Management of T1 carcinoma of the lower third rectum

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The earliest invasive carcinoma of colon and rectum is an invasion into the submucosa. For the TNM classification, these lesions are T1 Nx Mx. They present as an adenoma with invasive carcinoma, or a frank carcinoma.

Local excision for T1 carcinoma of the rectum can be curative if the lesion is accessible for an adequate excision and if the lesion has not spread to the lymph nodes or distant metastasis. The key to success in local excision is selecting the lesions that have low risk of metastasis.

How Often is Local Excision for T1 CA Rectum?

From the Mayo Clinic (1): A retrospective review of 7543 patients who underwent colorectal resection for carcinoma of colon or rectum from 1979 to 1995, 119 patients had T1 carcinoma of the rectum; seventy patients (59%) were technically suitable for local excision.

From University of Minnesota (2): 1367 patients with carcinoma of rectum (all stages) from 1987 to 1996 underwent treatment; 69 patients with T1 lesions had local excision.

From the Cleveland Clinic (3): Of 1541 patients with carcinoma (all stages) within 10 cm of anal verge, 52 patients with T1 lesions underwent local excision without adjuvant therapy.

The Risk of Lymph Node Metastasis in T1

Numerous markers have been studied to predict lymph node metastasis in T1 carcinoma of rectum. Among the increased risk factors reported in the literature are: lymphovascular invasion, poor differentiation, gender, extensive budding, micro-acinar structure, flat or depressed lesion, and depth of invasion in submucosa.

Recent studies with multivariate analysis showed the independent risk of lymph node metastasis in T1 carcinoma of rectum to be: lymphovascular invasion and into the depth of the submucosa (Sm3)4. Our study also showed that T1 carcinoma in the lower third of the rectum had a high risk of lymph node metastasis5.

Selection of Patients for Transanal Excision in T1

Within 7 cm of anal verge  
Size not larger than 3 cm  
No lymphovascular invasion  
Not a Sm3 depth of invasion  
Not a high grade carcinoma

Technique of Local Excision

A Pratt anal speculum gives the best exposure.  
Mark normal margin at least 1 cm all around.  
Excise with electrocautery into perirectal fat.  
Close the wound transversely, or left open.

CONCLUSION

Local excision for T1 carcinoma of rectum has high recurrences.  
Improved cure = decreased recurrences.
Find better ways to select patients; molecular markers in the future?
Do more radical resection.
Adjuvant therapy?

**SUMMARY**

**LEĆENJE T1 KARCINOMA DONJE TREĆINE REKTUMA**

Prva i najranija faza invazivnog karcinoma kolona i rektuma je invazija submukoze. U TNM klasifikaciji ove lezije se označavaju kao T1 Nx Mx. One se klinički manifestuju kao adenomi sa fokusom invazivnog karcinoma ili kao karcinomi.

Lokalna ekscizija T1 karcinoma rektuma može biti kurativna ukoliko je lezija dostupna da se uradi adekvatna ekscizija i ukoliko se tumor nije proširio u regionalne limfine čvorove ili dao udaljene metastaze. Lokalna ekscizija tumora rektuma može dati zadovoljavajuće rezultate samo ukoliko se uradi dobra selekcija bolesnika (lezije sa malim rizikom metastaziranja).

Ključne reči: karcinom, rektum, klasifikacija

**REFERENCES**