

Preoperative and Perioperative preparation of patients with Colon and Rectal cancer

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Objectives

- T stage
- N stage
- Circumferential resection margin
- Distant metastases
- Synchronous tumours
- Optimisation of the patient
- Patient participation in decision making

Investigation of the Colon

- Choice lies between Barium enema
Colonoscopy Sigmoidoscopy CT
Colography
- Barium enema “ Apple core” stricture with
loss of mucosal pattern, Benign polyps
may show similar features.
- Barium enema has 1% false positives and
7% false negatives, usually in the Sigmoid
and the Caecum

Errors of Ba enema

- Perceptive, failure to recognise lesion
- Technical, Overfiling, too few films, lack of air contrast
- Limitations of Barium enema, particularly Sigmoid and Caecum, Sigmoid diverticular disease, small lesions of the Caecum, Rectal lesions when the Bowel Prep is poor

Rigid Sig/Flexi Sig/colonoscopy

- Rigid sig is good for the Rectum
- Flexi sig picks up lesions in 25% OF 'normal' Ba enemas, Particularly in the presence of diverticular disease
- Colonoscopy is the best, but anus and terminal Ileum are the only reliable landmarks. Has a higher risk of perforation than Ba enema, Complete visualisation achieved in 10% only

CHOICE?

- . Local availability
- Expertise
- If Ba enema is used, Rectum should be visualised endoscopically
- If suspicious symptoms are present in the face of a normal Ba enema, proceed to Colonoscopy
- Similarly, if colonoscopy fails to achieve
- full visualisation proceed to completion Ba enema

CHOICE?

- Colonoscopy preferred when the presenting symptoms are those of mucosal pathology i.e bleeding or family history of polyps/cancer
- Ba enema preferred when the symptoms are of functional nature i.e alteration of bowel habit, fistulation, suspected megacolon,volvulus

Histological confirmation

- Unnecessary, If the Ba enema shows an unequivocal carcinoma
- If in doubt endoscopic visualisation and biopsy are mandatory
- Where both Ba enema and endoscopy are unsatisfactory, Contrast CT ABD
- CT colography is better , detects lesions as small as 6mm in size

Imaging for Rectal cancer

- CT has a limited value. 73% accuracy for T staging, 25%-70% for nodal status, but easily identifies intra abdominal metastatic disease
- ERUS is more accurate for superficial tumours, less accurate for advanced tumours, has a steep learning curve, difficult in stenotic and bulky tumours and after neo adjuvant therapy.
Variable accuracy for nodal status

Imaging for Rectal cancer

- Endorectal MRI is accurate for superficial early lesions
- Phased array MRI is accurate for advanced tumours to assess the Circumferential Resection Margin
- But not suitable for assessment after neoadjuvant therapy

Detection of Metastases

- Chest radiograph is adequate
- Pre-op abdominal u/s scan does not reach the 85% accuracy, Therefore intraoperative u/s scan is becoming popular
- CT abd picks up liver lesions as small as 1.5cm, also shows ureteric involvement

Tumour markers

- CEA
- Gives a lead time in the diagnosis of recurrence of about one year
- But does not improve survival

Urea and Electrolytes

- Secretion by Colo-Rectal tumours
- Ureteric involvement
- Co-morbidity

Full Blood Count

- Blood transfusion
- Recent evidence suggests that there is no risk of increased recurrence

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