Feasibility and safety of TLC and HALS in treatment of complete bowel obstruction due to left colon cancer or rectal cancer

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To study the feasibility and safety of temporary loop colostomy (TLC) and hand-assisted laparoscopic surgery (HALS) in the treatment of complete bowel obstruction due to left colon cancer or rectal cancer. Methods: A total of 45 patients with complete bowel obstruction due to left colon cancer or rectal cancer treated in our hospital during 2012. 3 to 2014. 3 were divided into TLC-HALS group (23 cases) and the open approach group (22 cases). The postoperative discharge time, off-bed activity time, the number of cleaned lymph nodes, stress index and short-term postoperative complications were compared between the two groups. Results: There was no significant difference in discharge time, off-bed activity time and the number of cleaned lymph nodes (P>0.05). Postoperative paining time of TLC-HALS group was significantly shorter than open approach group (P<0.05). The postoperative stress indicators of HALS group were sharp increasing, and reached the highest level 1 day after surgery, the difference was statistically significant (P<0.01). Then it was significantly decreased (P<0.05, 7 d after surgery (P>0.05). The overall level of inflammatory mediators in traditional open group was also increased, and reached the peak 1 day after surgery, with significant difference (P<0.01). Then it was decreased 3 d after surgery, however, the decrease was slower than the HALS group, the overall differences remain statistically significant (P<0.05). 7 d after surgery, WBC and CRP levels were slightly higher than normal (P<0.05). There was no significant difference (P>0.05) in short-term postoperative complications. Conclusions: In summary, TLC-HALS surgery was less invasive, and of more rapid postoperative recovering. It is worthy of further promotion and application.

[KEY WORDS] Left colon resection; Hand-assisted laparoscopic; Obstructive left colon; Loop-type fistula