

# Comparison of Intracorporeal Anastomotic Techniques in Robot-Assisted Colectomy

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## Background

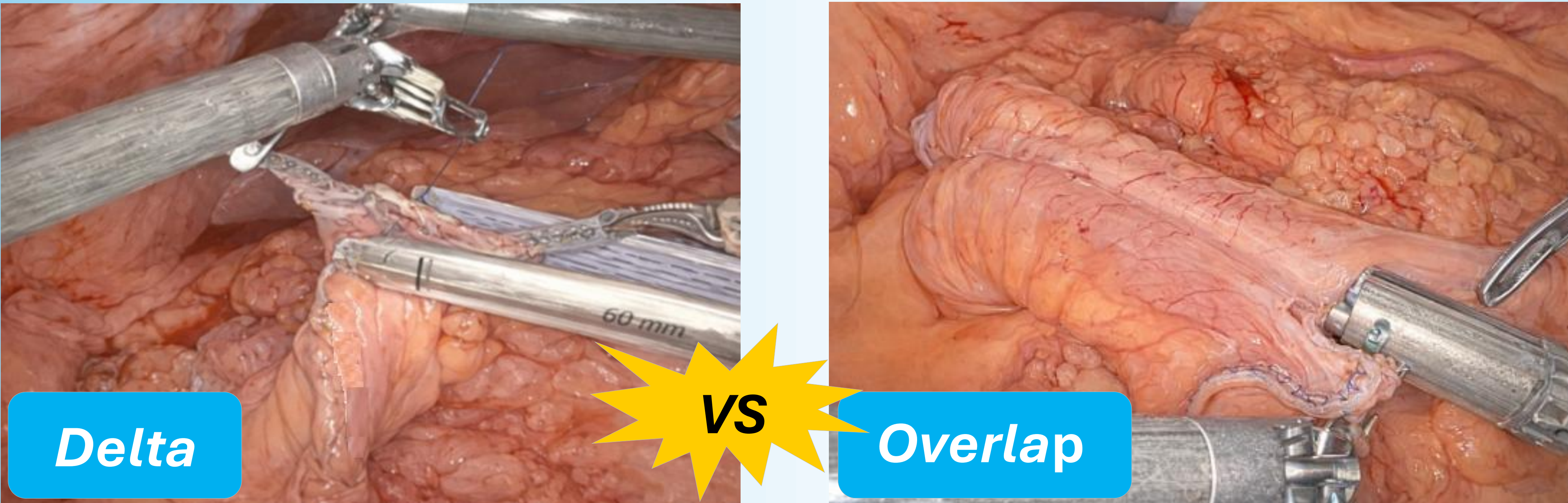
- Intracorporeal anastomosis(ICA) minimizes bowel mobilization and requires a smaller incision.
- Reduces postoperative pain, and lowers hernia risk.
- Optimal Robotic ICA techniques remains under debate.

***Aim: Compare delta anastomosis vs. overlap***

## Methods

- 40 patients (Apr 2024 – Jul 2025)
- Delta (n=15) vs Overlap (n=25)
- Endpoints:
  - Operative time
  - Anastomotic time
  - Complications (Clavien–Dindo  $\geq$  II)
  - Hospital stay
- Statistics: Mann-Whitney U and Fisher’s exact test
  - Significance:  $p < 0.05$

## ► Results



## Patient Characteristics:

|                     | Delta (n=15) | Overlap (n=25) | p-value |
|---------------------|--------------|----------------|---------|
| Median age          | 74 (50–85)   | 75 (52–84)     | 0.34    |
| Sex (M/F)           | 7/8          | 11/14          | 1.00    |
| Tumor depth (T1–T4) | 3/2/10/0     | 8/5/7/5        | 0.08    |
| Stage (I–IV)        | 3/5/6/1      | 10/9/6/0       | 0.31    |

## Operative Outcomes:

| Outcome                 | Delta | Overlap | P-value |
|-------------------------|-------|---------|---------|
| Operative Time (min)    | 347   | 340     | 0.50    |
| Anastomotic Time* (min) | 13    | 19      | 0.010   |
| Complications $\geq$ II | 1     | 3       | 1.00    |
| Hospital Stay (Days)    | 7     | 8       | 0.043   |

\*Anastomotic time was defined as the interval from the creation of a small enterotomy on the distal bowel to the closure of the stapler entry hole.

## Discussion

- Delta ICA reduced anastomotic time.
- Delta anastomosis was associated with a shorter hospital stay.
- Complication rates were comparable between Delta and Overlap.
- Delta ICA is effective in obese patients and cases with adhesions.

## Conclusion

**Delta anastomosis significantly shortens anastomotic time and hospital stay without increasing complications in robotic colectomy.**