

Treatment plan improvement by multidisciplinary case conferences for patients with colorectal cancer and synchronous liver metastases

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Aggressive treatments of metastasized colorectal cancer have been shown to be promising strategies, offering survival probabilities between 40% and 50% in selected patients (1,2). These achievements, however, were only possible on the basis of improvements in surgical techniques and the introduction of potent chemotherapeutic and biological drugs, combined in meticulously defined regimens (2). Naturally, this requires multidisciplinary teamwork and individually tailored therapeutic approaches. Many factors influence this individualized decision process, such as the quality and interpretation of imaging, the availability of a portfolio of systemic and locally ablative treatment options besides surgery, the availability of innovative treatment options within clinical studies, and last but not least, the experience of all health care professionals involved in the various treatment steps, in particular the surgeons (2,3). Several surgical concepts have been proposed in the past to address metastatic disease at two sites in patients with synchronously metastasized colorectal cancer, such as the liver-first approach, simultaneous resection of the primary and synchronous liver metastases, two-step liver resection, or the conventional colon/rectum-first and liver-second approach—with or without systemic chemotherapy.

However, as pointed out by Wanis *et al.* in their recent article in *‘Hepatobiliary Surgery and Nutrition’* (4), consensus-finding remains difficult as the complex individual tumor burden and spread may require adjusted

treatment. In other words, a concept developed for one patient may not be suitable for another because of differences in medical history or disease location (2).

In support of this statement, the value of multidisciplinary case conferences (MCC) has been emphasized in the past for various tumor entities with less complexity than synchronously metastasized colorectal cancer, including gastrointestinal tumors (4). Interestingly, a strong desire to maximize the quality of medical care resulted in a wave of center certifications—in Germany, for example, by the German Cancer Society or the German Society of Surgery—during the last decade. A uniform requirement of these certification norms for each center is the establishment of MCC as a fixed element in the weekly routine of case discussions. However, despite MCC being the standard of care in many centers placing emphasis on the benefit for patients of individualized decision making, no proof of a true link between MCC with individualized decision processes and subsequent patient benefit has to our knowledge been established so far in a large cohort.

With their current article, Wanis *et al.* (4) showed for the first time that their institutional MCC led indeed to a significant adjustment in treatment strategies for patients with colorectal cancer and synchronous liver metastases. In particular, when comparing 29 patients undergoing surgery after their case having been presented at the MCC and 37 patients without case presentation, a significantly higher

percentage of the cases discussed at the MCC had a change of treatment concept towards a more radical approach with liver resection such as liver-first or simultaneous primary colorectal cancer and liver metastases resection. Also, there was a trend towards increased use of neoadjuvant or adjuvant chemotherapy. The authors state that fewer than half of all cases were presented at the MCC before surgery. In the patient group whose cases were not presented at an MCC, the typical situation comprised initial colorectal treatment in a community hospital setting with subsequent referral for treatment of liver metastases. It may be assumed that a relevant proportion of these patients would have had a change in their treatment plan if their case had been presented at an MCC before the start of therapy. It may be premature to claim that the classical approach for cases not presented at an MCC is inadequate, since patients with colorectal cancer and synchronous hepatic metastases present with high heterogeneity that makes it challenging to draw conclusions regarding long-term survival from such small cohorts. In addition, the different options described may be appropriate for one patient but unfavorable for another, especially in view of the generally highly unpredictable aggressiveness of each individual cancer. Meanwhile, the reasons why the MCC presentation rate is so low remain speculative. Besides logistic barriers such as unavailability of video conferences or complicated information transfer (which have been addressed in the author's center), complex interactions of various factors may be responsible. Despite the physicians' and surgeons' experience and readiness to take responsibility for the patient even under conditions that may increase the perioperative risk, the financial and political dependency of community institutions may contribute to defensive treatment recommendations.

Finally, the work of Wanis *et al.* (4) shows in an alarming way that the current process sequence with low case presentation rates at MCC deprives patients of the

chance to obtain the best available treatment plan based on the current evidence. It underlines the necessity to put all efforts towards facilitating and coordinating MCC presentations in order to individualize optimally tailored treatment plans. For smaller centers, this would represent a chance to increase the safety and effectiveness of their treatment plans, since treatment plans chosen in the context of a MCC are based on consensus from a professional board and are, in a manner of speaking, 'MCC-approved'.

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Footnote

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