Intracorporeal anastomosis helped to obtain qualified resection margin during laparoscopic radical resection of transverse colon cancer: a retrospective single-center study

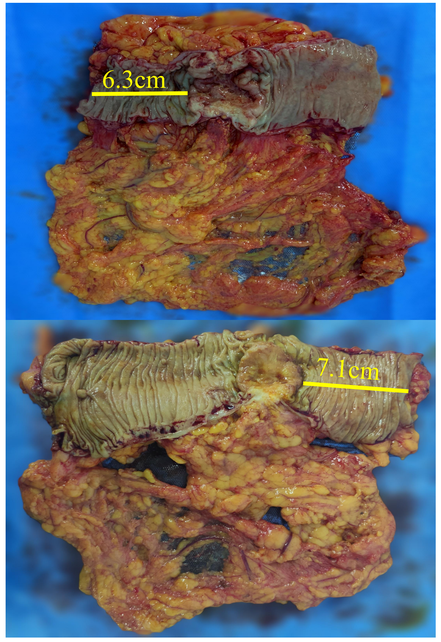
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Background: The approach of anastomosis in laparoscopic resection of transverse colon cancer (TCC) has rarely been discussed. This study aimed to compare the resection margin of TCC with extracorporeal anastomosis (ECA) versus intracorporeal anastomosis (ICA).

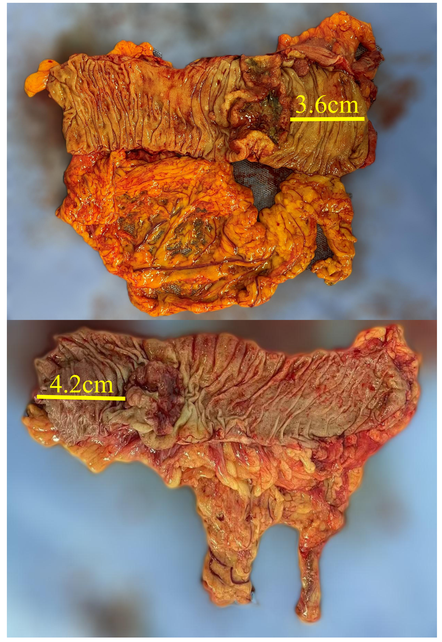
Methods: According to the approach of anastomosis, patients were divided into two groups, ECA group and ICA group respectively.The length of two-sided resection margins (long margin, short margin) was measured and those with short margin less than 4.0 cm were defined as unqualified specimens.

Conclusion: ICA resulted in longer resection margin and less unqualified specimens in laparoscopic resection of TCC.

ICA



ECA



margins	ICA（n=23）	ECA（n=94）	p value
total length of two-sided margins（cm）	24.0 (18.0, 30.5)	20.0 (13.9, 25.1)	**0.010**
long margin（cm）	18.0 (13.0, 23.5)	14.0 (9.0, 19.0)	**0.011**
short margin（cm）	6.0 (3.5, 8.0)	4.5 (3.5, 7.0)	0.120
proportion of unqualified specimens	6（26.1%）	46（48.9%）	**0.048**

Results: 117 TCC patients were included: 94 (80.3%) in ECA group and 23 (19.7%) in ICA group. The median length of long margin and the total length of two-sided margins were significantly longer in the ICA group (18.0 (13.0-23.5) vs. 14.0 (9.0-19.0) cm, p=0.011; 24.0 (18.0-30.5) vs. 20.0 (13.9-25.1) cm, p=0.010; respectively). The median length of short margin was also longer in the ICA group but the difference was not statistically significant (6.0 (3.5-8.0) vs. 4.5(3.5-7.0) cm, p=0.120). However, the proportion of unqualified specimens in ECA group was 48.9% (46/94), remarkably higher than that (26.1%, 6/23) in ICA group (p=0.048).

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