

doi: 10.13241/j.cnki.pmb.2017.12.027

中医针药联合治疗结直肠癌患者术后胃肠功能障碍的疗效观察

李博萍¹ 庞宏威¹ 贺毅洁¹ 郑建龙² 戴春威²

(1 陇东学院岐伯医学院 甘肃 庆阳 745000; 2 甘肃省庆阳市人民医院泌尿外科 甘肃 庆阳 745000)

摘要 目的:观察中医针药联合对结直肠癌患者术后胃肠功能恢复的影响。**方法:**回顾性收集 2010 年 5 月至 2016 年 5 月 88 例接受肠癌根治性手术患者的临床资料,根据术后治疗方式不同分为 4 组:常规组 30 例,针灸组 20 例,中药组 22 例,针药联合组 16 例。对比各组患者术后胃肠功能的客观指标:肠鸣音恢复时间、肛门排气排便时间,及实验室指标;血清胃动素(MOT)和生长抑素(SS)水平,并评价各组患者术后总疗效。**结果:**4 组患者肠鸣音恢复时间、肛门排气时间、排便时间及血清 MOT 及 SS 水平组间比较均存在统计学差异($P<0.05$),针药联合组肠鸣音恢复时间、肛门排气时间、排便时间均低于其他 3 组,针灸组及中药组亦低于常规组,差异均有统计学意义($P<0.05$);针药联合组血清 MOT 及 SS 水平均高于其他 3 组,针灸组及中药组亦高于常规组,差异均有统计学意义($P<0.05$)。针灸组、中药组及针药联合组总有效率均高于常规组,针药联合组亦高于针灸组及中药组,差异均有统计学意义($P<0.05$)。**结论:**中医针药联合对结直肠癌患者术后胃肠功能障碍的治疗具有显著作用。

关键词:结直肠癌;术后;胃肠功能障碍;针灸;中药

中图分类号:R735.37 **文献标识码:**A **文章编号:**1673-6273(2017)12-2310-04

Curative Effect Observation of Acupuncture Combined with Chinese Medicine in Treatment of Postoperative Gastrointestinal Dysfunction of Colorectal Cancer Patients

LI Bo-ping¹, PANG Hong-wei¹, HE Yi-jie¹, ZHENG Jian-long², DAI Chun-wei²

(1 Qi Bo Medicine School of Longdong University, Qingyang, Gansu, 745000, China;

2 Department of Urology, Qingyang People's Hospital of Gansu Province, Qingyang, Gansu, 745000, China)

ABSTRACT Objective: To observe the effect of acupuncture combined with chinese medicine on postoperative gastrointestinal function recovery in patients with colorectal cancer. **Methods:** Retrospective collected the clinical data of 88 patients with colorectal cancer who received radical surgery from May 2010 to May 2016, all patients were divided into 4 groups according to the treatment methods: the conventional group (30 cases), acupuncture group (20 cases), traditional chinese medicine group (22 cases) and acupuncture combined with medicine group (16 cases). Compared the objective index of postoperative gastrointestinal function: the recovery time of bowel sound, anal exhaust and defecation time, and laboratory indexes, include serum motilin (MOT) and somatostatin (SS) levels, then evaluated the overall curative effect of each group. **Results:** The recovery time of bowel sound, anal exhaust time, anal defecation time and serum MOT and SS levels between were compared between 4 groups of patients were statistically significant differences ($P<0.05$), the recovery time of bowel sound, anal exhaust time, anal defecation time of acupuncture combined with medicine group were lower than the other 3 groups, acupuncture group and traditional Chinese medicine group were also lower than the conventional group, the difference was statistically significant ($P<0.05$). The serum MOT and SS levels in acupuncture combined with medicine group were higher than the other 3 groups, acupuncture group and traditional Chinese medicine group were also higher than the conventional group, the difference was statistically significant ($P<0.05$). The total effective rate of acupuncture group, traditional Chinese medicine group and acupuncture combined with medicine group were higher than that of conventional group, acupuncture combined with medicine group was higher than acupuncture group and traditional Chinese medicine group, the difference was statistically significant ($P<0.05$). **Conclusion:** Traditional chinese medicine combined with acupuncture has a significant role in patients of colorectal cancer with postoperative gastrointestinal dysfunction.

Key words: Colorectal cancer; Postoperative; Gastrointestinal dysfunction; Acupuncture; Chinese medicine

Chinese Library Classification(CLC): R735.37 **Document code:** A

Article ID: 1673-6273(2017)12-2310-04

前言

作者简介:李博萍(1978-),女,硕士,讲师,从事病理与病理生理学方面的研究,E-mail: 2594956069@qq.com

(收稿日期:2016-12-26 接受日期:2017-01-12)

结直肠癌(Colorectal cancer, CRC)是目前世界上发病率和致死率较高的胃肠道恶性肿瘤。统计显示, CRC 的发生率高居女性癌症的第二位,男性癌症的第三位^[1]。此外, CRC 患者 5 年生存率只有 50-60%^[2]。目前,针对结直肠癌的治疗原则是以手

术切除为主的综合治疗。但术后胃肠道功能及结构的改变以及麻醉、手术应激等因素经常会引起胃肠功能的损伤,导致患者不同程度的胃肠功能障碍(Postoperative Gastrointestinal Disorder, PGD),其主要临床表现为:肠鸣音减弱或消失、肛门停止排气排便、腹痛腹胀、恶心及呕吐等^[3],严重影响了患者的术后胃肠功能恢复及生活质量。因此,术后有效地促进胃肠功能的恢复是患者围手术期处理的关键所在。多项研究表明,术后行中医治疗可显著缩短患者胃肠功能的恢复时间^[4-6]。目前,临床患者术后多行单独的中药或针灸治疗,关于针灸联合中药治疗患者术后胃肠功能障碍的治疗效果尚无结论。本研究将对临床上中医针药联合治疗结直肠癌患者术后胃肠功能障碍的恢复情况做一调查。

1 对象与方法

表 1 各组患者一般资料的比较

Table 1 Comparison of the general data of patients in each group

Indexes		Conventional group (n=30)	Acupuncture group (n=20)	Traditional Chinese medicine group(n=22)	Acupuncture combined with medicine group (n=16)
Gender(M/F)		17/13	12/8	10/12	7/9
Age(years)		54.6± 20.3	56.9± 18.7	53.2± 10.6	60.1± 10.2
Tumor location	Rectum	14	8	13	10
	Colon	16	12	9	6
TNM staging	I	3	2	4	2
	II	7	3	2	1
	III	12	6	8	5
	IV	8	9	8	8
Operation time(h)	≤ 3	18	9	13	11
	3~6	12	10	9	5
	6~12	0	1	0	0

1.2 治疗方法

1.2.1 常规组 术后禁食,胃肠减压,静脉补充液体及肠外营养等,保证患者的机体正常代谢及良好的营养状态。具体治疗方案由我科医师负责,避免使用镇静和抗胆碱药等治疗。

1.2.2 中药组 选药基本由西洋参 30 g,党参 15 g,生大黄 10 g,丹参 15 g,丁香 10 g,枳实 10 g,厚朴 10 g,白术 15 g,吴茱萸 15 g 等组成,并根据患者个体差异辨证论治,肠风虚寒型,合以健脾温中益气方药如香砂六君子汤,黄土汤等;肠风夹热型,合清热燥湿,行气止痛类如黄连泻心汤等;脏毒积聚型加二白饮或五味消毒饮加味等。处方由制剂室煎制,取水 500 mL 煎至 200 mL,术后 24 h 开始服用,日 1 剂,服用 5 天后复诊。

1.2.3 针灸组 术后第 1 天取长 40 mm 毫针迅速进针,取穴足三里、上巨虚、下巨虚、梁丘、三阴交、阴陵泉等,足三里用提插捻转补法,余穴平补平泻,于针柄上套置长约 15 cm 长的艾条,每次灸 2 壮,留针 45 min。每天 1 次,治疗 10 天。

1.2.4 针药联合组 同时进行中药和针灸治疗。

1.1 一般资料

采用回顾性调查方式收集 2010 年 5 月至 2016 年 5 月庆阳市人民医院进行肠癌根治性手术患者的临床资料,纳入标准:(1)患者均经过临床诊断且病理确诊为结直肠癌,年龄在 18-80 岁之间;(2)接受肠癌根治性手术治疗且术后出现不同程度胃肠功能障碍的患者;(3)临床数据完整;(4)接受术后治疗超过 3 天。排除标准:(1)患有心血管、肝、肾、脑、肺等原发性疾病严重影响胃肠功能的患者;(2)有肿瘤转移的患者;(3)术后胃肠功能评价方法及恢复情况记录不详细的患者。采用统一的病例信息采集表统计患者的一般资料包括:性别、年龄、肿瘤部位、TNM 分期及手术时间等。根据患者术后所接受的治疗方式将 88 例患者分为 4 组:常规组 30 例、针灸组 20 例、中药组 22 例及针药联合组 16 例。4 组一般资料组间比较差异无统计学意义($P>0.05$),见表 1。

1.3 评价指标

(1)反映胃肠功能的客观指标:肠鸣音恢复时间、肛门排气、排便时间。(2)反映胃肠功能的实验室指标:术后 3 天监测患者血清胃动素(motilin, MOT)和生长抑素(somatostatin, SS)水平,由该院检验科完成检测。(3)术后各组患者总体疗效比较^[7]:显效:腹胀或腹痛消失,肠鸣音活跃,24 h 内肛门排气排便,胃肠反应消失(恶心、呕吐);有效:腹胀或腹痛缓解,肠鸣音正常,24-48 h 内肛门排气排便,胃肠反应缓解(恶心、呕吐);改善:轻微腹胀或腹痛,肠鸣音减弱,48-72 h 内肛门排气排便,胃肠反应缓解(恶心、呕吐);无效:明显腹胀或腹痛,肠鸣音微弱或消失,72 h 以上肛门未排气排便;胃肠反应明显(恶心、呕吐)。总有效=改善+有效+显效。

1.4 统计方法

采用 SPSS 20.0 统计软件包进行数据的统计学分析,多组间计量资料比较采用方差分析,组间比较行 t 检验;计数或构成比资料用百分率(%)表示,采用 χ^2 检验。 $P<0.05$ 即差异有统

计学意义。

2 结果

2.1 各组患者术后胃肠功能指标比较

4 组患者肠鸣音恢复时间、肛门排气时间、排便时间及血清 MOT 及 SS 水平组间比较均存在统计学差异($P<0.05$),针药

联合组肠鸣音恢复时间、肛门排气时间、排便时间均低于其他 3 组, 针灸组及中药组亦低于常规组, 差异均有统计学意义($P<0.05$); 针药联合组血清 MOT 及 SS 水平均高于其他 3 组, 针灸组及中药组亦高于常规组, 差异均有统计学意义($P<0.05$),见表 2。

表 2 各组患者术后胃肠功能指标比较

Table 2 Comparison of postoperative gastrointestinal function indexes of patients in each group

Groups	n	The recovery time of bowel sound(h)	Anal exhaust time (h)	Anal defecation time(h)	MOT(pg/mL)	SS(pg/mL)
Conventional group	30	37.3± 16.1	64.3± 17.3	94.6± 17.9	106.2± 36.9	27.6± 8.1
Acupuncture group	20	26.1± 5.5*	45.6± 12.7*	75.5± 17.7*	137.2± 45.4*	37.5± 20.0*
Traditional chinese medicine group	22	30.2± 12.9*	49.8± 18.6*	76.6± 20.2*	136± 50.1*	33.4± 16.4*
Acupuncture combined with medicine group	16	20.4± 10.2*##	40.1± 11.1*##	69.5± 13.8*##	153.7± 63.2*##	45.3± 10.1*##

Note: compared with conventional group, * $P<0.05$; compared with acupuncture group and traditional chinese medicine group, # $P<0.05$.

2.2 各组患者术后总疗效比较

针灸组、中药组及针药联合组总有效率均高于常规组,针

药联合组亦高于针灸组及中药组, 差异均有统计学意义($P<0.05$),见表 3。

表 3 各组术后总疗效比较[n(%)]

Table 3 Comparison of postoperative total curative effect in each group [n (%)]

Groups	n	Invalid	Improvement	Effective	Excellence	Total effective
Conventional group	30	12(40.0)	13(43.3)	5(16.7)	0(0.0)	18(60.0)
Acupuncture group	20	4(20.0)	2(10.0)	4(20.0)	10(50.0)	16(80.0)*
Traditional chinese medicine group	22	5(22.8)	3(13.6)	5(22.8)	9(40.9)	17(77.3)*
Acupuncture combined with medicine group	16	1(6.3)	1(6.3)	2(12.5)	12(75.0)	15(93.8)*##

Note: compared with conventional group, * $P<0.05$; compared with acupuncture group and traditional chinese medicine group, # $P<0.05$.

3 讨论

结直肠癌是胃肠道常见的两种恶性肿瘤,其发病率逐年上升,对人类的生命构成了严重威胁。目前临床针对结直肠癌患者的治疗原则是以手术切除为主的综合治疗。凡能切除的结直肠癌如无手术禁忌都应尽早实施肠癌根治术。但腹部手术由于麻醉、精神因素及手术应激等因素会引起患者不同程度的胃肠功能障碍^[8],临床主要表现为腹痛、腹胀、腹泻、恶心、呕吐等,不利于患者术后的康复。调查发现,大约 4.25%的腹部手术患者术后可出现不同程度的胃肠功能障碍^[9]。患者术后胃肠功能障碍,一方面可影响患者的消化吸收功能,引起机体的代谢紊乱及营养失衡,不利于患者术后的康复;另一方面,术后胃肠高压,不利于手术刀口的吻合,影响手术治疗效果^[10-12]。目前,临床关于术后胃肠功能障碍并无特效的治疗方式,通常多进行常规护理自然恢复胃肠功能如禁饮食,持续胃肠减压,肠外营养,维持水电解质及酸碱平衡等。研究显示,腹部手术后小肠数小时即可恢复蠕动,胃需要大约 1 至 2 天,而结直肠恢复蠕动则需要 3 到 7 天左右^[13]。对于高龄或恶性肿瘤患者,术后长时间的

胃肠功能不全引起的机体的营养不良状态不仅不利于患者术后的康复,还可影响手术质量。有研究表明,恶性肿瘤患者通常伴有营养不良,而术后胃肠功能障碍可加重患者的营养不良状态,从而直接影响患者手术质量及生活质量^[14,15]。因此,有效的术后处理,缩短患者术后胃肠功能的恢复时间对患者的术后康复及预后至关重要。

近些年,越来越多的研究表明,术后行中医治疗可明显促进患者胃肠功能的恢复^[9,16,17]。胃肠即中医学中的脾胃。中医学认为胃主受纳,脾主运化,而"内伤脾胃,百病由生",强调了脾胃的重要性。结直肠癌患者术后因失血及麻醉等致使气机阻滞,脾胃气虚,运纳失常,故见脘闷腹胀、腹痛、呃逆、呕吐等胃肠失格表现,治宜补脾健胃为主。有研究显示,术后服用中药芪朴汤可明显缩短患者术后肠鸣音、排气排便时间,且能明显减少患者术后的并发症,对患者术后胃肠功能的恢复效果明显^[18-20]。此外,针灸作为中医学中独特的治疗方式,具有疏通经络、行气活血、防病保健等作用。研究表明,针刺刺激可促进胃肠蠕动,利于结直肠癌患者术后胃肠功能不全的康复^[7,14]。因此,有人主张结合中药及针灸的优势治疗结直肠癌患者术后胃肠功

能障碍,但其治疗效果尚存在争议,有待进一步的验证。本研究通过观察中医针药联合对结直肠癌患者术后胃肠功能恢复情况的影响发现,相比常规术后护理或单独应用中药或针灸治疗,针药联合治疗可明显缩短术后患者胃肠功能的恢复时间,且能提高治疗效果;此外,MOT和SS是胃肠道分泌的重要胃肠激素,多用于检测胃肠道的分泌功能。针药联合治疗可促进患者术后MOT和SS的分泌,益于患者术后胃肠道功能的恢复。

由此可见,针药联合治疗相对于传统的常规治疗及单独应用中药或针灸治疗对结直肠癌患者术后胃肠功能障碍具有显著疗效,同时具备疗效好、费用低、副作用少等优势,可于临床上推广应用。

参考文献(References)

- [1] Ferlay J, Shin HR, Bray F, et al. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008 [J]. *Int J Cancer*, 2010, 127(12): 2893-2917
- [2] Chen ST, Lee TY, Tsai TH, et al. The Traditional Chinese Medicine DangguiBuxue Tang Sensitizes Colorectal Cancer Cells to Chemoradiotherapy[J]. *Molecules*, 2016, 21(12): E1677
- [3] Salehi A, Marzban M, Zadeh AR. Acupuncture for treating hot flashes in breast cancer patients: an updated meta-analysis [J]. *Support Care Cancer*, 2016, 24(12): 4895-4899
- [3] Hsieh YL, Chou LW, Hong SF, et al. Laser acupuncture attenuates oxaliplatin-induced peripheral neuropathy in patients with gastrointestinal cancer: a pilot prospective cohort study [J]. *Acupunct Med*, 2016, 34(5): 398-405
- [4] Kim KH, Kim DH, Kim HY, et al. Acupuncture for recovery after surgery in patients undergoing colorectal cancer resection: a systematic review and meta-analysis [J]. *Acupunct Med*, 2016, 34(4): 248-56
- [5] 奥沛源,罗勤,傅江涛,等.四磨汤口服液对稳定性胸腰椎骨折胃肠功能障碍的临床研究[J].*现代生物医学进展*, 2015, 15(21): 4115-4117, 4077
Ao Pei-yuan, Luo Xun, Fu Jiang-tao, et al. Effect of Simotang Oral Liquid on Gastrointestinal Dysfunction of Patients with Stable Thoracolumbar Fractures[J]. *Progress in Modern Biomedicine*, 2015, 15(21): 4115-4117, 4077
- [6] Tao W, Luo X, Cui B, et al. Practice of traditional Chinese medicine for psycho-behavioral intervention improves quality of life in cancer patients: A systematic review and meta-analysis[J]. *Oncotarget*, 2015, 6(37): 39725-39739
- [7] 张双燕,杜业勤.温针灸对肠癌术后患者胃肠功能及免疫功能的影响[J].*中国针灸*, 2011, 31(6): 513-517
Zhang Shuang-yan, Du Ye-qin. Effects of warming needle moxibustion on improvement of gastrointestinal and immune function in patients with postoperation of colorectal cancer [J]. *Chinese Acupuncture & Moxibustion*, 2011, 31(6): 513-517
- [8] Vather R, Trivedi S, Bissett I. Defining postoperative ileus: results of a systematic review and global survey [J]. *J Gastrointest Surg*, 2013, 17(5): 962-972
- [9] 马焱,朱永康.术后胃肠功能障碍机制研究进展[J].*辽宁中医药大学学报*, 2011, 13(7): 236-238
Ma Yao, Zhu Yong-kang. Research Progress on the mechanism of gastrointestinal dysfunction after operation [J]. *Journal of Liaoning University of Traditional Chinese Medicine*, 2011, 13(7): 236-238
- [10] Berberian P, Obimba C, Glickman-Simon R, et al. Herbs for Low-Back Pain, Acupuncture for Psychological Distress, Osteopathic Manipulative Therapy for Chronic Migraine, Honey Dressings for Burns, Vegetarian Diet and Risk of Colorectal Cancer [J]. *Explore (NY)*, 2015, 11(5): 410-414
- [11] Tan Y, Zhao Y, He T, et al. Efficacy and safety of auricular point acupressure treatment for gastrointestinal dysfunction after laparoscopic cholecystectomy: study protocol for a randomized controlled trial[J]. *Trials*, 2016, 17(1): 280
- [12] Hu WH, Cajas-Monson LC, Eisenstein S, et al. Preoperative malnutrition assessments as predictors of postoperative mortality and morbidity in colorectal cancer: an analysis of ACS-NSQIP [J]. *Nutr J*, 2015, 14: 91
- [13] Kim G. Electroacupuncture for postoperative pain and gastrointestinal motility after laparoscopic appendectomy (AcuLap): study protocol for a randomized controlled trial[J]. *Trials*, 2015, 16: 461
- [14] Liu MY, Wang CW, Wu ZP, et al. Electroacupuncture for the prevention of postoperative gastrointestinal dysfunction in patients undergoing vascular surgery under general anesthesia: study protocol for a prospective practical randomized controlled trial [J]. *J Integr Med*, 2014, 12(6): 512-519
- [15] Meng ZQ, Garcia MK, Chiang JS, et al. Electro-acupuncture to prevent prolonged postoperative ileus: a randomized clinical trial [J]. *World J Gastroenterol*, 2010, 16(1): 104-111
- [16] Lian WL, Pan MQ, Zhou DH, et al. Effectiveness of acupuncture for palliative care in cancer patients: a systematic review[J]. *Chin J Integr Med*, 2014, 20(2): 136-147
- [17] Lu W, Dean-Clower E, Doherty-Gilman A, et al. The value of acupuncture in cancer care [J]. *Hematol Oncol Clin North Am*, 2008, 22(4): 631-648
- [18] Hou F, Li W, Shi Q, et al. Yi Ai Fang, a traditional Chinese herbal formula, impacts the vasculogenic mimicry formation of human colorectal cancer through HIF-1 α and epithelial mesenchymal transition[J]. *BMC Complement Altern Med*, 2016, 16(1): 428
- [19] 谭萍,马碧泉.吴茱萸联合粗盐热敷腹部对结直肠癌患者术后胃肠功能的影响[J].*山东医药*, 2011, 51(3): 53
Tan Ping, Ma Bi-quan. Wu Zhuyu combined salt hot pressing abdomen on gastrointestinal function in postoperative patients with colorectal cancer[J]. *Shandong medical journal*, 2011, 51(3): 53
- [20] Lin X, Xu W, Shao M, et al. Shenling Baizhu San suppresses colitis associated colorectal cancer through inhibition of epithelial-mesenchymal transition and myeloid-derived suppressor infiltration [J]. *BMC Complement Altern Med*, 2015, 15(1): 126