Editorial

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Paradigm Shift in the Treatment of Elderly Patients With Unresectable Stage IV Colorectal Cancer

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See Article on Page 175-181

Colorectal cancer (CRC) is one of the most common malignant tumors that lead to cancer-related death worldwide, and it has an increasing incidence rate. Approximately 20% to 30% of patients with CRC are found to have distant metastases at the time of diagnosis [1]. To date, with recent advances in systemic chemotherapy, nonoperative treatment has become the mainstay of treatment in patients with incurable metastatic CRC [2, 3]. Given the progress in chemotherapy regimens and palliative techniques such as endoluminal stenting and given the high mortality of cancer-directed surgery, the prognostic impact of a primary tumor resection in patients with stage IV CRC has been under debate [4-6]. A previous analysis of Surveillance Epidemiology and End Results (SEER)-Medicare-linked data between 1991 and 1999 reported a 72% cancer-directed surgery rate in elderly patients (age ≥ 65) with stage IV CRC [6]. However, more recent SEER-Medicare data from 2001 to 2007 demonstrated a statistically significant decrease in the rate of surgical resections of primary tumors from 64.6% in 2001 to 57.1% in 2007 [7]. Similarly, The Netherlands' Cancer Registry also found a significant decrease in primary tumor resection rates from 66% to 56% and an increase in systemic chemotherapy from 2.0% in 1989–1993 to 40% in 2004–2006 in elderly patients with stage IV CRC disease [8]. These treatment trends may indicate that practitioners are rapidly adopting the use of modern combination chemotherapy and that a paradigm shift in the treatment of stage IV CRC is beginning.

Current practice guidelines from the National Comprehensive Cancer Network (NCCN) recommend a resection of the primary tumor only if patients are symptomatic or have metastatic sites amenable to a potentially-curative resection. Although the rationale for an up-front primary tumor resection is based on an attempt to resolve potential complications from the primary tumor, such as bowel obstruction, uncontrollable bleeding, or tumor perforation [6, 9], the critical role of surgery for patients with incurable stage IV CRC is still inconclusive, especially for patients with stage IVB CRC. Furthermore, proper prognostic clinical parameters, such as age, performance status, pathological grading, or localization of the primary tumor, should be considered before undertaking surgery in elderly patients with stage IV CRC. Although very limited evidence is available with respect to the survival benefit of a primary tumor resection in patients with stage IV CRC, recent studies demonstrated a 31% reduction in mortality with surgical resection of the primary tumor and an increase in survival in elderly patients with stage IV CRC [10, 11]. Consistent with previous studies, our retrospective study showed that patients who underwent a primary tumor resection followed by chemotherapy had a significantly longer survival time than patients who received first-line chemotherapy (17.2 vs. 13.6 months, P = 0.002) [12]. On the basis of the current limited results, a primary tumor resection is potentially associated with survival benefits in elderly patients with stage IV CRC. However, primary-tumor-related complications are a major concern. The rates of complication in patients with an unresected primary tumor have been reported to range from 11.0% to 30% [2, 13, 14].

This study analyzed retrospectively the survival outcomes and the prognostic factors in elderly patients with stage IVB CRC. The current study showed that the patients in the resection group had significantly longer median survival times compared to the patients in the nonresection group (12.43 months vs. 3.58 months, P < 0.001). In addition, male gender, higher level of carcinoembryonic antigen, higher aspartate aminotransferase level, and nonresection of the primary tumor were independent poor prognostic factors on the multivariate analysis. However, the relatively short follow-up time and the small sample size are major drawbacks to interpreting the survival benefits and the prognostic factors

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clearly [15]. A large-scale, randomized study is needed to clearly establish the true benefits primary tumor resection for stage IVB CRC. In conclusion, the appropriate role of a surgical resection for treating stage IVB CRC, including its prognostic impact on tumor-related symptom control, its survival benefits and its impact on quality of life, remains to be fully evaluated.

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