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Nonoperative management of rectal cancer after chemoradiation opposed to resection after complete clinical response. A comparative study

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Abstract

Introduction: Surgery is the standard treatment of rectal cancer after neoadjuvant therapy. Some authors advocate a nonoperative management (NOM) after complete clinical response (cCR) following chemoradiotherapy (CRT). We compare our results with NOM to standard resection in a retrospective analysis.

Methods: Rectal adenocarcinomas submitted to NOM after CRT between September 2002 and December 2013 were compared to surgical patients that had pathological complete response (pCR) during the same period. Endpoints were Overall Survival (OS), Disease Free Survival (DFS), Local Relapse (LR) and Distant Relapse (DR).

Results: Forty-two NOM patients compared to 69 pCR patients operated after a median interval of 35 weeks after CRT. NOM tumors were distal (83.3% vs 59.4%, $p = 0.011$), less obstructive (26.2% vs 54.4%, $p = 0.005$) and had a lower digital rectal score ($p = 0.024$). Twelve (28.0%) recurrences in NOM group and eight (11.5%) in the surgical group occurred after a follow-up of 47.7 and 46.7 months respectively. Isolated LR occurred in five (11%) NOM patients and one (1.4%) in the surgical group. Four (80%) LR were surgically salvaged in NOM group. No difference in OS was found (71.6% vs 89.9%, $p = 0.316$) but there was a higher DFS favoring surgical group (60.9% vs 82.8%, $p = 0.011$). Distal tumors had worse OS compared to proximal tumors in surgical group (5-year OS of 85.5% vs 96.2%, $p = 0.038$).

Conclusion: The NOM achieved OS comparable to surgical treatment and spared patients from surgical morbidity but it resulted in more recurrences. This approach cannot be advocated routinely and controlled trials are warranted.

Keywords: Rectal cancer; Neoadjuvant therapy; Complete clinical response; Rectal resection; Nonoperative treatment

Introduction

Colorectal cancer is the third most common malignant neoplasia worldwide (1.4 million new cases/year[1]) and the third leading cause of cancer-related death in both men and women in the US.[2] The standard of care for rectal mid-distal locally advanced adenocarcinoma is neoadjuvant chemoradiotherapy (CRT) followed by radical surgery.[3] 14–40% of patients who receive neoadjuvant CRT will achieve a pathological complete response (pCR)[4] and will have a favorable prognosis after total mesorectal excision (TME), with low rates of local relapse (LR) and high 5-year survival rates.[5] However, the nonoperative management strategy (NOM) proposed by Habr-Gama et al.[6] selects those rectal cancer patients showing complete clinical response (cCR) after CRT in order to avoid surgery and its related morbidity.

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