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外伤性肝破裂患者腹腔镜下修补术后发生焦虑抑郁的危险因素分析*

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摘要 目的:探讨外伤性肝破裂患者腹腔镜下修补术后发生焦虑抑郁的危险因素。**方法:**应用前瞻性研究方法,采用一般资料问卷调查表、焦虑自评量表、抑郁自评量表对本院收治的 150 例外伤性肝破裂患者进行心理测评,分析术后焦虑和抑郁状态的发生情况。根据术后的状态分为三组,术后存在焦虑的患者为焦虑状态组($n=53$),存在抑郁状态的患者为抑郁状态组($n=57$),术后无焦虑抑郁状态的为对照组($n=40$)。对焦虑和抑郁形成的危险因素进行多因素 Logistic 回归分析。**结果:**焦虑状态组($n=53$)、抑郁状态组($n=57$)及对照组($n=40$)平均年龄、平均受教育年限比较差异无统计学意义($P>0.05$);而经济月收入、居住地、负面情绪、术前并发症、医保报销、家庭和睦、术前住院时间差异具有统计学意义($P<0.05$)。手术过程的手术时间、外循环时间、主动脉阻断时间、外循环百分比比较差异均无统计学意义($P>0.05$);而麻醉苏醒时间、ICU 停留时间差异具有统计学意义($P<0.05$)。术后担忧的问题及需求(治疗需求和心理需求)比较差异均具有统计学意义($P<0.05$)。Logistic 回归分析结果显示文化程度($OR=1.254$)、负面情绪($OR=1.245$)、家庭收入($OR=2.324$)、手术疗效($OR=2.258$)均为焦虑发生的危险因素;文化程度($OR=4.230$)、负面情绪($OR=1.254$)、家庭收入($OR=1.236$)、手术疗效($OR=2.120$)均为抑郁发生的危险因素。**结论:**外伤性肝破裂患者腹腔镜下修补术后焦虑抑郁的形成可能与患者的文化高低、负面情绪、手术疗效、家庭收入和术前并发症有关。

关键词: 外伤性肝破裂;腹腔镜下修补术;焦虑;抑郁

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Risk Factors of Anxiety and Depression after Laparoscopic Repair in Patients with Traumatic Liver Rupture*

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ABSTRACT Objective: To investigate the risk factors of anxiety and depression in patients with traumatic liver rupture after laparoscopic repair. **Methods:** In this prospective study, 150 patients with traumatic liver rupture were assessed with general information questionnaire, self-rating anxiety scale and self-rating depression scale to evaluate the incidence of post-operative anxiety and depression. According to the state of patients after operation, the patients with anxiety after operation were anxiety group ($n=53$), patients with depression were depression group ($n=57$) and control group were consist of those who have no anxiety and depression ($n=40$). The risk factors of anxiety and depression were analyzed by multivariate Logistic regression analysis. **Results:** There was no significant difference in average age and education years among anxiety group ($n=53$), depression group ($n=57$) and control group ($n=40$) ($P>0.05$). The difference of monthly income, residence, negative emotion, preoperative complications, medical insurance reimbursement, family harmony, preoperative hospitalization time was statistically significant. The operative time, the time of external circulation, the time of aortic occlusion and the number of cases of external circulation had not significant differences ($P>0.05$), but differences of anaesthetic resuscitation time and the residence time of ICU were statistically significant ($P<0.05$). Postoperative concerns and needs (both therapeutic and psychological) and risk factors of anxiety were significant different ($P<0.05$). Logistic regression analysis showed that education level ($OR=1.254$), negative emotion ($OR=1.245$), family income ($OR=2.324$) and surgical effect ($OR=2.258$) were risk factors for anxiety. Education level ($OR=4.230$), negative emotions ($OR=1.254$), family income ($OR=1.236$), and surgical efficacy ($OR=2.120$) were risk factors for depression. **Conclusion:** The incidence of anxiety and depression in patients with traumatic liver rupture after laparoscopic repair may be related to the level of culture, negative emotion, operative efficacy, family income and preoperative complications.

Key words: Liver traumatic rupture; Laparoscopic repair; Anxiety; Depression

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前言

近年来,腹腔镜技术获得迅猛发展,被广泛运用于临床手术中^[1]。对于外伤性肝破裂患者而言,腹腔镜下修补术具有安全

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有效、术后创伤小、恢复效果好的特点^[23]。但术后的负面情绪如焦虑、抑郁也会影响患者术后的躯体功能及手术疗效。因此,为保证患者的疗效,患者术后的情绪变化也越来越受临床工作者的关注^[4]。本文通过对外伤性肝破裂患者腹腔镜下修补术后焦虑抑郁形成的危险因素进行分析,以期临床进行心理疏导提供依据,结果报道如下:

1 材料与方法

1.1 研究对象

采用随机抽样方法选取本院 2016 年 12 月至 2018 年 6 月收治的 150 例接受腹腔镜下修补术治疗的外伤性肝破裂患者,包括男性 118 例,女性 32 例,年龄 26~66 岁,平均(42±7.45)岁。纳入标准:① 近期无严重急性发作史^[5,6];② 检验提示肝脏无衰竭或硬化、癌变;③ 无明显腹腔镜禁忌征;④ 无意识障碍,能清晰表达自己的观点;⑤ 住院前无焦虑抑郁病史及 1 周内未使用抗焦虑及抗抑郁的药物^[7];⑥ 患者已签署知情同意书。排除标准^[8,9]:① 存在明显腹腔镜禁忌征;② 存在心、脑、肾等危重疾病以及造血功能障碍;③ 近 1 周内使用过抗焦虑及抗抑郁的药物;④ 未签署知情同意书。

1.2 研究方法

患者于术前和术后恢复期间接受问卷调查,在经过培训护理人员的帮助下患者填写问卷,如有不理解的地方则给予解释后填写问卷,如有行动不便者则由护理人员协助填写;填写问卷的环境要保证安静舒适,不受干扰。问卷所得的资料仅用于研究,私人信息严格保密,问卷现场回收^[10]。

1.2.1 调查问卷 问卷内容^[11]包括包括平均年龄、居住地、受教育年限、术前并发症、家庭经济收入情况、有无负面情绪、医保报销与否、手术风险顾虑、术后照顾陪伴需求等。

1.2.2 焦虑自评量表 制作焦虑自评量表^[12],标准分的分界值为 40 分,其中 40-49 分为轻度焦虑,50-59 分为中度焦虑,60 分

以上为重度焦虑。关于焦虑症状的临床分级,除参考量表分值外,还应根据临床症状的程度来划分焦虑的等级。

1.2.3 抑郁自评量表 内容包括:精神病性情感症状、躯体性障碍、精神运动性障碍、抑郁的心理障碍 4 个方面,共包含 20 个项目,总分的正常上限为 41 分,分值越低状态越好^[13]。

1.2.4 术中及术后临床资料 准确记录手术过程的各项指标从而评价手术效果^[14,15],术中临床指标包括手术时间、外循环时间、麻醉后苏醒时间、ICU 停留时间等各项指标;术后进行心理调查,记录患者所担忧的问题及需求。

1.3 诊断标准

① 焦虑诊断^[16,17]:50~59 分为轻度焦虑,60~69 分为中度焦虑,70 分以上为重度焦虑。② 抑郁诊断^[18]:正常上限为 41 分,分值越低状态越好;≥ 41 则为抑郁状态。③ 临床诊断:医生根据临床症状的程度来划分焦虑和抑郁的程度。

1.4 分组方法

术后存在焦虑的患者为焦虑状态组,存在抑郁状态的患者为抑郁状态组,术后无焦虑抑郁状态的为对照组。

1.5 统计学处理

利用 SPSS 22.0 统计软件进行数据的分析和处理,先对所使用的数据进行正态检验,符合正态分布的数据以均数±标准差($\bar{x} \pm s$)表示,多组间比较时采用方差分析,方差齐时采用 LSD 检验;当不符合正态分布时采用非参数检验, $P < 0.05$ 为差异具有统计学意义。

2 结果

2.1 三组术前临床资料的比较

焦虑状态组($n=53$)、抑郁状态组($n=57$)及对照组($n=40$)平均年龄、平均受教育年限比较差异无统计学意义($P > 0.05$);而经济月收入、居住地、负面情绪、术前并发症、医保报销、家庭和龄、术前往院时间比较差异具有统计学意义($P < 0.05$),见表 1。

表 1 三组临床资料比较[$\bar{x} \pm s, n(\%)$]

Table 1 Comparison of the clinical data among three groups [$(\bar{x} \pm s, n(\%))$]

Project	Anxiety state (n=53)	Depressive state (n=57)	Control(n=40)	t/x ²	P	
Average Age	46± 9	44± 9	44± 8	0.1410	0.78	
Average education years	7.7± 3.3	7.7± 2.8	9.8± 3.8	0.1621	0.05	
Month income	≤ 4000	43(81.1)	42(73.7)	20(50.0)	8.6710	0.04
	>4000	10(18.9)	15(26.3)	20(50.0)	8.7515	0.03
Areas	Urban	20(46.5)	23(40.4)	15(37.5)	7.6572	0.01
	Rural	33(53.5)	34(59.6)	25(62.5)	9.8710	0.01
Negative Emotion	33(76.4)	34(59.6)	10(25.0)	10.2410	0.01	
Preoperative complications	29(54.7)	33(57.9)	7(17.5)	10.3414	0.02	
Reimbursement of medical expenditure	25(47.2)	22(38.6)	20(50.0)	9.5210	0.03	
Family harmony	24(45.3)	20(35.1)	25(62.5)	7.8512	0.01	
Hospitalization before surgery	12.12± 5.63	13.57± 4.32	9.87± 4.52	1.7514	0.01	

2.2 三组术中及术后临床资料的比较

三组手术时间、外循环时间、主动脉阻断时间、外循环例数比较差异无统计学意义($P > 0.05$);而麻醉苏醒时间、ICU 停留

时间比较差异具有统计学意义($P < 0.05$),见表 2。此外,三组术后担忧的问题及需求(治疗需求和心理需求)比较差异均具有统计学意义($P < 0.05$),见表 3。

表 2 三组术中临床资料的比较[$\bar{x} \pm s, n(\%)$]Table 2 Comparison of the clinical data among three groups during operation [$\bar{x} \pm s, n(\%)$]

Project	Anxiety state(n=53)	Depressive state(n=57)	Control(n=40)	t/ χ^2	P
Operation time / minutes	170.33 $\pm$ 73.15	171.21 $\pm$ 75.21	157.83 $\pm$ 67.11	0.5101	0.726
External circulation time / minutes	83.44 $\pm$ 33.14	81.41 $\pm$ 32.87	82.10 $\pm$ 31.04	1.5101	0.908
Aortic clamping time / minutes	62.14 $\pm$ 14.12	59.87 $\pm$ 12.54	60.24 $\pm$ 12.24	2.0101	0.962
External circulation case	43(81.1)	42(73.7)	25(62.5)	2.1450	0.054
Anesthesia recovery time /hours	15.42 $\pm$ 7.84	16.48 $\pm$ 8.25	14.87 $\pm$ 7.68	-1.0145	0.040
ICU Staying time / hours	70.21 $\pm$ 12.52	71.54 $\pm$ 9.87	52.21 $\pm$ 9.54	-0.0511	0.010

表 3 三组术后临床资料的比较(例)

Table 3 Comparison of the clinical data among three groups after operation (cases)

Project	Anxiety state(n=53)	Depressive state (n=57)	Control(n=40)	t/ χ^2	P
Worried about operation effect	24(45.3)	30(52.6)	10(25.0)	4.2540	0.001
Worried about knife-edge pain	25(47.5)	27(47.4)	8(20.0)	2.2410	0.001
Worried about operative risk	24(45.3)	28(49.1)	3(7.5)	1.2014	0.010
Worried about Hospitalization Expenses	30(56.7)	24(42.1)	10(25.0)	0.0010	0.380
Treatment need	24(45.3)	30(52.6)	14(35.0)	0.0501	0.520
Psychological needs	31(58.5)	35(66.0)	13(32.5)	2.1540	0.012
Accompany need	32(60.4)	34(59.6)	25(62.0)	5.2341	0.042
Disease informed need	36(67.9)	40(70.2)	12(30.0)	5.2140	0.012

2.3 多因素 Logistic 回归分析

以是否焦虑为因变量,以文化程度、负面情绪、家庭收入、手术疗效为自变量,行多因素 Logistic 回归分析,结果显示文化程度、负面情绪、家庭收入、手术疗效是焦虑的危险因素;以

是否抑郁为因变量,以文化程度、负面情绪、家庭收入、手术疗效为自变量,行多因素 Logistic 回归分析,结果显示文化程度、负面情绪、家庭收入、手术疗效是抑郁的危险因素,见表 4、表 5。

表 4 焦虑危险因素的 Logistic 回归分析

Table 4 Logistic regression analysis of risk factors for anxiety

Project	β	SE	Wals	P	OR	Exp(B)
Education level	5.678	0.258	2.345	0.041	1.254	3.250
Negative emotion	5.054	0.214	2.156	0.001	1.245	2.012
Family income	9.230	0.145	5.024	0.024	2.324	1.320
Operative effect	8.450	0.654	0.541	0.020	2.258	4.025

表 5 抑郁危险因素的 Logistic 回归分析

Table 5 Logistic regression analysis of risk factors for depression

Project	β	SE	Wals	P	OR	Exp(B)
Education level	5.369	0.257	2.054	0.014	4.230	0.980
Negative emotion	5.024	0.365	5.261	0.012	1.254	1.025
Family income	-0.258	0.325	5.852	0.040	1.236	2.014
Operative effect	6.028	0.854	0.245	0.024	2.120	3.021

3 讨论

3.1 焦虑抑郁发生的个体因素进行分析

研究表明个体因素对焦虑及抑郁的发生起重要作用,而个人情绪受文化程度、家庭收入、负性情绪等的影响^[9]。本研究收

治的 150 例患者中,有焦虑状态者 53 例,有抑郁状态者 57 例,未发现焦虑抑郁者 40 例。研究显示没有焦虑抑郁状态的对照组收入 >4000 的患者构成比(50.0)要大于焦虑状态组(18.9)和抑郁状态组(26.3),这提示患者的收入水平与焦虑抑郁的发生率有密切关系,这一结果与医保报销与否及担心手术费用过高

两项指标中相同^[20],都是对照组构成比要高于焦虑状态组与抑郁状态组。比较三组受教育年限,结果显示对照组的受教育年限要长于焦虑状态组和抑郁状态组,这提示学历高的患者更不易有焦虑抑郁状态,原因可能与对病情的了解程度有关,受教育年限长的患者对病情的了解程度更多^[21],因此对手术的担忧也较少;相反,学历低的患者对医疗过程了解相对较少,以至于迫切需要了解自己的病情;对于治疗需求,三组患者都希望有最好的治疗。关于三组个体的心态,焦虑状态组与抑郁状态组对手术的担忧较多,比如担心手术效果,担心刀口疼痛以及担心手术风险,这些危险因素也让患者更易患焦虑抑郁^[22,23]。有研究表明温暖的家庭关系能有效减少焦虑以及抑郁的发生,而近期的负面情绪极大地影响手术的疗效及患者的情绪,其中负面情绪包括有成员人际关系紧张、丧偶、离婚、子女早逝、配偶或子女患有较严重疾病等^[24,25],这些都在很大程度上影响了患者的心理健康,患者不仅要面临病痛的折磨,还要担心高额费用及亲属的情况,这往往会造成患者有孤独感,却找不到宣泄口,久而久之便会患病^[26],所以对照组的负面情绪例数构成比要远远少于焦虑抑郁组以及抑郁状态组对陪同需求以及心理需求的要求更加迫切^[27,28]。

3.2 焦虑抑郁发生的外界因素分析

研究发现手术的顺利进行以及术后的贴心护理都能有效降低患者的焦虑及抑郁的发生率^[29,30]。对照组 ICU 停留时间以及麻醉苏醒时间均短于焦虑状态组以及抑郁状态组,ICU 停留时间以及麻醉苏醒时间说明手术的顺利进行,手术顺利进行,更加有利于患者的恢复,这不仅在生理上对患者进行了抚慰,在心理上降低了患者的压力,患者恢复快了,心理负担少了,焦虑抑郁的发生率也相应的降低了^[31]。而对于手术时间,外循环时间,主动脉阻断时间以及外循环例数三组的差异无统计学意义。这可能是与同一组医务人员进行手术的原因,手术都顺利进行。

综上所述,焦虑抑郁的发生受个体因素以及外界因素共同影响,外伤性肝破裂患者腹腔镜下修补术后焦虑抑郁的形成可能与患者的文化高低,负性情绪,手术疗效,家庭收入和术前并发症有关。所以在临床防治焦虑抑郁可以从心理方面及手术治疗方面防治,心理方面包括了解患者的负面情绪,降低患者对病情的担心;手术治疗方面则注意患者的经济承受能力,给予有效的治疗。

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