

### **Preoperative Radiotherapy in Rectal Cancer Treatment - is it Really a Golden Standard?**

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#### **Abstract**

Preoperative radiotherapy in the treatment of rectal cancer was thought to be an achievement of similar importance to total mesorectal excision (TME), for the therapeutic management of rectal malignancies. However, numerous criticisms have been discussed in this field lately. We have analysed the two main purposes of preoperative radiation: possible sphincter preservation and the conversion of a non-resectable tumor into a resectable one in a series of 31 consecutive patients, operated in our clinic. In 20 of them, preoperative radio/chemoradiotherapy was applied, while 11 patients were firstly operated and then irradiated. The surgical procedure included total meso-rectal excision in 30 patients, as part of a low anterior resection, in 13 cases and of an abdominal perineal resection, in the other 17 cases. We have found that preoperative radiotherapy improves the local recurrence rate but has no influence on the overall survival rate. However, we should not overlook the adverse effects of this method: toxicity of radiotherapy on the small bowel and the urinary bladder, the healing of the perineal wounds and the risk of anastomotic leaks. We concluded in favor of elective preoperative radiotherapy in selected cases: any T4 tumors, T3 tumors which threaten the mesorectal fascia on MRI, whenever there is a suspicion of nodal involvement and also for very low tumors.

**Key words:** rectal cancer, preoperative radiotherapy

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