

Neoadjuvant therapy and mini-invasive total mesorectal excision for rectal cancer: feasibility and outcome analysis from a single institution prospectively collected data base

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ABSTRACT

Aim and background. Neoadjuvant treatment for rectal adenocarcinoma improves local control and represents the standard for locally advanced disease. Laparoscopic and robotic total mesorectal excision has been increasingly adopted. It provides magnified visualization of the pelvic cavity, thereby facilitating the mesorectal dissection.

Methods. Consecutive patients with locally advanced/ultralow rectal adenocarcinoma received neoadjuvant treatment and mini-invasive total mesorectal excision at our center. We retrospectively reviewed the clinical records by using a prospectively collected data base and focusing on feasibility, tumor response and treatment outcomes.

Results. In a 13-year period, 117 rectal adenocarcinoma patients (80 males and 37 females) received neoadjuvant treatment and mini-invasive total mesorectal excision. Median age at diagnosis was 67 years; pre-treatment stage was I in 10 (9%); IIA in 58 (50%); IIC in 5 (4%); IIIA in 10 (9%); IIIB in 31 (26%) and IV in 3 (2%) patients. All patients received external beam radiation therapy, 79 (67%) combined with fluorouracil-based chemotherapy. One-hundred and three patients underwent laparoscopic surgery and 14 robotic surgery. Overall, 90 patients (77%) had anterior resection and 27 (23%) had abdominoperineal resection. Down-staging was obtained in 70 patients (66%). No major intraoperative nor delayed surgical complications were observed. At a median follow up of 52 months, 8 patients (7%) had a local relapse, 7 of them along with distant relapse, and 16 (14%) had distant relapse. The 5-year relapse-free survival was 76.5%.

Conclusions. Our data suggest that in a community hospital mini-invasive surgery after neoadjuvant treatment is feasible in real clinical practice and achieves consistent results in term of disease control rate.

Key words: mini-invasive surgery, neoadjuvant therapy, rectal cancer, total mesorectal excision.

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