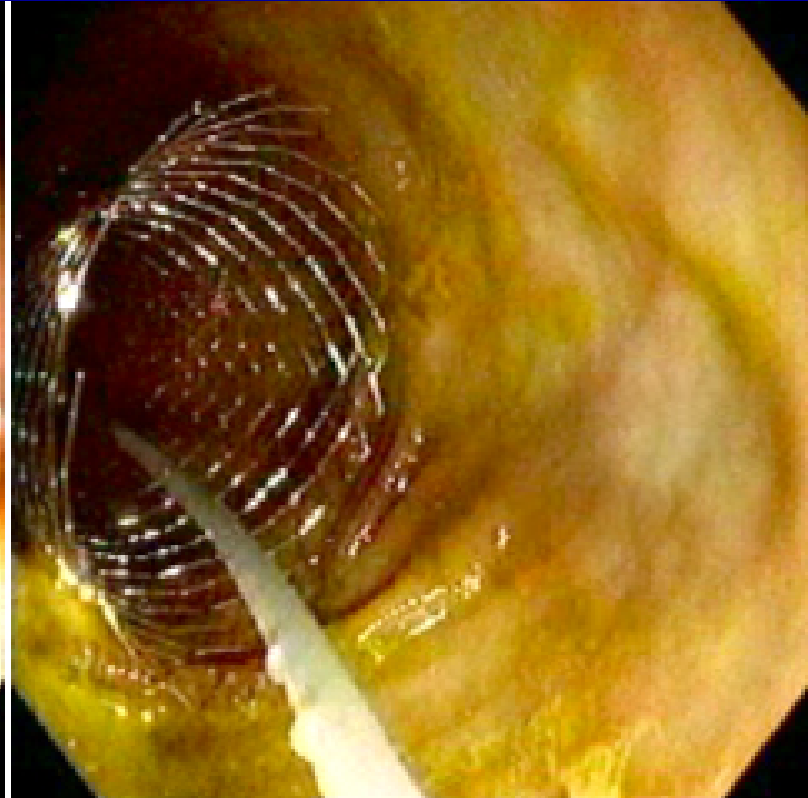
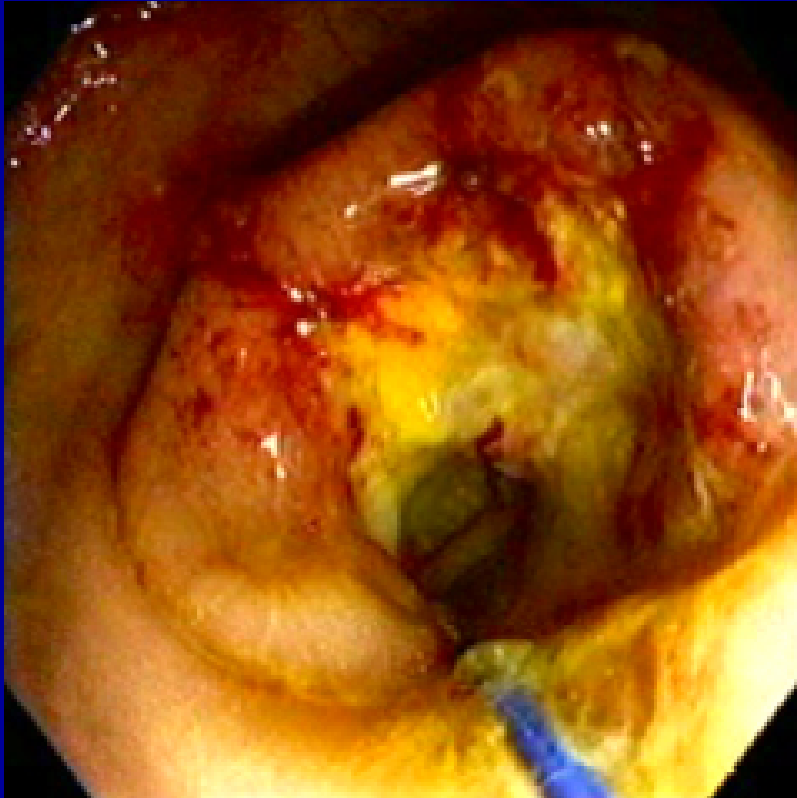
# Endoscopic ultrasound staging of rectal cancer



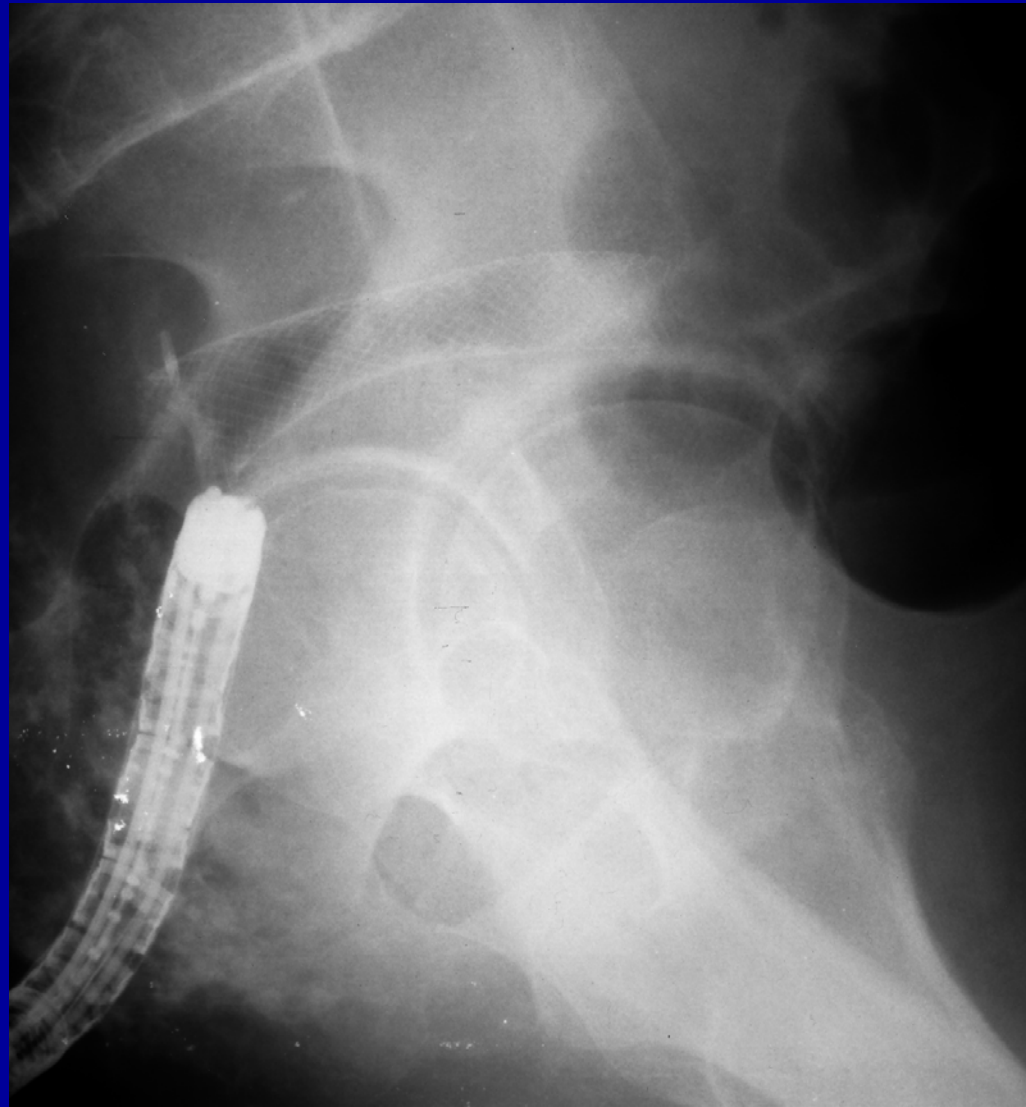
# Endoscopic Ultrasonography (EUS) for staging of Rectal cancer



# Self Expandable Metal Stent Placement to Relieve Obstruction



# Colorectal metal stent



# Self Expandable Metal Stent Placement to Relieve Obstruction

- High Technical and clinical success rate to relieve obstructive symptoms
- Stents can be placed in obstructing tumors as low as 2-3 cm above the anal verge
- Can avoid emergency surgery and ostomy
- Helps Bowel cleansing and elective one stage operation

# Surveillance after definitive treatment

- Early recognition of recurrence – before symptoms develop increases chance of complete surgical resection
- Screening for second primary tumors and polyps
- Significant surveillance benefit from an intense surveillance strategy after surgical resection

# Surveillance

- Clinical Evaluation by physician every 3-6 months for first 3 years, every 6 months in years 4 and 5 and then annual visits.
- Physical examination including rectal examination
- Carcinoembryonic antigen (CEA) levels every 3 months

# Surveillance

- Complete colonoscopy before surgery for rectal cancer or within few months after surgery
- AGA and ASCO guidelines suggest colonoscopy 1 year after surgical resection and 3 years later if normal and then every 5 years

# Surveillance

- Rectal Cancer patients treated with low anterior resection without radiation therapy-Flexible sigmoidoscopy every 6 months for 5 years
- Stage II and III rectal cancer patients who had surgical resection-CT scan of the chest and abdomen every year for 3 years

# Surveillance

## PET scans

- No role in routine surveillance
- Potentially useful in patients with persistently elevated CEA and unrevealing other conventional studies
- Could potentially alter treatment

# Screening For Family Members

- Increased risk in first degree relatives
- AGA and ACS recommend screening for first degree relatives of patients beginning at age 40