

local recurrence rates [1]. Few years later, the Swedish Rectal Cancer Trial found that preoperative radiotherapy improved survival compared to surgery alone [2]. The results of a large meta-analysis strengthened the idea that adding preoperative radiotherapy to surgery could improve overall and cancer specific survival [3].

Apart from the advances in rectal cancer treatment through the introduction of effective adjuvant treatment regimens, the concept of adequate surgery has changed dramatically in recent years. It was discovered that the basic conventional procedure that involves blunt dissection of the rectal fascia failed to remove all mesorectal tissue, which was associated with high recurrence rates from 15 up to 45% [4]. The acknowledgement of the important role of circumferential margin involvement in the occurrence of local recurrences led to the introduction of TME (Total Mesorectal Excision) surgery [5]. By using sharp dissection under direct vision a relative bloodless plane is followed along the outer surface of the rectum. This technique ensures a specimen with intact mesorectum with negative tumour margins in the majority of resectable (i.e. mobile) rectal cancers. As was concluded from mainly retrospective studies, the use of this technique resulted in favourable local recurrence rates and increased survival compared to conventional blunt dissection.

Considering the progress in rectal cancer treatment in the areas of both adjuvant treatment and surgery, the question had to be answered whether adjuvant treatment in addition to TME surgery was still capable of achieving any further improvement in outcome. To answer this question, a large international multicenter trial was set up by the Dutch Colorectal Cancer Group together with the Nordic Gastro Intestinal Tumor Adjuvant Therapy Group and the EORTC to investigate the efficacy of short term preoperative radiotherapy in TME treated rectal cancer patients. From January 1996 until December 1999 1861 patients with histologically proven adenocarcinoma of the rectum without evidence of distant metastases were included into the study. 1861 patients were randomly assigned in one of the two treatment groups. The participating surgeons attended workshops and symposiums, saws instructional videotapes and were monitored by specially trained surgeons. Pathologists were trained to identify lateral spread of the tumour according to the protocol of Quirke et al. The local recurrence analysis for all patients of the TME trial showed a 2-year local recurrence rate of 5.3%. In the TME group this rate was 8.2% and in the RT+TME group 2.4% ($p < 0.001$). Survival rates did not differ significantly [6]. Macroscopic examination of the resected specimen correlated independently from gender, age and tumour size with local failure and survival [7]. In a univariate subgroup analysis, the beneficial effect of short term irradiation was not significant in patients who had lesions located more than 10 centimetres from the anal verge and in patients with TNM stage I and IV. However, diagnostic tools like digital rectal examination and endorectal ultrasonography are not capable of identifying these subgroups of patients accurately.

It became apparent from this study that performing a R0 resection is of utmost importance. Of 1759 eligible patients with available information on margins and tumour spillage, only 1351 (77%) had tumour-free margins. Patients with involved margins had significant worse local recurrence and survival rates than patients that did not. Moreover, preoperative radiotherapy had only a limited effect on the prevention of local recurrences in patients with positive resection margins. (8) It must be assumed that the number of tumour cells, still present in many patients with positive margins is too high to prevent local recurrences by giving preoperative radiotherapy. Furthermore, neither postoperative radiotherapy had a significant effect on the prevention of local recurrences in these patients. Postoperative adjuvant treatment can thus not compensate for suboptimal surgery. These findings stress the importance of adequate surgery. Preoperative imaging like MRI scanning may serve as good tool to select patients at risk for R1 resection. (9) These patients will benefit most likely from conventional neoadjuvant chemoradiation, which may lead to downstaging and downsizing, thus enabling a R0 resection. Improving this risk assessment in a preoperative phase will therefore lead to better treatment outcome for all patient subgroups with rectal cancer.

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Cancer of the oesophagus and gastro-oesophageal junction

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The lack of desired success in the surgical management of cancer of the esophagus and gastroesophageal junction has resulted into an interest to investigate preoperative and postoperative adjuvant therapies. The seemingly promising results of multimodality therapies, despite a definite lack of proof, have resulted in a widespread use of such regimens throughout the Western world. This attitude in part may be related to an outcome below standards of the surgical arm in a number of clinical trials. It seems therefore of paramount importance to optimise the surgical quality as a key to effective multimodality treatment.

A number of authors therefore have focused on the relation between outcome and hospital and surgeon volume as well as specialisation in achieving better surgical results. Although this debate is still open it seems that concentrating volume results in an increased incentive to set up detailed databases, more specific guidelines and protocols and regular multidisciplinary clinical conferences.

Concentrating patient volume will generate increased familiarity with the well known oncologic complexity of these cancers. More sophisticated facilities allow a more adequate staging e.g. by using PET scan, and thus avoiding unnecessary surgery. The particularities of the anatomy of the esophagus and the oncological principles governing the surgery require sufficient familiarity with different access routes, surgical techniques and accurate knowledge of pre- and postoperative management.

Whether lymphnode dissection is only diagnostic or indeed therapeutic is still an open question. But the role of adequate pathologic lymphnode staging in these tumours, particularly notorious for spread to nodes in the neck, thorax and abdomen despite tumour location versus the lack of accuracy of clinical staging of these nodes remains of paramount importance within the framework of multimodality regimens. As for many other cancers the effect of local recurrence on survival has been downplayed if not denied. Prevention of locoregional recurrence remains therefore an important goal in which quality of surgery plays a key role resulting in better cancer care in all respects.

In conclusion: striving for high surgical quality is an essential part of cancer care in general and for carcinoma of the esophagus and gastroesophageal junction in particular. Lack of surgical quality should never be a surrogate for the use of adjuvant therapeutic modalities. Therefore surgeons who care should assume a leadership role in defining the gold standard and best practice.

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Is quality control of radical prostatectomy feasible?

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Radical prostatectomy is performed by many urologists and the quality of the surgeon and the surgery itself should be optimal. The question is whether surgical quality can indeed be assessed.

We have made an attempt to evaluate the quality of the surgical act in a number of EORTC GU Group centers and showed that the duration of surgery, the blood loss, the postoperative continence, the margin positivity and the rate of undetectable PSA after surgery are highly variable and that this cannot be absolutely related to the caseload – as was shown in other cancer surgeries. A standard radical prostatectomy can be defined by a rather limited number of parameters that can even be collected retrospectively.