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进展期胃癌根治术后早期复发的影响因素分析

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摘要 目的:分析影响进展期胃癌根治术后早期复发的相关因素,为临床干预工作提供依据。**方法:**选取 2009 年 6 月至 2012 年 7 月本院收治的 195 例进展期胃癌患者作为研究对象,所有患者均接受胃癌根治术治疗,根据患者术后 1 年内复发与否将上述患者分为早期复发组(n=103)与对照组(n=92)。先后采用 χ^2 检验、非条件 Logistic 回归分析确定影响进展期胃癌根治术后早期复发的独立相关因素。**结果:**单因素分析发现,两组患者的肿瘤直径、Borrmann 分型、Lauren 分型、T 分期、N 分期、TNM 分期、新辅助化疗、术后化疗等指标相比差异有统计学意义($P<0.05$),两组患者的性别、年龄、体质指数、肿瘤位置、分化程度、手术方式、腹腔镜手术等指标相比差异无统计学意义($P>0.05$)。非条件 Logistic 回归发现,N 分期、TNM 分期是影响进展期胃癌根治术后早期复发的独立危险因素,而新辅助化疗是独立保护因素。**结论:**进展期胃癌的 N 分期、TNM 分期是其术后早期复发的独立危险因素,采取术后新辅助化疗可降低进展期胃癌根治术后早期复发率。

关键词:进展期胃癌;胃癌根治术;复发;影响因素

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Analysis of the Influencing Factors of Early Recurrence after Radical Resection for Patients with Advanced Gastric Cancer

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ABSTRACT Objective: To analyze the influencing factors of early recurrence after radical resection for advanced gastric cancer so as to provide theoretical evidence for clinical intervention. **Methods:** Totally 195 patients with advanced gastric cancer admitted into our hospital from June 2009 to July 2012 were selected as the objects of study. All patients underwent radical resection of gastric cancer. According to with or without recurrence one year after radical resection, these before-mentioned patients were divided into early recurrence group (n=103) and control group (n=92). Chi-square test and unconditioned logistic regression analysis were applied to determine the independent relevant factors for early recurrence after radical resection. **Results:** The univariate analysis found that there were significant differences in tumor diameter, Borrmann type, Lauren type, T stage, N stage, TNM stage, neoadjuvant chemotherapy and postoperative chemotherapy between early recurrence group and control group ($P<0.05$), while there was no significant difference in gender, age, body mass index, tumor location, degree of differentiation, surgical approaches and laparoscopic surgery between two groups ($P>0.05$). The unconditioned logistic regression analysis found that N stage and TNM stage were independent risk factors for early recurrence after radical resection, but neoadjuvant chemotherapy was an independent protective factor. **Conclusion:** N stage and TNM stage were independent risk factors of early recurrence after radical resection for advanced gastric cancer. Neoadjuvant chemotherapy can reduce the early recurrence rate after radical resection for advanced gastric cancer.

Key words: Advanced gastric cancer; Radical resection; Recurrence; Influencing factor

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前言

胃癌是指起源于胃壁表层黏膜上皮细胞的恶性肿瘤,可见于胃的各个部位,以胃窦区最为常见,贲门部次之^[1]。根据病变浸润深度可将胃癌分为早期胃癌与进展期胃癌两大类,前者是指病变仅侵及黏膜或黏膜下层的胃癌,后者是指病变超过黏膜下层的胃癌。进展期胃癌在根治术后易复发,本研究旨在探讨

分析影响进展期胃癌根治术后早期复发的相关因素,现报道如下。

1 材料与方法

1.1 一般资料

选取 2000 年 6 月至 2012 年 7 月本院收治的 195 例进展期胃癌患者作为研究对象。纳入标准:①术后经病理检查确诊为进展期胃癌;②符合根治术的手术指征,接受根治术治疗;③病历资料完整。排除标准:①采用姑息性手术治疗的患者;②病历资料不全的患者。其中男性 126 例,女性 69 例;年龄 35~75

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(48.4± 5.2)岁。根据患者术后 1 年内复发与否将上述患者分为早期复发组(n=103)与对照组(n=92)。

1.2 分析指标

选取性别、年龄、体质指数、肿瘤直径、肿瘤位置、分化程度、Borrmann 分型、Lauren 分型、T 分期、N 分期、TNM 分期、手术方式、腹腔镜手术、术后化疗、新辅助化疗等 15 个指标作为分析指标。

1.3 统计学处理

采用 χ^2 检验、非条件 Logistic 回归分析确定影响进展期胃

癌根治术后早期复发的独立相关因素。

2 结果

2.1 影响进展期胃癌根治术后早期复发相关因素的单因素分析

两组患者的肿瘤直径、Borrmann 分型、Lauren 分型、T 分期、N 分期、TNM 分期、新辅助化疗、术后化疗等指标相比差异有统计学意义($P<0.05$),两组患者的性别、年龄、体质指数、肿瘤位置、分化程度、手术方式、腹腔镜手术等指标相比差异无统计学意义($P>0.05$)。见表 1。

表 1 影响进展期胃癌根治术后早期复发相关因素的单因素分析

Table 1 Single factor analysis of the impact of advanced gastric cancer early postoperative factors associated with recurrence

Factors	b	S_b	OR value	95%CI	Wald χ^2	P value
Tumor diameter	1.4206	0.8577	4.1396	0.7707~22.2355	2.7433	>0.05
Borrmann type	1.2980	0.7549	3.6220	0.8339~16.0804	2.9564	>0.05
Lauren type	1.5817	0.9544	4.8632	0.7491~31.5737	2.7465	>0.05
T stage	0.9274	0.6973	2.5279	0.6445~9.9156	1.7689	>0.05
N stage	1.0942	0.3192	2.9868	1.5977~5.5836	11.7510	<0.05
TNM stage	1.5301	0.4986	4.6186	1.7382~12.2724	9.4175	<0.05
Neoadjuvant chemotherapy	-1.2532	0.4237	0.2856	0.1245~0.6552	8.7483	<0.05
Postoperative chemotherapy	-1.0365	0.7750	0.3547	0.0777~1.6201	1.7887	>0.05

2.2 影响进展期胃癌根治术后早期复发相关因素的非条件 Logistic 回归分析

对进展期胃癌根治术后早期复发相关因素的非条件

Logistic 回归分析结果显示:N 分期、TNM 分期是影响进展期胃癌根治术后早期复发的独立危险因素,新辅助化疗是独立保护因素,见表 2。

表 2 影响进展期胃癌根治术后早期复发相关因素的非条件 Logistic 回归分析

Table 1 Non-conditional logistic regression analysis of the impacted of advanced gastric cancer early postoperative factors associated with recurrence

Factors		Early recurrence group (n=103)	Control group(n=92)	χ^2 value	P value
Gender	Male	67(65.0)	59(64.1)	0.0179	0.9052
	Female	36(35.0)	33(35.9)		
Age(year)	<60	75(72.8)	71(77.2)	0.4906	0.4883
	≥ 60	28(27.2)	21(22.8)		
Body mass index (kg/m ²)	<24	59(57.3)	57(62.0)	0.4407	0.5067
	≥ 24	44(42.7)	35(38.0)		
Tumor diameter(cm)	<6	27(26.2)	42(45.7)	8.0310	0.0032
	≥ 6	76(73.8)	50(54.3)		
Tumor location	Up Stomach 1/3	12(11.7)	7(7.6)	0.9647	0.6313
	Middle Stomach 1/3	40(38.8)	39(42.4)		
	Down Stomach 1/3	51(49.5)	46(50.0)		
Degree of differentiation	High	15(14.6)	10(10.9)	1.2325	0.7451
	Middle	22(21.4)	17(18.5)		
	Low	31(30.1)	28(30.4)		
	No	35(39.9)	37(40.2)		
Borrmann type	I	10(9.7)	19(20.7)	9.3818	0.0248
	II	15(14.6)	22(23.9)		
	III	35(34.0)	25(27.2)		
	IV	43(41.7)	26(28.2)		
Lauren type	Intestinal type	32(31.1)	41(44.6)	8.5449	0.0155
	Diffuse type	55(53.4)	30(32.6)		
	Other type	16(15.5)	21(22.8)		

续 表

Factors		Early recurrence group(n=103)	Control group (n=92)	x ² value	P value
T stage	T2	23(22.3)	39(42.4)	9.2890	0.0097
	T3	37(35.9)	27(29.3)		
	T4	43(41.8)	26(28.3)		
N stage	N0	11(10.7)	19(20.7)	11.7648	0.0086
	N1	19(18.4)	24(26.1)		
	N2	34(33.0)	33(35.8)		
TNM stage	N3	39(37.9)	16(17.4)	9.4678	0.0091
	II	12(11.7)	23(25.0)		
	III	35(34.0)	37(40.2)		
Surgical approaches	IV	56(54.3)	32(34.8)	0.3179	0.5943
	Extended radical resection	44(42.7)	43(46.7)		
	Modified radical resection	59(57.3)	49(53.3)		
Laparoscopic surgery	Yes	19(18.4)	13(14.1)	0.6600	0.4397
	No	84(81.6)	79(85.9)		
Neoadjuvant chemotherapy	Yes	32(31.1)	48(52.2)	8.9471	0.0046
	No	71(68.9)	44(47.8)		
Postoperative chemotherapy	Yes	53(51.5)	61(66.3)	4.4117	0.0379
	No	50(48.5)	31(33.7)		

3 讨论

胃癌是目前临床上最常见的恶性肿瘤之一,由于早期胃癌的临床症状不太典型,因此胃癌患者确诊时往往已至进展期^[2]。以手术为主的综合治疗是进展期胃癌最常用的治疗方案,其主要术式有标准根治术、扩大根治术、姑息性手术等,不同术式有不同的手术指征^[3]。本研究所有患者均严格按照手术指征接受相应的术式治疗。尽管如此,进展期胃癌在根治术后有着较高的复发率以及转移率^[4],使这些患者的远期疗效受到严重的影响。

有文献报道,肿瘤的直径越大,癌组织的浸润程度越深,肿瘤细胞可通过穿透的浆膜层脱落至腹腔从而导致种植转移^[10]。在肿瘤的各种分期中,往往分期越晚的肿瘤,由于其可能已经发生浸润,从而更易导致转移和术后复发^[11]。对于进展期胃癌的治疗方法的研究报道很多,有文献提到,通过新辅助化疗和术后化疗治疗的患者预后良好,复发率和总体生存率都大于对照组^[12]。在本研究中,共分析了 15 个指标,单因素分析结果显示两组患者的肿瘤直径、Borrmann 分型、Lauren 分型、T 分期、N 分期、TNM 分期、新辅助化疗、术后化疗等指标相比差异有统计学意义。这说明上述指标与进展期胃癌根治术后复发有着直接或间接的联系。另外,非条件 Logistic 回归发现 N 分期、TNM 分期是影响进展期胃癌根治术后早期复发的独立危险因素,新辅助化疗则是独立保护因素。多个淋巴结发生转移的进展期胃癌患者的临床分期往往较晚,尽管患者接受根治性切除,但是术前患者常常已经发生了微转移,因此在根治术过程中应适当扩大淋巴结清扫范围,从而使进展期胃癌患者的复发率得到降低。此外,新辅助化疗在进展期胃癌患者治疗过程中所产生的作用已经受到广泛关注,研究表明新辅助化疗可使进展期胃癌患者的手术切除率、术后生存期得到显著提高,2010

年 NCCN 胃癌临床实践指南已将新辅助化疗纳入 T2 及更高分期胃癌的治疗建议中^[12,21]。本研究结果显示新辅助化疗是影响进展期胃癌根治术后早期复发的独立保护因素,因此在进展期胃癌患者接受根治术治疗之前,应给予适当的新辅助化疗。

总之,本研究结果表明进展期胃癌的 N 分期、TNM 分期是其术后早期复发的独立危险因素,采取而新辅助化疗可降低进展期胃癌根治术后早期复发率。

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