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Intracorporeal or extracorporeal union of the intestine in colon removals: what really changes?

A study carried out in several hospitals, among which the Parc Taulí University Hospital and researchers from the UAB, has analyzed what differences there may be between anastomosis —intestine binding— intracorporeal or extracorporeal when the colon is removed in cancer cases. This research makes it possible to determine that there are no significant large differences, but intracorporeal was related to smaller incisions, more postoperative comfort and a smaller hospital stay.

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When we perform a laparoscopic right colectomy —a not invasive surgical procedure to remove part or all of the colon— for colon cancer, we remove the affected segment and then we need to reconnect the bowel. This reconnection, the anastomosis, can be created in two ways: inside the abdomen (intracorporeal) or by bringing the bowel out through a small incision to create it outside (extracorporeal). For years, surgeons have debated whether one approach is safer than the other, particularly regarding the risk of an anastomotic leak, an uncommon but potentially serious complication.

To address this, we conducted the Hemi-D-TREND study, a prospective multicenter study across 11 hospitals (2019–2022) including 438 patients undergoing laparoscopic surgery:

225 intracorporeal and 213 extracorporeal anastomoses.

Our primary aim was to compare leak rates. The reassuring message is that both groups had a very low leak rate (below 2%), with no difference between techniques. We also looked at recovery and other postoperative outcomes. Overall, we found no meaningful differences in major complications, infections, or reoperations. Anyway, intracorporeal anastomosis was associated with fewer conversions to open surgery and a slightly shorter hospital stay.

What does this mean for patients? In experienced teams with well-established recovery pathways, both options are safe and effective. The best choice may depend on the center's expertise, the individual case, and the team's usual surgical strategy.

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