

LOCAL EXCISION OF RECTAL CANCER

Introduction

- 30% of all colorectal cancers
- 42,000 cases and 8500 deaths/year
- surgery is the cornerstone of curative therapy
 - 5-yr survival 80-90% for stage I
 - 50-60% for stage II
 - 30-40% for stage III

Surgical Management

- LAR/APR- gold standard; morbidity(7-68%) and mortality(0-6.5%)
- local excision- properly selected patients: Superficially invasive, small cancers determining the best surgical option:
- tumor characteristics
 - depth of invasion
 - nodal status
 - location
 - histology.
 - Macroscopic appearance (ulceration) and tumor size are not absolute contraindications for local therapy.
- patients factors
 - operative risk
 - functional status
 - patient wishes (refuse stoma etc.)

Local excision

- Early distal rectal cancers with favorable features that are classified as T1 or T2 by depth of invasion may be treated by local excision :
 - Transanal- most commonly used approach for distal cancers
 - Trans-sphincteric excision (York-Mason procedure)
 - Midline posterior proctotomy - posterior parasacral approach (Kraske resection)
- The goal is: a complete full-thickness excision of the rectal cancer down to the perirectal fat ; primary closure ; minimum lateral margin of 1 cm; clear deep margin.
- Selection of patients — The usual criteria used to determine suitability for potentially curative local excision are:
 - Tumor size less than 4 cm
 - Location 8 cm or less from the anal verge
 - Well or moderately well differentiated histology
 - Mobile, not ulcerated tumor
 - No suspicion of perirectal or presacral nodes (CT or EUS)
 - Tumor involves less than one-third of the circumference of the rectal wall
 - Tumor stage \leq T2
- the node bearing areas are not removed by local excision techniques rendering these procedures inadequate for node- positive tumors. In T3 (extension beyond muscularis mucosa), the 5year survival reduces by 20-30% and the local recurrence rate is high.

- the risk of nodal metastases rises progressively as the tumor penetrates more deeply from submucosa through muscularis propria to fat.
- Lymph node metastases:
 - 5 to 12 % of T1 lesions
 - 10 to 35 % of T2 lesions
 - 70 % of T3 lesions
 - 53-79 of T4 lesions.

Transanal endoscopic microsurgery

- Accesses lesions up to 18 cm from the dentate line.
- Disadvantages:
 - short-term reduction in anorectal function that does not seem to persist
 - entry into the peritoneal cavity during the procedure
 - Technical difficulty of the procedure
 - expense of the equipment

Other local techniques : electrocoagulation ; endocavitary radiation

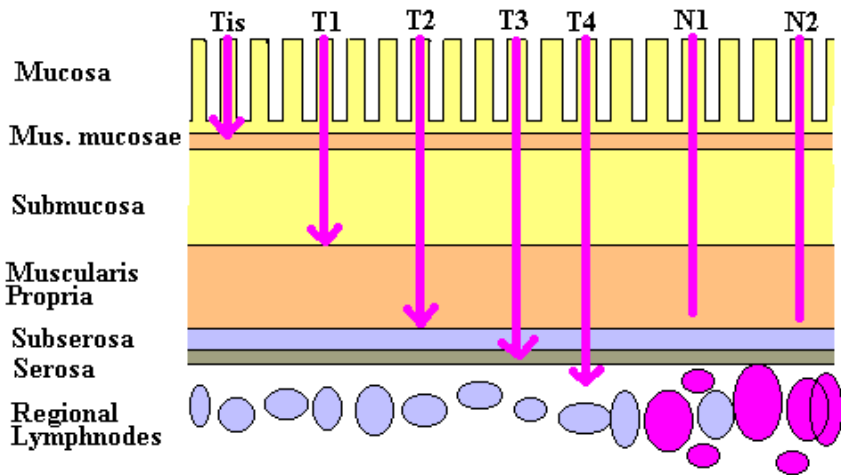
Local excision with adjuvant therapy: T₂ tumors and T₁ with poor histopathologic characteristics

Results

- Vary wildly between centers. Lack of EBM.
- Local recurrence after transanal excision:
 - T₁ 0-18%
 - T₂ 11-47%.
 - Radical surgery : T₁ 0% ; T₂ 6%)
- Local excision of T₂ lesions: higher rate of metastasis; lower 5 year survival rate (65 vs. 81%).
- Salvage surgery- most local recurrence post local excision, are in rectal wall. Better outcome with radical salvage surgery

Current policy

- T1 N0: local excision
- T2 N0: radical resection without adjuvant chemoradiation (good-risk patient)
- T2 N0: local excision coupled with chemoradiation (therapeutic equivalence to radical surgery has not been proved)
- T3 or N+: local excision may offer a palliative option



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