

胃癌患者身体质量指数对腹腔镜术式选择及效果的影响

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【摘要】目的:探讨不同身体质量指数(BMI)对胃癌患者腹腔镜术式选择及疗效的影响。**方法:**选择行腹腔镜胃癌根治术患者115例,根据患者BMI分为体型肥胖组($BMI > 25 \text{ kg/m}^2$, 35例)和正常组($BMI 18.5 \sim 25.0 \text{ kg/m}^2$, 45例)、低体质量组($BMI < 18.5 \text{ kg/m}^2$, 35例),其中肥胖组患者行腹腔镜辅助远端胃大部切除术(LADG)15例,近端胃大部切除术(LAPG)10例,全胃切除术(LATG)10例;正常组患者采用LADG术14例,LAPG术20例,LATG术11例;低体质量组采用LADG术10例,LAPG术15例,LATG术10例。观察3组患者的术后恢复效果及术后生存情况。**结果:**肥胖组手术时间较正常组、低体质量组明显延长,术中出血量较正常组、低体质量组增加,淋巴结清扫总数较正常组、低体质量组减少,差异均有统计学意义($P < 0.05$)。肥胖组术后住院时间较正常组、低体质量组显著延长($P < 0.05$)。正常组、低体质量组手术时间、术中出血量、淋巴结清扫总数、术后住院时间对比差异无统计学意义($P > 0.05$)。3组肿瘤直径、术后肛门首次排气时间和术后并发症总发生率差异无统计学意义($P > 0.05$)。3组患者总生存率和无进展生存率差异均无统计学意义($P > 0.05$)。**结论:**不同BMI胃癌患者行腹腔镜辅助LADG、LAPG和LATG根治术治疗,其中体型肥胖组患者较正常组、低体质量组手术时间长,术后恢复时间长,但并不影响术后并发症和预后。

【关键词】胃癌;身体质量指数;腹腔镜;术式选择

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Effects of body mass index on the selection and efficacy of laparoscopic surgery in patients with gastric cancer

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Abstract: Objective To investigate the effects of the body mass indexes (BMI) of patients with gastric cancer on the selection and therapeutic effect of laparoscopic operation. **Methods** A total of 115 patients receiving laparoscopic radical gastrectomy were enrolled in the study. According to BMI, the patients were divided into 3 groups, namely obese group ($BMI > 25 \text{ kg/m}^2$, $n=35$), normal group ($BMI 18.5 \sim 25.0 \text{ kg/m}^2$, $n=45$) and underweight group ($BMI < 18.5 \text{ kg/m}^2$, $n=35$). There were 15 cases of laparoscopy-assisted distal gastrectomy (LADG), 10 cases of laparoscopy-assisted proximal gastrectomy (LAPG) and 10 cases of laparoscopy-assisted total gastrectomy (LATG) in obese group, 14 cases of LADG, 20 cases of LAPG and 11 cases of LATG in normal group, and 10 cases of LADG, 15 cases of LAPG and 10 cases of LATG in underweight group. The postoperative recovery and postoperative survival in 3 groups were analyzed. **Results** Compared with those in normal group and underweight group, the operative time in obese group was significantly longer, and the intraoperative blood loss was increased, and the total number of dissected lymph nodes was decreased, with statistical differences ($P < 0.05$). Moreover, the length of postoperative hospital stay in obese group was significantly longer than that in normal group and underweight group ($P < 0.05$). No statistical difference was found in operative time, intraoperative blood loss, the total number of dissected lymph nodes and postoperative hospital stay between normal group and underweight group ($P > 0.05$). Moreover, there were no statistically significant differences among 3 groups in tumor diameter, postoperative first anal exhaust time and the overall incidence of postoperative complications, overall survival rate and progression-free survival rate ($P > 0.05$). **Conclusion** Among the gastric cancer patients with different BMI who were treated with LADG, LAPG and LATG, the patients in obese group has longer operative time and postoperative recovery time than those in normal group and underweight group, but BMI has trivial effects on postoperative complications and prognosis.

Keywords: gastric cancer; body mass index; laparoscope; selection of surgical procedure

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前言

目前胃癌最常见的治疗主要为胃大部切除术或全胃切除手术并辅以放化疗^[1-2]。胃癌患者不仅会出现生理上的症状和疼痛,还会造成心理上的不良情绪,对患者身心危害极大^[3]。胃肠道症状是胃癌患者最常见的疾病表现,且针对不同体质量的胃切除患者,术后肠道会出现不适症状,经过一段时间适应后逐渐好转^[4]。对胃癌患者来说,肠道症状会比其他癌症患者严重,且会随着治疗时间而发生变化^[5]。本研究探讨不同身体质量指数(BMI)对胃癌患者腹腔镜术式选择及疗效的影响。

1 资料与方法

1.1 一般资料

选择2015年5月~2018年5月梧州市工人医院收治的行腹腔镜胃癌根治术患者115例,根据患者体质量指数(BMI)分为体型肥胖组(BMI>25 kg/m²,35例)、正常组(BMI 18.5~25.0 kg/m²,45例)和低体质量组(BMI<18.5 kg/m²,35例),所有患者经腹腔镜胃癌根治术证实为I~III期胃癌。其中肥胖组35例中男20例,女15例,年龄(52.7±8.9)岁,病理分期I期13例,II期12例,III期10例。正常组45例中男25例,女20例,年龄(51.9±7.5)岁,病理分期I期16例,II期18例,III期11例。低体质量组35例中男21例,女14例,年龄(52.3±7.8)岁,病理分期I期14例,II期13例,III期8例。在性别、年龄、病情等相关信息上,3组间具有可比性($P>0.05$)。3组患者均通过医院伦理委员会批准,且均知晓本次诊治方案,并签字确认。

1.2 方法

采用腹腔镜辅助胃癌根治术治疗所有患者,在腹腔镜引导下将胃部的游离组织和淋巴结清扫干净,在腹部做小切口进行胃切除和吻合。包括腹腔

镜辅助远端胃大部切除术(LADG)、近端胃大部切除术(LAPG)和全胃切除术(LATG)。

1.3 观察指标

观察两组患者术后恢复及术后生存情况。对两组患者手术时间、术中出血量、肿瘤直径、淋巴结清扫数量、淋巴结阳性数目及住院时间、术后肛门首次排气时间及住院期间术后并发症发生情况进行比较。

1.4 统计学方法

采用SPSS 22.0软件进行统计学分析和处理,分别使用均数±标准差和百分比表示计量资料和计数资料,采用 t 检验和 χ^2 检验。多样本对比采用方差分析。 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组患者腹腔镜术式选择情况比较

肥胖组患者行LADG术15例,LAPG术10例,LATG术10例;正常组患者行LADG术14例,LAPG术20例,LATG术11例;低体质量组患者行LADG术10例,LAPG术15例,LATG术10例。3组术式选择差异具有统计意义($F=3.543, P=0.019$)。

2.2 两组患者手术相关指标比较

肥胖组手术时间较正常组、低体质量组明显延长,术中出血量较正常组、低体质量组增加,淋巴结清扫总数较正常组、低体质量组减少,差异均有统计学意义($P<0.05$,表1)。肥胖组术后住院时间较正常组、低体质量组显著延长,差异有统计学意义($P<0.05$,表2)。正常组与低体质量组手术时间、术中出血量、淋巴结清扫总数、术后住院时间对比差异无统计学意义($P>0.05$,表1、表2)。3组肿瘤直径、术后肛门首次排气时间和术后并发症总发生率差异无统计学意义($P>0.05$,表1、表2)。

表1 各组手术指标比较($\bar{x} \pm s$)
Tab.1 Comparison of operation indicators in different groups (Mean±SD)

组别	n	手术时间/min	术中出血量/mL	肿瘤直径/cm	淋巴结清扫总数/枚
肥胖组	35	236.91±35.48	85.09±21.32	4.53±1.68	23.16±5.14
正常组	45	212.83±38.96 [#]	70.64±20.81 [#]	4.78±1.83	28.69±6.57 [#]
低体质量组	35	214.11±37.65 ^{*#}	68.15±19.54 ^{*#}	4.65±1.53 [*]	29.11±6.14 ^{*#}
F值	-	4.792	7.077	0.215	10.960
P值	-	0.010	0.001	0.807	0.000

^{*}表示与正常组相比, $P>0.05$;[#]表示与肥胖组相比, $P<0.05$

2.3 两组患者治疗后总生存率比较

随访期间,肥胖组术后肿瘤进展10例,无进展生

存率为71.43%(25/35),其中死亡8例,总生存率为77.14%(27/35)。正常组肿瘤进展15例,无进展生

表2 各组术后恢复效果比较($\bar{x} \pm s$)

Tab.2 Comparison of postoperative recovery in different groups (Mean±SD)

组别	n	术后住院时间/d	术后肛门排气时间/d	术后并发症发生率/%
肥胖组	35	10.63±2.58	2.69±1.37	14.29(5/35)
正常组	45	8.73±2.46 [#]	2.74±1.42 [#]	11.11(4/45) [#]
低体质量组	35	8.54±2.29 ^{*#}	2.70±1.39 ^{*#}	11.43(4/35) ^{*#}
F值	-	8.052	0.015	1.031
P值	-	0.001	0.985	1.095

*表示与正常组相比, $P>0.05$; [#]表示与肥胖组相比, $P<0.05$

率为66.67%(30/45),其中死亡10例,总生存率为77.78%(35/45)。低体质量组肿瘤进展9例,无进展生存率为71.43%(26/35),其中死亡7例,总生存率为80.00%(28/35)。3组患者总生存率和无进展生存率差异均无统计学意义($F=0.020$, $P=0.993$)。

3 讨论

通常临床上采用手术治疗胃癌,不少研究发现胃癌患者的治疗结果与手术方式有着重要联系^[6-8]。近几年来,医学技术不断成熟,腹腔镜手术及机器手臂治疗胃癌应用广泛,且治疗效果明显,术后恢复较快^[9]。虽然机器手臂的应用初见成效,但具体效果仍需要临床试验进一步验证^[10]。有研究发现许多胃癌患者手术后会出现肠道不适症状^[11]。此外,肠道症状常与进食有关,如接受幽门保留胃切除手术后,胃排空较慢的患者,其腹部饱胀感、恶心、呕吐的情形也较严重,且逆流性食道炎也只发生在胃排空较慢的患者^[12]。患者在接受胃切除手术后,术后胃肠道需要适应一段时间^[13-14]。接受化疗的患者将会承受化疗带来的副作用,包括恶心、呕吐等胃肠道反应,由于放化疗患者接受病灶部位的照射,所以胃肠道反应比其他肿瘤患者要严重,且治疗时间越长,症状可能越明显^[15-16]。

对不同体质量胃癌患者行腹腔镜辅助胃癌根治术时,消瘦患者横结肠系膜前后叶之间有疏松结缔组织间隙,容易分离^[17-18]。肥胖患者脂肪肥厚,有炎性粘连,分离较困难,易引起横结肠系膜分支血管撕裂,特别是胃结肠静脉断裂造成大量出血,此时不应盲目止血,采用纱布垫压迫5 min,多数患者出血停止,此时再用血管钳夹住结扎止血^[19-20]。本研究结果提示,不同BMI胃癌患者行腹腔镜辅助LADG、LAPG和LATG胃癌根治术进行治疗具有统计学意义,其中体型肥胖患者手术时间长,术后恢复时间较正常体型、低体质量患者显著延长,但并不影响术后并发症和预后。

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