·临床研究·

老年原发性肝癌患者经导管肝动脉化疗栓塞术后生活质量及其影响因素

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【摘 要】 **目的** 调查经导管肝动脉化疗栓塞术(TACE)治疗的老年原发性肝癌(PHC)患者不良情绪、自护能力及生活质量,并分析其影响因素。**方法** 选择2020年3月至2023年3月阜阳市第二人民医院收治的实施TACE治疗的348例老年PHC患者为研究对象,使用焦虑自评量表(SAS)、抑郁自评量表(SDS)、自护能力测评量表(ESCA)及欧洲癌症研究组织(EORTC)生活质量核心问卷量表(QOL-C30)调查患者术前及术后出院3个月回院复诊时负面情绪、自理能力及生活质量。采用SPSS 22.0统计软件进行数据分析。根据数据类型,分别采用t检验或单因素方差分析进行组间比较。采用多元线性回归模型分析影响老年PHC患者术后生活质量的相关因素,并分析风险因素对焦虑抑郁情绪及自护能力的影响。采用Pearson相关性分析评估老年PHC患者术后生活质量与焦虑、抑郁、自护能力的相关性。**结果** 老年PHC患者TACE术后SAS及SDS评分降低;ESCA及QOL-C30评分升高,差异均有统计学意义($P<0.05$)。不同年龄、肝癌切除手术史、疾病知情患者术后焦虑、抑郁及自护能力比较,差异均有统计学意义($P<0.05$)。多元线性回归分析显示,年龄($\beta=-0.320$;$P<0.001$)、肝癌切除手术史($\beta=-0.245$;$P=0.001$)及疾病知情情况($\beta=-0.290$;$P=0.001$)均可显著影响老年PHC患者TACE术后生活质量,共同解释老年PHC患者TACE术后生活质量69.30%的变异度($F=35.128$;$P<0.001$)。Pearson相关性分析显示,老年PHC患者术后QOL-C30与SAS、SDS评分呈负相关($r=-0.627$,-0.609;$P<0.05$);与ECSA评分呈正相关($r=0.383$;$P<0.05$)。**结论** 经TACE治疗后,老年PHC患者生活质量有所上升,但整体水平依旧不佳,而年龄≥75岁、既往肝癌切除史及不知晓自身病情的老年PHC患者术后生活质量更差,且具有以上特征的患者焦虑、抑郁发生率更高,自护能力更差,建议临床关注具有以上特征的老年肝癌患者术后生活质量,并注重患者不良情绪的疏导及自护能力的培养。

【关键词】 老年人;原发性肝癌;经导管肝动脉化疗栓塞术;生活质量
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Quality of life and its influencing factors in elderly patients with primary hepatic carcinoma after transcatheter arterial chemoembolization

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【**Abstract**】 **Objective** To investigate the nagative emotions, self-care ability and quality of life (QOL) in elderly patients with primary hepatic carcinoma (PHC) undergoing transcatheter arterial chemoembolization (TACE), and to analyze the influencing factors for QOL. **Methods** A total of 348 elderly PHC patients who received TACE treatment in our hospital from March 2020 to March 2023 were recruited in the study. Self-rating anxiety scale (SAS), self-rating depression scale (SDS), exercise of self-care agency scale (ESCA) and European Organization for Research of Cancer (EORTC) quality of life-core 30 questionnaire (QOL-C30) were used to investigate the negative emotions, self-care ability and QOL in this patients before surgery and at three months after discharge. SPSS statistics 22.0 was used for data analysis. According to the data type, t test or one-way analysis of variance was performed for comparison between groups. Multivariate linear regression model was employed to analyze the related factors affecting the postoperative QOL in them, and the effect of the obtained risk factors on anxiety, depression and self-care ability was analyzed. Pearson correlation analysis was conducted to analyze the correlation of postoperative QOL with anxiety, depression and self-care ability in these elderly patients. **Results** After TACE, the SAS and SDS scores were significantly decreased, while those of ESCA and QOL-C30 were obviously increased in elderly PHC patients ($P<0.05$). There were statistically differences in postoperative anxiety, depression and self-care ability among the patients with different ages, history of hepatocellular carcinoma resection, and informed condition of disease ($P<0.05$). Multivariate linear regression analysis showed that age ($\beta=-0.320$; $P<0.001$), history of hepatocellular carcinoma resection ($\beta=-0.245$; $P=0.001$) and informed condition of disease ($\beta=-0.290$; $P=0.001$) significantly affected the QOL in these patients after

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TACE, and jointly explained 69.30% of the variation in their QOL after TACE (F=35.128, P<0.001). Pearson correlation analysis showed that the score of postoperative QOL-C30 was negatively correlated with the SAS and SDS scores (r=−0.627, −0.609; P<0.05), and positively with the ECSA score (r=0.383; P<0.05) in elderly PHC patients. **Conclusion** After TACE treatment, though the QOL level is increased in the elderly PHC patients, the overall level is still poor. For the elderly PHC patients who are ≥ 75 years old, have a history of hepatocellular carcinoma resection and ignorance of disease condition, they have worse QOL, and are prone to anxiety and depression and worse self-care ability. It is suggested that attention should be paid to the postoperative QOL in elderly patients with above characteristics in clinical practice, and guidance of negative emotions and cultivation of self-care ability attention should also be focused on.

【Key words】 aged; primary hepatic carcinoma; transcatheter arterial chemoembolization; quality of life

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原发性肝癌(primary hepatic carcinoma, PHC)是全球常见的恶性肿瘤[1]。经导管肝动脉化疗栓塞术(transcatheter arterial chemoembolization, TACE)是目前治疗 PHC 的重要手段,其可有效切断肿瘤血供,抑制肿瘤生长,改善患者预后。随着医学观念的改变,生活质量逐渐成为评估疾病治疗效果及患者生存现状的重要指标[2]。老年人群存在特殊的心理及生理特征,单独研究老年 PHC 患者 TACE 术后生活质量,在提高针对性干预准确性中具有重要意义。此外,心理因素及自我护理能力在 PHC 患者术后生活质量中起着重要作用,但这些因素如何相互作用尚缺乏相关研究,明确上述关系有利于为患者提供个性化、全面看护建议,从而提升生活质量。本研究以实施 TACE 治疗的老年 PHC 患者为样本进行调查,分析生活质量的影响因素。

1 对象与方法

1.1 研究对象

选择 2020 年 3 月至 2023 年 3 月阜阳市第二人民医院收治的实施 TACE 治疗的 348 例老年 PHC 患者为研究对象,其中男性 189 例,女性 159 例;年龄 60 ~ 87 (68.92 ± 7.04) 岁。纳入标准:年龄 > 60 岁;符合 PHC 诊断标准[3],实施 TACE 治疗;病例资料和治疗记录完整。排除标准:有其他恶性肿瘤;存在重大心、肺、肾或其他器官功能障碍,不能耐受 TACE 治疗;存在严重精神或认知障碍;研究期间接受了其他肝癌相关治疗;治疗前已存在生活质量问题(如长期卧床、需持续机械辅助呼吸等)。本研究经过医院医学伦理委员会批准。患者及家属对研究内容知情同意并签署知情同意书。

1.2 方法

手术前 1 d 及术后出院 3 个月回院复诊时,采用焦虑自评量表(self-rating anxiety scale, SAS)[4]、抑郁自评量表(self-rating depression scale, SDS)[5]、自护能力测评量表(exercise of self-care agency scale, ESCA)[6]及欧洲癌症研究组织(European Organisation for Research and Treatment of Cancer, EORTC)生活质量核心问卷量表(quality of life-core 30 questionnaire, QOL-C30)[7]对患者焦虑、抑郁、自护能力及生活质量进行评估。

1.3 统计学处理

采用 SPSS 22.0 统计软件进行数据分析。计量资料以均数±标准差($\bar{x}\pm s$)表示,两组间比较采用 t 检验,多组间比较采用单因素方差分析。采用 Pearson 相关性分析评估不良情绪、自护能力与生活质量的相关性。采用多元线性回归模型评估各因素对生活质量的影响。P<0.05 为差异有统计学意义。

2 结 果

2.1 患者 TACE 手术前后不良情绪、自护能力及生活质量情况比较

与术前相比,老年 PHC 患者 TACE 术后出院 3 个月回院复诊时,SAS、SDS 评分降低;ESCA、QOL-C30 评分升高,差异均有统计学意义(P<0.05;表 1)。

表 1 患者 TACE 手术前后不良情绪、自护能力及生活质量情况比较

Table 1 Comparison of negative emotions, self-care ability and quality of life before and after TACE surgery

(points, $\bar{x}\pm s$)

Item	Pre-surgery (n=348)	Post-surgery (n=348)	t	P value
SAS	61.39±8.72	57.23±8.47	21.400	<0.001
SDS	59.46±8.05	55.64±7.56	36.670	<0.001
ECSA	80.95±13.60	89.63±15.27	106.342	<0.001
QOL-C30	51.32±12.86	65.94±10.58	17.487	<0.001

SAS: self-rating anxiety scale; SDS: self-rating depression scale; ESCA: exercise of self-care agency scale; QOL-C30: quality of life-core 30 questionnaire.

2.2 患者 TACE 术后总体生活质量的单因素分析

老年 PHC 患者 TACE 术后总体生活质量评分在不同年龄、Child 分期、肝癌切除手术史、文化程度和疾病知情情况中差异均有统计学意义(P<0.05;表 2)。

表2 患者TACE术后总体生活质量的单因素分析

Table 2 Univariate analysis of patients' overall quality of life after TACE

Item	*n*	Overall quality of life (points)	*t*	*P* value
Gender			1.622	0.106
Male	189	50.28±12.43		
Female	159	52.51±13.18		
Age			3.129	0.002
≤75 years	243	52.87±12.71		
>75 years	105	48.19±13.03		
Child stage			3.750	<0.001
A	202	53.46±12.15		
B	146	48.32±13.24		
History of hepatic carcinoma surgery			2.206	0.028
Yes	120	49.41±13.54		
No	228	52.57±12.24		
Initial or relapse			0.889	0.375
Initial	271	51.76±12.49		
Relapse	77	50.29±13.89		
Education level			4.746	0.009
Junior school and below	128	49.18±13.24		
High school	142	52.93±12.68		
College and above	78	54.28±11.95		
Disease awareness			3.838	0.022
Unaware	85	48.47±13.76		
Partially aware	153	51.82±12.29		
Fully aware	110	53.57±12.87		

2.3 生活质量的多元线性回归分析

多元线性回归分析显示，年龄、肝癌切除手术史和疾病知情情况均可显著影响经TACE治疗的老年PHC患者的生活质量，共同解释老年PHC患者TACE术后生活质量69.30%的变异度（$F=35.128$；$P<0.001$；表3）。

2.4 不同年龄、肝癌切除术史、疾病知情情况患者SAS、SDS及ESCA评分比较

老年PHC患者TACE术后SAS、SDS、ESCA评分在不同年龄、肝癌切除手术史和疾病知情情况中差异均有统计学意义（$P<0.05$；表4）。

2.5 患者TACE术后不良情绪、自护能力与生活质量的相关性

Pearson相关性分析显示，老年PHC患者TACE术后QOL-C30与SAS、SDS评分呈负相关（$r=-0.627$，-0.609；$P<0.05$），与ECSA评分呈正相关（$r=0.383$；$P<0.05$）。

3 讨 论

本研究结果显示，老年PHC患者TACE术后SAS、SDS、ESCA及QOL-C30评分均获得有效改善，说明TACE手术能有效控制病情，在一定程度上改善患者负面情绪，提高其生活质量。此外，住院治疗期间，在医护人员的指导及健康宣教作用下，老年PHC患者自护能力也有一定程度的提升[8,9]。尽管如此，老年PHC患者TACE术后的生活质量水平依旧不高，研究老年PHC患者术后生活质量的影响因素，对于改善其生存状态具有重要意义。

表3 总体生活质量的多元线性回归分析

Table 3 Multivariate linear regression analysis of overall quality of life

Factor	*B*	*SE*	*β*	*t*	*P* value
Age (>75 years)	−3.578	0.914	−0.320	−3.915	<0.001
Child stage (B)	−1.286	0.842	−0.125	−1.527	0.127
History of hepatic carcinoma surgery (yes)	−2.493	0.763	−0.245	−3.267	0.001
Education level (middle school and below)	−0.853	0.691	−0.095	−1.234	0.218
Disease awareness (unaware)	−3.167	0.984	−0.290	−3.218	0.001

$R^2=0.693$，$F=35.128$；$P<0.001$.

表4 不同年龄、肝癌切除术史、疾病知情情况患者SAS、SDS及ESCA评分比较

Table 4 Comparison of SAS, SDS and ESCA among patients with different ages, history of hepatocellular carcinoma resection and informed condition of disease (points, $\bar{x}\pm s$)

Item	*n*	SAS	SDS	ESCA
Age				
≤75 years	243	56.32±8.29	54.78±7.42	91.23±15.09
>75 years	105	59.47±8.62*	57.89±7.69*	86.54±15.38*
History of hepatic carcinoma surgery				
Yes	120	58.76±8.55	57.34±7.66	87.42±15.31
No	228	56.12±8.28#	54.92±7.44#	91.52±15.07#
Disease awareness				
Unaware	85	60.13±8.58	58.79±7.70	85.26±15.33
Partially aware	153	56.24±8.26△	54.68±7.41△	91.78±15.10△
Fully aware	110	57.42±8.44	55.83±7.48	89.32±15.18

SAS: self-rating anxiety scale; SDS: self-rating depression scale; ESCA: exercise of self-care agency scale. Compared with age ≤75 years, *$P<0.05$; compared with history of hepatic carcinoma surgery, #$P<0.05$; compared with unaware of the disease, △$P<0.05$.

本研究通过多元线性回归分析发现,年龄、肝癌切除手术史及疾病知情状况均可显著影响老年 PHC 患者术后生活质量,分析其原因如下。(1)随着年龄的增加,个体身体机能下降,术后恢复慢,更容易出现并发症,且高龄患者合并基础疾病情况更为严重,这也增加了治疗风险和复杂性,进而降低生活质量[10,11]。(2)有肝癌切除手术史者生活质量更差,可能原因是此类患者对 TACE 耐受性降低,更容易出现出血等并发症,且有手术史者再次接受治疗会有额外的心理压力,更容易产生疾病不确定感[12]。(3)疾病知情情况在既往研究中被证实是治疗依从性和预后的重要影响因素,原因是患者充分知情时更可能遵循医师的建议、维持治疗计划并主动寻求支持,不仅更有能力处理不确定性,还能更积极地参与治疗决策过程并与医疗团队建立良好合作关系[13,14]。

进一步分析发现,具有以上高危因素的老年 PHC 患者焦虑、抑郁情绪更为严重,自护能力更差,这可能与以下因素相关。(1)年龄≥75 岁:患者由于机体功能减退,理解能力与自主学习能力减退,不能有效掌握自护知识,正确认识疾病,对他人的依赖性强,存在低自尊特点,更易产生负面情绪[15]。(2)肝癌切除史:此类患者对治疗的耐受力更低,治疗不良反应多,治疗开销大,治疗负担重,心理压力更重,故自护能力更差,不良情绪更明显。(3)疾病知情:知晓自身病情能提高自身能动性,更易以积极的态度面对疾病,配合治疗,取得更好的治疗效果,降低自身不良情绪,提高自护能力[15]。Pearson 相关性分析结果显示,老年 PHC 患者术后 SAS、SDS 评分与 QOL-C30 评分整体均呈负相关,与 ECSA 评分呈正相关,说明焦虑、抑郁及自护能力与患者生活质量密切相关。

经 TACE 治疗后,老年 PHC 患者生活质量有所上升,但整体水平依旧不佳,而年龄≥75 岁、既往肝癌切除史及不知晓自身病情的患者术后生活质量更差,且具有以上特征者焦虑、抑郁发生率更高,自护能力更差,建议临床关注具有以上特征的老年肝癌患者术后生活质量,并注重患者不良情绪的疏导以及自护能力的培养。

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