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ASO AUTHOR REFLECTIONS

ASO Author Reflections: Hepatectomy and Proctectomy for Metastatic Rectal Cancer: Is a Combined Approach Best for All Patients?

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PAST

Numerous reports supporting the feasibility of combined liver and colon surgery for metastatic colorectal cancer have been published over the past decade.[1] This combined approach reflects a larger trend toward more liberal application of liver resection for colorectal metastases due to the increased safety of liver surgery and more effective systemic therapy. However, the existing retrospective evidence is limited by selection bias; patients undergoing combined operations are frequently healthier at baseline and have a lower burden of disease. The advantages of a single operation to address the primary tumor and metastases include shorter hospitalization and simpler treatment sequencing. Notwithstanding, major hepatectomy ($\geq$ 3 segments) is less well-tolerated when combined with associated procedures.[2] Combined resection of rectal cancer and metastases is a particular challenge given the increased morbidity of proctectomy. Selected centers have advocated for combined proctectomy and hepatectomy, however, the applicability of this approach in less-controlled settings remains uncertain.[3]

PRESENT

The present analysis utilizes the National Cancer Database and captures a majority of patients in the US undergoing surgery for rectal cancer with synchronous hepatic metastases. While overall 30- and 90-days mortality rates were low (0.92% and 2.12%, respectively), 30- and 90-days mortality rates in patients 70 years of age or older were 3.34% and 7.38%, respectively.[4] Additionally, overall survival decreased with increasing age, from 54.7 months below 50 years of age, to 37.2 months for patients $>$ 70 years of age. Notably, these data do not account for the extent of liver resection. The series is probably enriched for minor liver resections ($<$ 3 segments) and underestimates the risk associated with major hepatectomy. However, despite these limitations, these data point to shortcomings of the combined approach, particularly in frailer patients.

FUTURE

While this series demonstrates that combined hepatectomy and proctectomy can be performed in younger patients with reasonable short- and long-term outcomes, the optimal treatment for rectal cancer with synchronous hepatic metastases in a less selected cohort remains poorly defined. A randomized controlled trial will likely never be performed to address this controversy due to the heterogeneity associated with metastatic rectal cancer.[5] In the absence of such data, staged approaches, with either liver

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resection or proctectomy first, remain viable alternatives. With these approaches, higher-risk operations can be deferred until tumor biology and patient fitness for surgery have been more extensively gauged. At present, nuanced clinical judgment continues to drive treatment strategy. Ongoing efforts to correlate tumor features with response to systemic therapy and outcome from surgery may ultimately have the greatest influence on outcome.

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