NEOADJUVANT TREATMENT OFRECTAL CANCER:
SHORT-COURSE VS LONG-COURSE RADIOTHERAPY?

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Aim: The two broad approaches to neoadjuvant therapy for distal rectal cancer - short-course and long-course radiation. The outcomes of these approaches reported in nonrandomized trials are not comparable because patients selected for treatment with short-course radiotherapy included those with T1–3 disease. The aim of this study was to compare survival, local control, postoperative complications and anal sphincter preservation in the two treatment groups: short-course (sRT) versus long-course radiotherapy (lRT) as a neoadjuvant modality for the management of lower rectal cancer.

Methods: The study randomized 172 patients with T2-3N+/−M0 distal rectal cancer. Patients receive either neoadjuvant short-course radiotherapy (5 x 5 Gy) and surgery within 1-2 days (Groupe 1) or long-course radiotherapy (30 Gy in 15 fractions of 2 Gy) and surgery 4 weeks later (Groupe 2). The median follow-up of living patients was 48 (range 38–64) months.

Results: Complete response - 8.8%, partial response - 42.3% in Groupe 2. The actuarial 5-year overall survival was 77.6 % in the Groupe 1 and 90.2 % in the Groupe 2 (P = 0.01). Disease-free survival was 62.7% versus 86.4 per cent (P = 0.001), crude incidence of local recurrence was 8.8% versus 6.9% (P = 0.170) respectively. Anal sphincter preservation in Group 2 was 91.1%, compared with 55.4% in the 1st group. Number of sphincter saving surgery for patients in Group 2 with initially planned abdominoperineal resection of the rectum increased by 2.7 times (p <0.005). Postoperative complications such as anastomotic leak comparable in both groups (8.8 and 7.5%).

Conclusions: Combined treatment of patients with distal rectal cancer (T2-3N+/−M0) using neoadjuvant long-course radiotherapy of 30 Gy is safe and effective.

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