

## Cancer of the lower third of the rectum: Dilemmas between the low anterior resection and the abdominoperineal excision

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**Objective.** Sphincter-saving operations are performed with the increasing frequency for patients with carcinoma of the lower third of the rectum. Stapling devices allow a safe resection of lesions closer to the anal verge. Our study compares the results of the low anterior resection (LAR) using the double stapling technique and of the abdominoperineal excision (APE) in patients with carcinoma of the lower third of the rectum.

**Patients and methods.** In the period from 1<sup>st</sup> January 1989 to 31<sup>st</sup> December 1995, 116 patients with carcinoma of the lower third of the rectum underwent potentially curative resection. Five-year survival was estimated by Kaplan-Meier statistical analysis. Patients who died within 30 days after the operation were censored. Differences in survival curves between both groups were assessed by the log rank test.

**Results.** We performed LAR in 44 of 116 (37.9%) patients and APE in 53 of 116 (45.7%). We preserved the sphincter in 52 out of 116 (44.8%)(LAR, local excision). The patients were divided according to the type of operation by the Dukes classification: LAR (A11/44 25%; B16/44 36,4%; C17/44 38,6%), APE (A12/53 22,6%; B17/53 32,1%; C24/53 45,3%). Five-year survival rate for patients with Dukes B and C tumors in the lower third of the rectum is 25% for LAR and 53% for APE. There was no statistically significant difference of survival curves between the two operations ( $p=0.20458$ , Log rank). We analyzed our results with regard to positive lymph nodes: LAR (N1 15.9%; N2 25%; N3 11,4%); APE (N1 18.9%; N2 22.6%; N3 0%). Lymphatic spread was found in 23 of 44 (52.3%) of the patients with LAR and in 22 of 53 (41.5%) of the patients with APE. Anastomotic leakage became clinically manifest in 8 out of 44 patients (18.2%). All the patients required relaparotomy and were treated with temporary loop ileostomy.

**Conclusion.** We performed LAR (52,3%) in a higher percentage of patients with lymphatic dissemination than APE (41.5%). Thus the difference in five-year survival rate is not surprising: LAR (25%), APE (53%). A more detailed preoperative staging of the tumor should be undertaken (endorectal- ultrasonography and size of the tumor). LAR should be performed in patients with small tumors or non advanced carcinoma (T1, T2). In patients where lymphatic dissemination or more advanced carcinoma (T3,T4) is identified, APE should be performed.

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