Multidisciplinary Treatment of Colorectal Cancer
During the last 15–20 years, the treatment of colorectal cancer has changed dramatically. From involving almost only surgeons in the treatment, the scientific progress in adjuvant therapy, neoadjuvant therapy, diagnostics and pathology now set the demand for a broader approach when deciding the treatment for the individual patient.

The Calman and Hine report from 1995 [1] first argued for the multidisciplinary approach and has now been implemented in many countries throughout the world and in fact sets the golden standard for modern oncological treatment for all forms of cancer. In the field of rectal cancer, solid documentation exists for the efficacy of this approach in terms of local recurrence rates [2–4]. The reasons for this could be more accurate staging with MRI and ultrasound, the use of neoadjuvant radiochemotherapy – sometimes in selected patients – and, not at least, the evaluations of operative specimens in order to be sure that the correct operative technique has been used [5]. The effect on the improvement in surgical techniques, dissecting in the correct embryological planes, also plays a role for this improvement [6] not only in rectal but also in colonic cancer surgery [7] – although never proven in a proper randomised trial. The use of postoperative adjuvant chemotherapy [8] and the more aggressive approach to salvage surgery and other effective treatments for metastatic disease has become common practise [9]. Apart from these already-achieved improvements, we will, in the future, hear a lot about selective individual therapy based on tumour markers and individual genotypes [10, 11].

In the context of the multidisciplinary approach to colorectal cancer, it seems obvious to have multidisciplinary team conferences – the so-called MDT conference. This has during the last couple of years been introduced in every centre dealing with colorectal cancer treatment with its many different modalities and is in many places a part of the daily practice. Every speciality involved in the handling of these patients is represented – surgery, medical and radiation oncology, pathology, radiology, nuclear medicine, clinical genetics and specialised nurses. The structure on the meetings is locally organised and guidelines for MDT conferences have been launched [12]. In some places a dedicated co-ordinator is nominated and gets special salary for the job [13]. The conferences are ideal forums for discussion and not at least education of younger doctors, and communications between the specialities are thought to be improved [14, 15]. Even though one has to consider the time spent at these conferences and whether it really is cost-effective seen from the...
patient’s point of view [15]. The MDT approach for treatment strategy has been proven to enhance the quality of the operative specimens as regarded from the proportion of circumferential margin (CRM) positivity [16], but whether this is due to the MDT conference itself or just reflects the results of the MDT thinking is unknown. It has been proven that patients which have been objects for a MDT conference have a significant better survival, as compared to patients that did not [17]. These results are to be taken with great reserve due to the historical design of the study, which enhances the risk of bias considerably. During the same period, many new treatment modalities have been introduced such as better anaesthesia, better surgery and fast-track surgery. A proper randomised trial will never be performed due to lack of acceptance and equipoise – not at least among doctors but perhaps also among patients. It is strange that only this study evaluating the efficacy of MDT conference exists, but perhaps others are on their way, now that the MDT approach has gained broad acceptance.

The approach demands training both in organising and in uniforming the language of the different specialities. In this respect national guidelines might be important, although the level of evidences does not seem to improve during the years [18]. National MDT courses and training programmes have been introduced in several countries, and with this book as a backbone for this training, we probably can get even better – although it is difficult to prove. Anyway the MDT conference has probably come to stay.

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References

The multidisciplinary team (MDT) approach to rectal or colorectal cancer treatment is becoming the gold standard. It has become mandatory for institutions treating these diseases in more countries and the term is now well established within the involved medical disciplines. The concept has become self-assertive as the number of possible treatments and combinations of treatments have increased. More treatment modalities mean more choices and therefore higher demands to the preoperative staging of the disease and assessment of the patient’s physics and preferences.

Multidisciplinarity is defined in the Wikipedia encyclopedia as “a non-integrative mixture of disciplines in that each discipline retains its methodologies and assumptions without change or development from other disciplines within the multidisciplinary relationship”. It has been discussed if the correct term should be “interdisciplinary” because “interdisciplinarity blends the practices and assumptions of each discipline involved”. The established teams will, with time, have more and more difficulties in defining the interrelationships and their effects on the process leading to decisions at the MDT meetings. No matter what the correct term is, the collaboration is an important means to determine the best treatment, to develop future treatments and to educate the future MDT members.

I was introduced to surgery and colorectal cancer patients by Dr. Carl Zimmermann-Nielsen, DMSc, at Svendborg Hospital in Denmark many years ago. He taught some strange principles of colorectal cancer treatment which seemed quite old fashioned at that time: He emphasised the importance of individualising the treatment. He executed this based on his experience and intuition. At that time, we, youngsters, were learning new words as “evidence based”. To our best knowledge it meant that there was only one “best treatment” and this should be offered to all patients without discrimination. We are now beginning to reach the same level of wisdom as that of Carl’s, but this time, to some extent, based upon evidence. He also meant that monkeys could be taught the scientific part of patient treatment and that “the art of medicine” was the difficult part. It might have been true then, but our knowledge has grown and even the cleverest monkey will encounter difficulties now. Nevertheless, the art of medicine is still crucial, in particular in the relations with cancer patients and their relatives.

Carl also taught us that whenever you divide a responsibility between two persons, they will be left with approximately five percentages each. This is one of the main dangers of multidisciplinary handling of patients and should
be prevented by all means. We will have to prove him wrong on this one in the years to come, and this is actually one of the motivations for this book.

Some of the top European doctors and scientists have agreed to participate in the writing of this book, all of them with experience, dedication and pronounced influence on the development of the MDT concept as well as other aspects of high-quality, individualised treatment of colorectal cancer patients. The book is intended for the MDT members and for those training in the fields of colorectal cancer management. The book presents updated important knowledge but is not intended to be comprehensive within the different disciplines. Focus has been on controversies and on the aspects of common interests amongst the MDT members.

It is the main obligation for any MDT to provide the best possible treatment and care and to implement evidence-based principles whenever possible. It may seem somewhat conflicting that evidence-based principles have to be the foundation of MDT discussions, whereas at the same time we have to admit that the concept of formalised MDT meetings in itself is yet not very strongly evidence based. The near future will provide us with the necessary evidence.

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