FECS Clinical Research Award Lecture

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Rectal cancer treatment in the next century

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Rectal cancer surgery has changed dramatically over the last 15 years, form a standard excision with blunt dissection to the more exact surgical procedure called a total mesorectal excision (TME). With this new technique a more exact specimen oriented resection is, following the embryological planes, is achieved. This new trend has also increased the proportion of patients with a sphincter saving procedure.

The role of adjuvant radiotherapy has been well established as an additional treatment to reduce the local recurrence rates However, with the more exact technique, i.e., TME, the role of additional radiotherapy can be questioned due to the very low local recurrence rates reported from different centres. Radiotherapy can be delivered with two main different objectives; one as an adjuvant treatment and another as treatment, In the adjuvant setting, most data from the literature indicate that if radiotherapy is advisable, preoperative irradiation is to be preferred. This is partly based upon three large randomized Swedish trials running during the 80'. In such an adjuvant setting, i.e., in patients with a resectable rectal cancer, radiotherapy is used to sterilise microscopic deposits outside the surgical area. The other option, fixed tumours (T4 cancer), the role of radiotherapy is to achieve turnout shrinkage with the aim of making the tumour resectable. The value of concomitant chemo-therapy to irradiation is still debated. Experimental data indicates a synergistic effect, but no conclusive data from randomised trials do support the beneficial role of adding the two treatment modalities.

Another still unsolved treatment modality is how to eradicate microscopic distant deposits. Adjuvant chemotherapy and adjuvant immunotherapy has been proposed. According to literature a survival benefit has been demonstrated in patients with colon cancer stage II and stage III, but for rectal cancer still some conflicting data exist. The use of immunotherapy in both colon and rectal cancer is not yet settled.

Another important question is the role of radical surgery. In analogy with the treatment of breast cancer, it might be possible t o have a less aggressive surgical approach and to use radio-chemotherapy to sterilise lymph node deposits. This can be possible with the new surgical approach; transanal endoscopic microsurgery (TEM). With such an approach, quality of life will improve provided survival will not decrease.

Conclusion: Surgery is still the main stay in the treatment of rectal cancer. The surgical technique has change dramatically the last decade and the new concept of less aggressive operations (TEM) might be the future. The role of adjuvant radiotherapy and chemotherapy is still debated, and with the concept 'number needed to treat' to have a beneficial effect on survival behoves us to find important prognostic factors to only give the additional treatment to those who really need it.