

# 腹腔镜辅助胃癌根治术手术效果及对炎性因子、肿瘤标志物水平的影响

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**Title:** Effect of laparoscope-assisted radical gastrectomy on inflammatory factors and tumor markers

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**摘要:** 目的: 探讨腹腔镜辅助胃癌根治术的手术效果及对炎性因子、肿瘤标志物水平的影响。方法: 选取我院手术治疗的118例胃癌患者, 根据手术方法分为腹腔镜组(腹腔镜辅助下远端胃癌根治术)58例、传统组(开腹远端胃癌根治术)60例, 对比两组患者的手术时间、术中出血量、清扫淋巴结数目、切口长度、住院时间, 对比两组患者手术前后不同时间点的血清血红素氧化酶-1(hemeoxygenase-1, HO-1)、肿瘤坏死因子- $\alpha$ (tumor necrosis factor- $\alpha$ , TNF- $\alpha$ )、白细胞介素-6(interleukin-6, IL-6)、C反应蛋白(C-reactive protein, CRP)、癌胚抗原(carcinoembryonic antigen, CEA)、糖类抗原724(carbohydrate antigen 724, CA724)的变化。结果: 腹腔镜组的手术时间长于传统组( $P < 0.05$ ), 腹腔镜组的术中出血量、切口长度、住院时间均低于传统组( $P < 0.05$ ); 两组患者的清扫淋巴结数目差异不具有统计学意义( $P > 0.05$ ); 术前, 腹腔镜组和传统组患者的血清HO-1、TNF- $\alpha$ 、IL-6、CRP水平差异不具有统计学意义( $P > 0.05$ ); 术后3天, 腹腔镜组的血清HO-1、TNF- $\alpha$ 、IL-6、CRP水平低于传统组( $P < 0.05$ ); 术前、术后3个月、术后6个月, 腹腔镜组和传统组患者的血清CEA、CA724水平组间比较, 差异不具有统计学意义( $P > 0.05$ ); 术后3个月、术后6个月, 两组患者的血清CEA、CA724水平较本组术前均显著的降低( $P < 0.05$ ); 腹腔镜组的手术并发症5.17%与传统组的11.67%比较, 差异不具有统计学意义( $P > 0.05$ )。结论: 腹腔镜辅助胃癌根治术具有与传统开腹手术相似的临床效果, 同时具有术后恢复快、患者炎症反应程度轻的优势。

**Abstract:** Objective: To explore the surgical methods, effects and safety of laparoscope-assisted radical gastrectomy for gastric cancer. Methods: 118 patients with gastric cancer who underwent surgery in our hospital were divided into two groups according to the surgical method: 58 cases with laparoscopy-assisted distal radical gastrectomy and 60 cases with traditional group (open radical gastrectomy). The operative time, intraoperative blood loss, number of lymph nodes removed, length of incision, length of stay, and serum hemeoxygenase-1 (HO-1) and tumor necrosis factor- $\alpha$  (TNF- $\alpha$ ), interleukin-6 (IL-6), C-reactive protein (CRP), carcinoembryonic antigen (CEA), carbohydrate antigen 724 (CA724) were compared between the two groups of patients at different time points before and after surgery. Results: The operation time of laparoscopic group was longer than that of the traditional group ( $P < 0.05$ ). The intraoperative blood loss, incision length and length of stay in the laparoscopic group were lower than those in the traditional group ( $P < 0.05$ ). The difference in the number of lymph node dissection between the two groups had no statistical significance ( $P > 0.05$ ). Before surgery, the levels of serum HO-1, TNF- $\alpha$ , IL-6 and CRP in laparoscopic group and traditional group were not statistically significant ( $P > 0.05$ ). 3 days after surgery, the levels of serum HO-1, TNF- $\alpha$ , IL-6, and CRP in the laparoscopic group were lower than those in the traditional group ( $P < 0.05$ ). There was no statistically significant difference in the levels of CEA and CA724 between the laparoscopic group and the traditional group in preoperation and postoperation about 3 months and 6 months ( $P > 0.05$ ). At 3 months after operation and 6 months after operation, serum CEA and CA724 levels in the two groups were significantly lower than preoperation

( $P < 0.05$ ). The surgical complications in the laparoscopic group were 5.17% and 11.67% in the traditional group, and the difference was not statistically significant ( $P > 0.05$ ). Conclusion: Laparoscopic radical gastrectomy has clinical effects similar to traditional open surgery. It also has the advantages of rapid postoperative recovery and mild inflammatory response.

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