

Comparison between intensified neoadjuvant treatment and standard preoperative chemoradiation for rectal cancer

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ABSTRACT

Objectives. The aim of the current study was to compare a neoadjuvant regimen containing oxaliplatin with standard preoperative treatment for rectal cancer.

Methods. From December 2006 to December 2007, 20 patients with rectal cancer were treated at our Institution with the weekly addition of oxaliplatin (50 mg/m²) to radiotherapy (50.4-54.0 Gy in 28-30 daily fractions) and continuous infusion of 5-fluorouracil (200 mg/m²). The results of the regimen were compared with a historical control group including 21 consecutive patients previously treated with standard 5-fluorouracil treatment from December 2004 to October 2006.

Results. Both the rate of sphincter preservation in low rectal cancer (91.7% *vs* 36.4%, $P = 0.009$) and the rate of downstaging (84.2% *vs* 47.6%, $P = 0.023$) were higher in the oxaliplatin group than in the control group. Pathological complete response was achieved in 8 patients (42.1%) in the oxaliplatin group and in 4 patients (19.0%) in the control group ($P = 0.172$). When ypT0-pT1 stages were analyzed together, the P value was 0.051. Acute toxicity was increased in the oxaliplatin group, with a higher incidence of G3 diarrhea and pelvic pain than in the control group (30.0% *vs* 14.3%, $P = \text{NS}$).

Conclusions. Our data seem to correlate the addition of oxaliplatin to the standard treatment for rectal cancer with higher rates of sphincter preservation, down-staging and complete response. Toxicity is increased and requires careful monitoring. However, our results refer to a retrospective comparison of a small series of patients and need to be validated by the large, phase III randomized trial currently ongoing. **Free full text available at www.tumorionline.it**

Key words: continuous 5-fluorouracil infusion, oxaliplatin, preoperative radiochemotherapy, rectal cancer.

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