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# 腹腔镜下直肠癌根治术在治疗老年患者中的临床研究

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**摘要 目的:**探讨老年直肠癌患者行腹腔镜微创手术的治疗效果。**方法:**回顾性分析了 2008 年 7 月至 2011 年 1 月本院收治的 91 例老年直肠癌患者,按治疗方式分为腹腔镜组 39 例和开腹组 52 例,术后随访 3 年,比较分析两组患者围手术期、手术并发症及预后情况。**结果:**腹腔镜组患者的术中出血量、肠功能恢复时间、术后发热情况及住院时间均优于开腹组( $P<0.05$ );腹腔镜组并发症发生率为 2.6%,低于开腹组的 21.1%( $P<0.05$ );腹腔镜组局部复发率、远处转移率及死亡率与开腹组比较均无统计学差异( $P>0.05$ )。**结论:**老年直肠癌患者行腹腔镜手术与开腹手术效果相当,且安全、微创,但远期疗效尚需进一步研究证明。

**关键词:**腹腔镜;直肠癌;老年人;效果

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## Clinical Study on Laparoscopic Surgery in Radical Resection of Rectal Cancer in Elderly Patients

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**ABSTRACT Objective:** To study the effect of elderly patients with rectal cancer underwent laparoscopic minimally invasive operation. **Methods:** A retrospective analysis of 91 cases was conducted on elderly patients with colorectal cancer who were treated in our hospital from July 2008 to January 2011. The patients were divided into laparoscopic group (39 cases) and laparotomy group (52 cases) according to the treatment methods, followed-up for 3 years, postoperative. The perioperative situation, operation complications and prognosis of the two groups of patients were compared and analyzed. **Results:** The amount of bleeding, intestinal function recovery time, postoperative fever and hospitalization time in the laparoscopic group were better than those of laparotomy group ( $P<0.05$ ); The complication rate was 2.6%, lower than 21.1% of laparotomy group ( $P<0.05$ ); There was no significant difference in local recurrence rate, distant metastasis rate and mortality between the two groups ( $P>0.05$ ). **Conclusion:** The clinical effect of elderly patients with rectal cancer underwent laparoscopic operation is similar to laparotomy operation, it's safe and minimally invasive, but the long-term efficacy needs further study to prove.

**Key words:** Laparoscope; Rectal cancer; Aged; Effect

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### 前言

在消化道恶性肿瘤中,直肠癌的发病率仅次于胃癌和食道癌,是大肠癌中最常见的恶性肿瘤<sup>[1-3]</sup>。目前,对于直肠癌的治疗方法主要以手术切除为主,随着治疗手段的不断创新和进步,近年来腹腔镜手术切除技术在直肠癌中的成功应用,使此项技术逐渐成为部分直肠癌患者手术的首选方式<sup>[4,5]</sup>。作为一种微创性手术,是否能够较好的应用在老年期直肠癌患者中尚缺乏报道,因此本研究旨在探讨老年直肠癌患者行腹腔镜微创手术治疗的临床疗效。

### 1 资料和方法

#### 1.1 临床资料

纳入本研究的是 2008 年 7 月至 2011 年 1 月本院收治的

91 例老年直肠癌患者,年龄 60-75 岁,均未接受其他辅助治疗或靶向治疗等,排除 Dukes 分期为 D 期的患者。按治疗方式分为腹腔镜组 39 例和开腹组 52 例。两组患者的 KPS 评分<sup>[6]</sup> 60-80 分,两组患者年龄、性别、病理类型、分化程度、Dukes 分级和手术方式比较详见表 1,两组均衡可比。

#### 1.2 方法

**1.2.1 腹腔镜手术** 患者取截石位,略倾向右侧,气腹形成,将腹压控制在 12-14 mmHg 范围之间,随即安置 Trocar,并将主操作孔选在右下腹;若患者是女性则需悬吊起子宫,并将术野充分显露,乙状结肠侧的腹膜用超声刀切开,沿内侧髂血管沿右侧腹膜切开至直肠前返折腹膜处,沿髂左右血管分叉处分并显露肠系膜下动脉,根部用血管夹夹闭,并用超声刀将其离断,处理肠系膜下静脉及淋巴组织,并清除结缔组织,充分显露右侧的输尿管,将乙状结肠左侧的腹膜切开,在乙状结肠与直肠肿瘤组织间用布带捆扎,对肠管充分阻断处理,超声刀锐性分离,术中需注意直肠系膜的完整性保留<sup>[7]</sup>。

**1.2.2 开腹手术** 开腹手术的术式及具体手术步骤均按中国

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抗癌协会专业委员会制订的手术规范进行<sup>[7]</sup>,并同样给予术后抗感染治疗和对症处理。

### 1.3 评价与随访

本研究的评价指标主要包括:平均手术时间、术中出血量、肠功能恢复时间、术后发热及住院时间;并进一步分析两组患者手术并发症的具体发生情况;并通过门诊或电话联系的方式对 91 名老年直肠癌患者进行为期 3 年的术后随访,内容包括肿瘤局部复发、远隔转移和患者死亡情况,期间无失访出现,随访率达 100%。

### 1.4 统计学方法

本研究用 SPSS 11.5 统计学软件进行数据分析,计量资料用均数 $\pm$ 标准差( $\bar{x}\pm s$ )表示,计量资料用成组 t 检验,计数资

料用卡方检验进行,将  $P<0.05$  的差异定为具有统计学意义。

## 2 结果

### 2.1 两组患者的围手术期情况比较

两组患者的平均手术时间没有显著差异,而腹腔镜手术组的患者术中出血量、肠功能恢复时间、术后发热情况及住院时间均优于开腹组( $P<0.05$ ),详见表 2。

### 2.2 两组患者的手术并发症情况比较

腹腔镜手术组患者除 1 例出现腹部皮下气肿外,均未见骶前出血、吻合口漏等严重手术并发症发生;开腹组患者出现肠梗阻 7 例、切口感染 5 例。腹腔镜组并发症发生率为 2.6%,低于开腹组的 21.1% ( $P=0.011<0.05$ )。

表 1 两组患者的临床资料比较

Table 1 Comparison of the clinical data of two patients

| 指标 Indexes                  | 腹腔镜(n=39) Laparoscopic group  | 开腹组(n=52) Laparotomy group | P     |
|-----------------------------|-------------------------------|----------------------------|-------|
| 性别(男 / 女) Gender (M/G)      | 23/16                         | 28/24                      | 0.626 |
| 年龄(岁)Age(years)             | 64.3 $\pm$ 2.6                | 63.7 $\pm$ 2.5             | 0.268 |
| 病理类型<br>Pathological type   | 腺癌 Adenocarcinoma             | 48                         | 0.490 |
|                             | 其他 Other                      | 4                          |       |
| Dukes 分期<br>Dukes staging   | A 期 A staging                 | 26                         | 0.925 |
|                             | B 期 B staging                 | 21                         |       |
|                             | C 期 C staging                 | 5                          |       |
| 分化程度<br>Differential degree | 高分化 Well-differentiated       | 28                         | 0.705 |
|                             | 中分化 Moderately differentiated | 21                         |       |
|                             | 低分化 Poorly differentiated     | 3                          |       |
| 手术方式<br>Modus operandi      | Miles 术 Miles operation       | 14                         | 0.856 |
|                             | Dixon 术 Dixon operation       | 38                         |       |

### 2.3 两组患者的预后情况比较

3 年随访发现,腹腔镜组的术后局部复发为 6 例,远隔转移为 3 例,共计 9 例(23.1%);开腹组的术后局部复发为 10 例、

远隔转移为 6 例,共计 16 例(30.8%),两组比较无统计学显著性差异( $P>0.05$ );腹腔镜组 3 年内的死亡率为 9 例(23.1%),开腹组为 10 例(19.2%),无显著性差异( $P>0.05$ ),详见表 3。

表 2 两组患者的围手术期情况比较( $\bar{x}\pm s$ )

Table 2 Comparison of perioperative related indexes of two groups of patients( $\bar{x}\pm s$ )

| 指标<br>Indexes                                       | 腹腔镜(n=39)<br>Laparoscopic group | 开腹组(n=52)<br>Laparotomy group | P      |
|-----------------------------------------------------|---------------------------------|-------------------------------|--------|
| 手术时间(min)<br>Operation time (min)                   | 172 $\pm$ 44                    | 167 $\pm$ 29                  | 0.067  |
| 术中出血量(ml)<br>The amount of bleeding(ml)             | 109 $\pm$ 34                    | 155 $\pm$ 49                  | <0.001 |
| 肠功能恢复时间(h)<br>Intestinal function recovery time (h) | 15 $\pm$ 4                      | 20 $\pm$ 6                    | <0.001 |
| 术后发热(n)<br>Postoperative fever(n)                   | 2.1 $\pm$ 5.1                   | 9 $\pm$ 17.3                  | 0.021  |
| 住院时间(d)<br>hospitalization time(d)                  | 6.1 $\pm$ 1.1                   | 7.7 $\pm$ 1.4                 | 0.030  |

表 3 两组患者的预后情况比较[n(%)]  
Table 3 Comparison of prognosis of patients in two groups[n(%)]

| 指标 Indexes              | 腹腔镜(n=39) Laparoscopic group | 开腹组(n=52) Laparotomy group | P     |
|-------------------------|------------------------------|----------------------------|-------|
| 局部复发 Local recurrence   | 6(15.4)                      | 10(19.2)                   | 0.689 |
| 远处转移 Distant metastasis | 3(7.7)                       | 6(11.5)                    | 0.730 |
| 死亡 Death                | 9(23.1)                      | 10(19.2)                   | 0.718 |

### 3 讨论

在目前应用的直肠癌传统术式中,开腹手术早已应用,且在各大医院均有较广泛的采用,能够获得较好的疗效<sup>[8]</sup>。然而,随着科学技术的不断进步,腹腔镜技术已逐渐普及,并得到了不同程度的良好临床应用,获得较好的临床疗效,因此,腹腔镜技术在直肠癌切除术中的优越性正逐渐受到人们的关注<sup>[9-11]</sup>。在本研究中发现,腹腔镜手术组患者的术中出血量、肠功能恢复时间、术后发热情况及住院时间均优于开腹组。这可能是因为开腹组需要更多的手术步骤和多器官组织的处理,术中的推压对肠道可能产生了不同程度的影响;同时,由于其手术创面较大,凝血因子消耗较大,因此机体需要更长时间进行恢复。本研究发现腹腔镜组在手术并发症方面具有一定的优势,除1例出现腹部皮下气肿外,均未见骶前出血、吻合口漏等严重手术并发症发生,且腹腔镜组较开腹组的手术并发症发生率低。提示腹腔镜手术切除治疗老年期直肠癌较开腹组具有创伤小、降低应激反应、恢复快等优点,并且方法安全、有效。但在进一步研究中并未发现腹腔镜组在远期疗效(复发、转移和死亡)方面具有明显优势。与相关报道研究相似<sup>[12-14]</sup>。

本研究总结归纳了腹腔镜手术治疗的优越性,主要有以下几点:首先,腹腔镜的照明亮度充分且可调,在视野内没有明显的阴影,镜头能够通过移动和旋转调整角度充分显露手术视野,成像能够通过距离控制得到放大、清晰的效果,能较全面、清晰地对解剖结构进行展示,超声刀具有良好的止血和切割功能,大大减少了术中出血,手术视野清晰,有利于沿直肠周围间隙和盆筋膜进行精细的解剖和分离,有利于保护盆腔的自主神经<sup>[15-17]</sup>;然后,在手术过程中因对腹腔内脏器干扰很少,从而保护了体内环境平衡,减少了开腹手术造成的对临近组织和器官的伤害,减少了开腹手术常见的腹腔内粘连<sup>[18]</sup>;再者,由于切口较小,切口疤痕也较小,比较美观,患者术后切口疼痛较轻,有利于病人早期下床活动,有利于病人术后的快速康复<sup>[19,20]</sup>。这些优势也正弥补了老年患者的身体劣势,减少了直肠癌根治术的并发症,减轻了老年直肠癌患者的痛苦,提高了直肠癌的治疗效果。

综上所述,腹腔镜手术切除治疗老年直肠癌与开腹手术的临床效果相当,并具有术中创伤小、术后恢复快、并发症少等优点,短期疗效明显优于传统方法。但目前尚需进一步大样本、长期随访研究对其远期疗效进行证明。

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