

Selected patients with colon cancer hepatic metastases may benefit from liver transplantation

Journal

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Reuters Health - 30/03/2022 - Selected patients with liver-only colorectal metastases (CRLMs) may benefit from hepatectomy and liver transplant, researchers from three transplant centers report in JAMA Surgery.

Dr. Roberto Hernandez-Alejandro of the University of Rochester Medical Center in New York and colleagues describe 10 highly selected patients with CRLMS who underwent living donor liver transplant (LDLT) at Rochester, the Cleveland Clinic in Ohio, or the University Health Network in Toronto.

At 1.5 years, Kaplan Meir estimates of patient and disease free survival were 100% and 63%, respectively.

Among 91 patients who presented for inclusion in the transplant oncology protocols for unresectable colorectal metastases, only 12 patients (13%) were deemed candidates for liver transplant. Two received livers from deceased donors and were excluded from this study. The 10 remaining patients (mean age, 45; 6 males) had all undergone extensive oncologic treatment. In addition, four had undergone liver resections, three underwent hepatic artery infusions, and three underwent tumor ablation. The mean number of chemotherapy cycles before liver transplant was 22.5 (range 6-37). All 10 exhibited sustained radiographic or carcinoembryonic antigen response to treatment.

The median time from diagnosis of CRLMS to LDLT was 1.7 years (range, 1.1-7.8 years). Patients treated with transplant exhibited a median Clinical Risk Score of 2.5 (range, 1-4), and an Oslo Score of 1.5 (range, 0-2), with higher scores indicating a higher risk of recurrence.

With a median follow up of 1.5 years (range 0.4-2.9), three patients experienced recurrence: one in the peritoneum at 121 days, one in the liver graft at 92 days, and one outside the liver at 199 days. All three were treated with palliative chemotherapy. One died of recurrence three months later. The other two are alive more than two years posttransplant without further evidence of disease.

All 10 living donors were alive and well at last follow up, with no significant complications.

The authors believe that restricting transplantation to patients with favorable tumor biology based on disease response to systemic therapy may explain the good early-term outcomes in this selected cohort.

"Living donor liver transplant may represent a critical lifeline for well-selected patients with unresectable, liver confined colorectal metastases," they said, adding that "the field of transplant oncology should move toward unified criteria that may facilitate the incorporation of selected patients with CRLMS into the standard organ allocation system."

In an editorial, Dr. Shimul Shah of the University of Cincinnati College of Medicine in Ohio and Dr. Parsia Vagefi of the University of Texas Southwestern Medical Center in Dallas -two programs that have their own CRLM protocols - laud the research team for excellent postoperative outcomes in donors and recipients.

However, they believe the recurrence rate of 30% within 200 days after transplant is concerning and say a better understanding of what constitutes favorable tumor biology is needed. They also suggest it would be helpful to compare the outcomes in these recipients with those of the 79 patients who did not receive a transplant and the two who received livers from deceased donors.

Furthermore, they note, the authors employed three different protocols and candidate selection processes during the course of the study, making it difficult to interpret the data.

Like Dr. Hernandez-Alejandro and colleagues, Drs. Shah and Vagefi say a national registry and additional research on the role of liver transplantation for CRLMs is necessary to "chart the course of transplant as a future treatment for this deadly disease."

SOURCE: <https://bit.ly/36XccOb> and <https://bit.ly/36VvyP0> JAMA Surgery, online March 30, 2022.

[By Reuters Staff](#)