

# 老年乳腺癌患者腋窝淋巴结清扫术后出现抑郁和焦虑的患病率及其相关因素

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**摘要：**目的：探讨老年乳腺癌患者腋窝淋巴结清扫术后出现抑郁和焦虑的患病率，进一步分析相关因素。方法：收集本院于2019年9月至2022年3月收治老年乳腺癌患者325例进行回顾性研究，所有患者均实施腋窝淋巴结清扫术。因研究过程中脱落11例，最终纳入314例。采用汉密尔顿焦虑量表（HAMA）和汉密尔顿抑郁量表（HAMD）评估患者焦虑、抑郁情况，按焦虑、抑郁是否发生分为良好组及不良组，收集两组人口学信息、疾病特征及临床指标行单因素及Logistic回归模型多因素分析明确老年乳腺癌患者腋窝淋巴结清扫术后发生不良情绪影响因素。结果：314例老年患者术后HAMA得分主要集中在14~20分，占32.17%，HAMD得分主要集中在8~20分和21~35分，占39.81和43.95%。焦虑患病率为63.06%，抑郁患病率为50.32%，共有209例患者出现焦虑、抑郁等不良情绪，总不良情绪发生率为66.56%；除所在地、婚姻状况、受教育程度、合并基础病、肿瘤部位、肿瘤分期、淋巴结转移、远处转移、术式外，两组年龄、家庭月收入、医疗付费形式、淋巴结清扫数目、术后是否接受放化疗比较，差异有统计学意义（ $P < 0.05$ ）；Logistic多因素回归分析结果显示，年龄（ $\geq 70$ 岁）、家庭月收入（ $< 5000$ 元）、医疗付费形式（自费）、乳腺癌家族史（有）、淋巴结清扫数目（ $\geq 15$ 个）、术后是否接受放化疗（是）是老年患者抑郁和焦虑发生的独立危险因素（ $P < 0.05$ ）。结论：老年乳腺癌患者腋窝淋巴结清扫术后抑郁和焦虑的患病率较高，高龄、家庭月收入低、医疗自费和有乳腺癌家族史、相对多淋巴结清扫数目、术后接受放化疗是术后不良情绪发生的独立危险因素。

**关键词：**老年；乳腺癌；腋窝淋巴结清扫术；抑郁；焦虑；相关因素

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## Prevalence and Related Factors of Depression and Anxiety after Axillary Lymph Node Dissection in Elderly Patients with Breast Cancer

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**Abstract:** Objective: To investigate the prevalence of depression and anxiety after axillary lymph node dissection in elderly patients with breast cancer, and to further analyze the related factors. Methods: A retrospective study was conducted on 325 elderly breast cancer patients admitted to our hospital from September 2019 to March 2022. All patients underwent axillary lymph node dissection. During the study, 11 patients were lost to follow-up, leaving a total of 314 patients included. The Hamilton Anxiety Scale (HAMA) and Hamilton Depression Scale (HAMD) were used to assess anxiety and depression in the patients. Based on the occurrence of anxiety and depression, the patients were divided into a good group and a poor group. Demographic information, disease characteristics, and clinical indicators were collected for both groups. Univariate and logistic regression analyses were performed to identify the factors associated with adverse emotional effects in elderly breast cancer patients

after axillary lymph node dissection. Results: Among the 314 elderly patients, the HAMA scores were mainly concentrated between 14 and 20, accounting for 32.17% of the cases. The HAMD scores were primarily distributed between 8–20 and 21–35, accounting for 39.81% and 43.95% respectively. The prevalence of anxiety was 63.06%, while the prevalence of depression was 50.32%. A total of 209 patients experienced adverse emotions such as anxiety and depression, resulting in an overall incidence rate of 66.56%. In addition to the location, marital status, education level, comorbidities, tumor site, tumor stage, lymph node metastasis, distant metastasis, and surgical procedure, there were significant differences ( $P < 0.05$ ) between the two groups in terms of age, monthly family income, medical payment method, number of lymph node dissections, and whether postoperative chemotherapy or radiotherapy was received. The results of the logistic regression analysis showed that age ( $\geq 70$  years), monthly family income ( $< 5000$  yuan), medical payment method (self-payment), family history of breast cancer (present), number of lymph node dissections ( $\geq 15$ ), and postoperative chemotherapy or radiotherapy (received) were independent risk factors for the occurrence of depression and anxiety in elderly patients ( $P < 0.05$ ). Conclusion: Elderly breast cancer patients have a higher prevalence of depression and anxiety after axillary lymph node dissection. Advanced age, low monthly family income, self-payment for medical expenses, family history of breast cancer, a higher number of lymph node dissections, and receiving postoperative chemotherapy or radiotherapy were identified as independent risk factors for the occurrence of adverse emotions after surgery.

**Keywords:** Old age; Breast Cancer; Axillary Lymph Node Dissection; Depression; Anxiety; Correlation Factor

## 1 引言

乳腺癌是女性常见高发恶性肿瘤疾病，老年人是乳腺癌发病的高危人群[1]，乳腺癌的发病因素是多样的，地区、环境、生活方式、情绪影响均可导致乳腺癌的发病，腋窝淋巴结清扫术是现阶段临床用于治疗该病最重要的手段之一，可有效扫除病灶，降低病死率[2]。但手术治疗对老年患者来说属于较为强烈的应激源，可能会对接受手术的患者身心带来巨大的冲击和刺激，患者处于对病情复发、婚姻关系、自身形体改变以及社会眼光等方面的担忧，出现较大的心理压力，产生焦虑和抑郁等不良情绪[3]，使得患者难以很好配合临床治疗，影响预后。基于此，本次研究对我院近几年收治的行腋窝淋巴结清扫术的老年乳腺癌患者进行统计行回顾性分析，分析术后出现焦虑和抑郁的发病率及其相关因素，希望为老年患者的临床干预提供更多参考。

## 2 引言

### 2.1 研究对象

收集本院于2019年9月至2022年3月收治的老年乳腺癌患者325例，患者均实施了腋窝淋巴结清扫术。纳入标准：符合乳腺癌相关诊断标准[4]，经

临床病理明确显示为乳腺癌者；均为女性患者；年龄 $\geq 60$ 周岁；接受腋窝淋巴结清扫术治疗者；认知正常、神志清醒，能够独立完成本次调查研究者；临床资料和既往病史齐全，配合度较好者；患者及家属对研究知情同意。排除标准：男性乳腺癌患者；合并其他恶性肿瘤疾病；患者3代以内亲属患有精神分裂症、偏执型精神病、双相情感障碍等严重精神疾病者；有严重躯体疾病者；合并新冠肺炎病毒感染；无法理解调查表内容者；脱落标准：①中途退出研究；②研究期间出现严重不良反应或病情恶化患者。研究过程中脱落11例，最终纳入314例。所有患者年龄在60~81岁，平均年龄（ $77.29 \pm 1.63$ ）岁；病程在0.3~6年，平均病程（ $2.87 \pm 0.51$ ）年。

### 2.2 研究工具

#### 2.2.1 焦虑、抑郁调查

采用汉密尔顿焦虑量表（Hamilton Anxiety Scale, HAMA）[5]和汉密尔顿抑郁量表（Hamilton Depression Scale, HAMD）[6]对所有患者进行焦虑和抑郁情绪的调查评估。

HAMA量表包含焦虑心境、紧张、害怕、失眠、认知功能、抑郁心境、躯体性焦虑（肌肉系统）、躯体性焦虑（感觉系统）、心血管系统症状、呼

吸系统症状、胃肠道症状、生殖泌尿系统症状、植物神经系统症状和会谈时行为表现等14项,均采用5级评分法,0分代表无症状,1分代表症状轻微,2分代表症状中等,3分代表症状较重,4分代表症状极重。总分反应患者焦虑症状的严重程度,<7分为无焦虑症状;7~13分为可能有焦虑;14~20分为肯定有焦虑;21~28分为肯定有明显焦虑;≥29分为可能有重度焦虑。

HAMD量表包含抑郁情绪、有罪感、自杀、入睡困难、睡眠不深、早醒、工作和兴趣、阻滞、激越、精神性焦虑、躯体性焦虑、胃肠道症状、全身症状、性症状、疑病、体重减轻、自知力、日夜变化、人格或现实解体、偏执症状、强迫症状、能力减退感、绝望感和自卑感等24项,采用3级(0分代表无症状;1分代表症状可疑或轻微;3分表达有明显症状)或5级评分法(0分代表无症状,1分代表症状轻微,2分代表症状中等,3分代表症状较重,4分代表症状极重)。总分反应患者抑郁症状的严重程度,<8分为无抑郁症状;8~20分为可能有抑郁;21~35分可确诊抑郁症;>35分为严重抑郁症。

分组标准:患者HAMA评分≥14分和(或)HAMD评分≥21分归入不良组,反之,归入良好组。

### 2.2.2 一般资料调查

收集两组人口学信息、疾病特征及临床指标,其中,①人口学信息:年龄(≥70岁、<70岁)、所在地(城市、农村)、家庭月收入(≥5000元、<5000元)、婚姻状况(已婚、未婚、离异或丧偶)、受教育程度(初中及以下、高中及以上)、医疗付费形式(医保、自费);②疾病特征:合并基础病(诸如高血压、糖尿病等)(是、否)、乳腺癌家族史(有、无);③临床指标:肿瘤部位(左侧、右侧)、肿瘤分期(I+II期、III+IV期)、淋巴结转移(有、无)、远处转移(有、无)、术式(乳房根治术、保乳术)、淋巴结清扫数目(≥15个、<15个)、术后是否接受放化疗(是、否)。

## 2.3 研究方法

统一在行腋窝淋巴结清扫术后第7d对老年乳腺癌患者进行调查,由本院精神科医师对调查员进行培训及考核,确保调查员熟练且规范进行HAMA、HAMD问卷评估,采用统一指导语帮助患者正确填写调查问卷表,要求所有患者在充分且独立的思考后正确填写调查表,填写完成后由调查员当场回收调查表并进行逐一检查,对患者遗漏或多选项进

行核对和纠正,以确保调查表真实性、准确性和有效性。共发放问卷314份,回收314份,有效回收率100%。

## 2.4 统计学分析

采用SPSS22.0软件对本次研究所有数据进行处理和分析,计量资料以( $\bar{x} \pm s$ )表示,采用t检验,计数资料用百分比表示,单因素分析以 $\chi^2$ 检验,多因素分析以Logistic回归分析校验,均以 $P < 0.05$ 为差异具有统计学意义。

## 3 结果

### 3.1 老年乳腺癌腋窝淋巴结清扫术患者基本人口学特征

314例老年乳腺癌腋窝淋巴结清扫术患者以70岁以上为主,占52.55%,农村地区、家庭月收入在5000元以上、已婚和受教育程度初中及以下患者居多,分别占64.01%、59.87%、57.64%和69.74%,详见表1。

表1. 老年乳腺癌腋窝淋巴结清扫术患者基本人口学特征(n, %)

Table 1. Basic demography characteristics of elderly patients with breast cancer undergoing axillary lymph node dissection (n,%)

Information	Number of people	Proportion (%)
Age	≥70 years old	165 52.55
	<70 years old	149 47.45
Location	City	113 35.99
	Village	201 64.01
Monthly household income	≥5000 yuan	126 59.87
	<5000 yuan	188 40.13
Marital status	Married	181 57.64
	Unmarried	20 6.37
	Divorced or widowed	113 35.98
The degree of education	Junior high school and below	219 69.74
	High school and above	95 30.26

### 3.2 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑得分分布情况

314例老年患者术后HAMA得分主要集中在

14~20分, 占32.17%, HAMD得分主要集中在8~20分和21~35分, 占39.81和43.95%, 见表2。

**表 2.** 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑情况 (n, %)

**Table 2.** Depression and anxiety after axillary lymph node dissection for elderly patients with breast cancer (n,%)

Scale	Scoring range	Number of people	Proportion (%)
HAMA	<7 points	34	10.83
	7~13 points	82	26.11
	14~20 points	101	32.17
	21~28 points	85	27.07
	≥29 points	12	3.82
HAMD	<8 points	31	9.87
	8~20 points	125	39.81
	21~35 points	138	43.95
	>35 points	20	6.37

### 3.3 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑的患病率

314例老年患者中焦虑患病率为63.06%, 抑郁患病率为50.32%, 共有209例患者出现焦虑、抑郁等不良情绪, 总不良情绪发生率为66.56%, 见表3。

**表 3.** 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑的患病率 (n, %)

**Table 3.** Prevalence of depression and anxiety after axillary lymph node dissection for elderly breast cancer (n,%)

	Number of people	Proportion
Simple anxiety	51	16.24
Simple depression	11	3.50
Depression combined with anxiety	147	46.82
Total bad mood	209	66.56

### 3.4 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑发生的单因素分析

除所在地、婚姻状况、受教育程度、合并基础病、肿瘤部位、肿瘤分期、淋巴结转移、远处转移、术式外, 两组年龄、家庭月收入、医疗付费形式

、淋巴结清扫数目、术后是否接受放化疗比较, 差异有统计学意义 ( $P < 0.05$ ), 见表4。

**表 4.** 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑发生的单因素分析 (n, %)

**Table 4.** Univariate analysis of depression and anxiety after axillary lymph node dissection in elderly breast cancer patients (n,%)

Factors	Number of cases	Good	Adverse	$\chi^2$	P			
		Group (n=105)	Group (n=209)					
Age	≥70 years old	44 (26.67)	121 (73.33)	7.166	0.007			
	<70 years old	61 (40.94)	88 (59.06)					
	City	37 (32.74)	76 (67.26)					
Location	Village	68 (33.83)	133 (66.17)	0.038	0.845			
	Monthly household income	≥5000 yuan	54 (42.86)			72 (57.14)	8.386	0.004
Marital status	<5000 yuan	51 (27.13)	137 (72.87)	20	8 (40.00)	12 (60.00)		
	Married	52 (28.73)	129 (71.27)					
The degree of education	Unmarried	45 (39.82)	68 (60.18)	219	76 (34.70)	143 (65.29)	0.519	0.471
	Divorced or widowed	45 (39.82)	68 (60.18)					
Medical insurance form	Junior high school and below	29 (30.53)	66 (69.47)	221	85 (38.46)	136 (61.54)	8.455	0.004
	High school and above	29 (30.53)	66 (69.47)					
	Medical insurance	85 (38.46)	136 (61.54)	93	20 (21.51)	73 (78.49)		
	Self-pay	20 (21.51)	73 (78.49)					

	ng		(21.51)	(78.49)		
Combined underlying disease	Yes	212	69	143	0.234	0.629
	No	102	(32.55)	(67.45)		
Family history of breast cancer	Yes	257	74	183	13.72	<0.00
	No	57	(28.79)	(71.21)		
Tumor site	Left side	164	57	107	0.516	0.472
	Right side	150	(34.76)	(65.24)		
Tumor staging	Stage I and II	148	56	92	2.433	0.119
	Stage III and IV	166	(37.84)	(60.16)		
Lymph node metastasis	Yes	134	51	83	2.242	0.134
	No	180	(38.06)	(61.94)		
Distant metastasis	Yes	108	31	77	1.659	0.198
	No	206	(28.70)	(71.30)		
Method of operation	Radical mastectomy	217	67	150	2.075	0.150
	Breast preservation	97	(30.88)	(69.12)		
Whether to receive radiotherapy and chemotherapy after surgery	Yes	155	34	121	18.21	<0.00
	No	159	(21.94)	(78.06)		
			71	88		
			(44.65)	(55.35)		

Logistic多因素回归分析结果显示，年龄（ $\geq 70$ 岁）、家庭月收入（ $< 5000$ 元）、医疗付费形式（自费）、乳腺癌家族史（有）、淋巴结清扫数目（ $\geq 15$ 个）、术后是否接受放化疗（是）是老年患者抑郁和焦虑发生的独立危险因素（ $P < 0.05$ ），见表5。

表5. 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑发生的多因素分析

Table 5. Multifactor analysis of depression and anxiety after axillary lymph node dissection for elderly breast cancer

Factors	$\beta$	SE	wald $\chi^2$	OR	95%CI	P
Age ( $\geq 70$ years old)	0.836	0.395	4.479	2.307	1.064~5.004	0.035
Monthly household income ( $< 5000$ yuan)	1.233	0.504	5.985	3.432	1.278~9.215	0.015
Medical treatment (Self-paying)	1.077	0.411	6.867	2.936	1.312~6.570	0.009
Family history of breast cancer (Yes)	0.959	0.378	6.437	2.609	1.244~5.473	0.012
Lymph node dissection ( $\geq 15$ )	1.416	0.512	9.247	4.121	1.511~11.240	<0.001
Whether to receive radiotherapy and chemotherapy after surgery (Yes)	1.375	0.497	8.914	3.955	1.493~10.476	<0.001

## 4 讨论

随着现代医学的进步，乳腺癌患者的生存状况得到了明显的改善，临床医师开始更多的将重点放在患者术后心理上。老年乳腺癌患者术后出现焦虑和抑郁的情况越来越普遍，并逐渐成为影响患者康复的重点问题之一[7]。

本次研究对我院近两年收治的行腋窝淋巴结清扫术的314例老年患者进行调查和分析，结果发

## 3.5 老年乳腺癌腋窝淋巴结清扫术后抑郁和焦虑发生的多因素分析

现,老年患者出现抑郁和焦虑的患病率高达50.32%和63.06%,314例患者中共有209例患者出现焦虑和抑郁情绪,总发生率为66.56%,低于陈庆秋[8]等的报道的98.5%焦虑发生率和84.1%抑郁发生率,推测原因可能在于本次研究的调查对象为60周岁以上老年女性,相较于年轻女性来说,老年人群更多的是在意疾病对身体的危害,而对自身形体外观、性魅力、性生活和婚姻方面的在意度和担忧度有所减少[9],因此,老年患者术后焦虑和抑郁的患病率虽然也较高,但相较于既往研究的低龄女性来说仍然偏低。

本次研究还对老年患者术后抑郁和焦虑发生的相关危险因素进行了分析,单因素和多因素的结果均显示,年龄 $\geq 70$ 岁、家庭月收入 $< 5000$ 元、医疗自费和有乳腺癌家族史仍是老年患者抑郁和焦虑发生的高危因素,这与先前的研究有相似的结论[10]。与60岁到70岁之间的患者相比,70岁以上患者年龄更高,身体机能更差,术后恢复相对较慢[11],疾病带来的影响要明显大于年龄较低一些的女性患者,这使得70岁以上女性患者更易出现抑郁和焦虑情绪。此外,家庭月收入较低和医疗自费的患者在承受疾病痛苦的同时还要忧心治疗给家庭带来的重担,无法通过医保报销相关费用使得治疗成本大大提升[12],尤其是对于经济条件较差的患者来说会直接导致其生活上出现困难,患者自身也会对家庭存在一定的负罪感,更有甚至还会因经济问题和治疗问题与家人发生矛盾[13],多种压力之下患者难以避免产生更多抑郁和焦虑的情绪。有乳腺癌家族史的患者在生活中会直接接触患病的亲人,目睹过亲人受疾病折磨的状况使得其自身对术后康复信心不足,会担忧术后复发[14],还会害怕后代也患上乳腺癌,种种因素下使得老年患者术后发生焦虑和抑郁的风险大大提升[15]。此外,疾病特征及临床指标中淋巴结清扫数目( $\geq 15$ 个)、术后是否接受放化疗(是)亦是导致老年乳腺癌患者腋窝淋巴结清扫术后抑郁和焦虑独立风险性因素,原因在于淋巴结清扫数目过多,可造成机体疼痛诱发生理应激,进而滋生焦虑、抑郁等不良情绪,至于术后接受放化疗存在毒副作用,患者难以忍受亦可引发不良情绪。与既往研究类似[16]。

综上所述,老年乳腺癌患者腋窝淋巴结清扫术后抑郁和焦虑的患病率较高,高龄、家庭月收入低、医疗自费、有乳腺癌家族史、相对多淋巴结清扫数目、术后接受放化疗是术后不良情绪发生的独立

危险因素,临床需依据这些危险因素制定有效和有针对性的干预措施,以减少老年患者术后抑郁和焦虑的患病率。

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