

· 临床研究 ·

# 老年子宫内膜癌术后化疗患者生活质量及其影响因素

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**【摘要】 目的** 调查老年子宫内膜癌术后化疗患者生活质量, 并分析其影响因素。**方法** 选择2018年6月至2023年6月首都医科大学附属北京世纪坛医院收治的158例老年子宫内膜癌术后化疗患者进行问卷调查, 使用癌症治疗功能评价系统共性模块(FACT-G)第4版的子宫内膜癌模块评估生活质量, 根据FACT-G评分将158例患者分为生活质量良好组(FACT-G评分 $\geq$ 平均分, 82例)与生活质量不良组(FACT-G评分 $<$ 平均分, 76例), 收集病理分期、病理类型、分化程度、化疗方案等资料。采用SPSS 24.0统计软件进行数据分析。根据数据类型, 分别采用 $\chi^2$ 检验或 $t$ 检验进行组间比较。采用logistic回归分析老年子宫内膜癌术后化疗患者生活质量不良的影响因素。**结果** 158例患者FACT-G评分的平均分为(79.68 $\pm$ 10.85)分。生活质量不良组癌灶p53突变率、3~4级不良反应发生率及抑郁、焦虑、癌症复发恐惧发生率均高于生活质量良好组, 差异有统计学意义( $P<0.05$ )。logistic回归分析显示, 癌灶p53突变( $OR=2.670, 95\%CI\ 1.343\sim5.309$ )、3~4级不良反应( $OR=4.646, 95\%CI\ 2.734\sim7.896$ )、抑郁( $OR=2.612, 95\%CI\ 1.315\sim5.186$ )、焦虑( $OR=3.284, 95\%CI\ 1.787\sim6.036$ )及癌症复发恐惧( $OR=3.442, 95\%CI\ 1.892\sim6.262$ )均为老年子宫内膜癌术后化疗患者生活质量不良的危险因素。**结论** 癌灶分子分型、重度不良反应及抑郁、焦虑、癌症复发恐惧的负性情绪是造成老年子宫内膜癌术后化疗患者生活质量下降的重要原因, 临床可以此制定针对性生理及心理干预措施, 提升患者生活质量。

**【关键词】** 老年人; 子宫内膜癌; 化疗; 手术切除; 生活质量; p53突变

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## Quality of life and its influencing factors in elderly patients with endometrial cancer after chemotherapy

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**【Abstract】 Objective** To investigate the quality of life (QOL) in elderly patients with endometrial cancer after chemotherapy and analyze its influencing factors. **Methods** A questionnaire survey was conducted on 158 elderly patients with postoperative chemotherapy for endometrial cancer from June 2018 to June 2023. Their QOL level was assessed by endometrial cancer module of the fourth edition of functional assessment of cancer therapy-general (FACT-G). According to their score of FACT-G, they were divided into good QOL group ( $\geq$  average level, 82 cases) and poor QOL group ( $<$  average level, 76 cases). Pathological stage and type, differentiation grade, chemotherapy regimen and other data were collected. SPSS statistics 24.0 was used for data analysis. Depending on data type, *Chi-square* test or student's *t* test was applied for intergroup comparison, and logistic regression analysis was adopted to identify the influencing factors for poor QOL in elderly patients with postoperative chemotherapy for endometrial cancer. **Results** The average score of FACT-G was (79.68 $\pm$ 10.85) points in the 158 patients. The poor QOL group had significantly higher mutation rate of p53 in tumor foci, incidence of adverse reaction grades 3-4 and rates of depression, anxiety and fear of cancer recurrence than the good QOL group ( $P<0.05$ ). Logistic regression analysis showed that p53 mutation ( $OR=2.670, 95\%CI\ 1.343\sim5.309$ ), adverse reaction grades 3-4 ( $OR=4.646, 95\%CI\ 2.734\sim7.896$ ), depression ( $OR=2.612, 95\%CI\ 1.315\sim5.186$ ), anxiety ( $OR=3.284, 95\%CI\ 1.787\sim6.036$ ) and fear of cancer recurrence ( $OR=3.442, 95\%CI\ 1.892\sim6.262$ ) were risk factors for poor QOL in elderly patients with postoperative chemotherapy for endometrial cancer. **Conclusion** Molecular type in tumor foci, severe adverse reactions and negative emotions such as depression, anxiety and fear of cancer recurrence are important reasons for the decline of QOL in elderly patients with endometrial cancer after chemotherapy. It is necessary to formulate targeted physiological and psychological intervention measures so as to enhance their QOL in clinical practice.

**【Key words】** aged; endometrial cancer; chemotherapy; surgical excision; quality of life; p53 mutation

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近年来,子宫内膜癌发病率逐年升高,2016 年全球新增病例已超过 32 万,是目前发达国家最常见的妇科癌症<sup>[1]</sup>。由于子宫内膜癌在 I ~ II 期即能出现临床症状,可实现早诊断、早治疗,但仍有 15%~20%的早期患者预后不良,对于存在高危因素者常需术后化疗<sup>[2]</sup>。化疗能减少复发风险,但也不可避免地导致其他正常器官损伤,有报道指出子宫内膜癌患者生活质量下降与肿瘤病理因素、年龄、负性情绪、化疗方案等均有关,但具体影响因素尚不明确<sup>[3]</sup>。另外,老年子宫内膜癌患者由于身体机能较中青年患者退化,恢复更慢,疾病及治疗给患者身体带来的痛苦更严重,生活质量可能更低<sup>[4]</sup>。基于此,本研究对老年子宫内膜癌术后化疗患者生活质量及其影响因素展开调查,为老年子宫内膜癌的疾病管理提供数据支持。

## 1 对象与方法

### 1.1 研究对象

选择 2018 年 6 月至 2023 年 6 月首都医科大学附属北京世纪坛医院收治的 158 例老年子宫内膜癌术后化疗患者为研究对象。纳入标准:行腹腔镜下广泛或次广泛子宫切除+双侧附件切除+盆腔淋巴清扫;经手术病理检查确诊为 I b ~ II 期子宫内膜癌;确诊时年龄  $\geq 60$  岁;包含低分化子宫内膜样腺癌、淋巴管瘤栓、高危病理类型、深肌层浸润、宫颈受累其中任一项高危因素;术后遵医嘱完成化疗方案;具备听、说、读、写的能力。排除标准:合并其他恶性肿瘤;神经-精神疾病史;手术前行放疗或内分泌治疗等抗肿瘤治疗;不配合治疗或调查。患者及家属对研究内容知情同意,签署纸质版知情同意书。

### 1.2 方法

1.2.1 资料收集 查阅病历,收集患者人口学特征、生育史、病理分期、病理类型、分化程度、癌灶 p53 突变与否、化疗方案,其中化疗方案均根据患者全身情况与经济状况选择,化疗 1~9 个疗程,每个疗程间隔时间为 4 周。参考美国国立癌症研究所发布的常见不良反应事件术语评价标准 4.0 版(common terminology criteria for adverse events 4.0,CTCAE 4.0)<sup>[5]</sup>,观察患者治疗不良反应并分级,1~2 级为可控制的轻中度不良反应,3~4 级为严重不良反应,5 级为不良反应致死(本研究未出现 5 级不良反应)。

1.2.2 问卷调查 在患者化疗结束时进行问卷调查,内容如下。(1)生活质量:使用癌症治疗功能评价系统共性模块(functional assessment of cancer therapy-general,FACT-G)第 4 版的子宫内膜癌模块

评估<sup>[6]</sup>,包含生理状况(7 个条目)、社会/家庭状况(7 个条目)、情感状况(6 个条目)及功能状况(7 个条目)共 4 个维度,27 个条目,各条目以 0~4 分计分,得分越高,生活质量越好。根据 FACT-G 评分将患者分为生活质量良好组( $\geq$ 平均分,82 例)与生活质量不良组( $<$ 平均分,76 例)。(2)抑郁:使用抑郁自评量表(Zung self-rating depression scale,SDS)<sup>[7]</sup>评估,共 20 个条目,采用 1~4 分计分,总得分相加为初始分,最终得分=初始分 $\times 1.25$ ,最终得分 $\geq 53$ 分提示存在抑郁。(3)焦虑:使用焦虑自评量表(Zung self-rating anxiety scale,SAS)<sup>[6]</sup>评估,有 20 个条目,计分方法及最终得分算法与 SDS 一致,最终得分 $\geq 50$ 分提示存在焦虑。(4)癌症复发恐惧:使用汉化癌症患者恐惧疾病进展简化量表(fear of progression questionnaire-short form, FoP-Q-SF)<sup>[8]</sup>,量表共 12 个条目,以 1~5 分计分,总得分 $\geq 34$ 分被认为具有临床意义上的癌症复发恐惧心理。

### 1.3 统计学处理

采用 SPSS 24.0 统计软件进行数据分析。计量资料以均数 $\pm$ 标准差( $\bar{x}\pm s$ )表示,组间比较采用  $t$  检验。计数资料以例数(百分率)表示,组间比较采用  $\chi^2$  检验或连续校正  $\chi^2$  检验、Fisher 精确概率法。采用 logistic 回归分析评估老年子宫内膜癌术后化疗患者生活质量不良的影响因素。 $P<0.05$  为差异有统计学意义。

## 2 结果

### 2.1 老年子宫内膜癌术后化疗患者生活质量调查

158 例患者 FACT-G 平均分为(79.68 $\pm$ 10.85)分,FACT-G 各维度得分详见表 1。

表 1 患者 FACT-G 各维度评分  
Table 1 Scores of dimensions of FACT-G (points)

| Item                 | Full | Lowest | Highest | $\bar{x}\pm s$    |
|----------------------|------|--------|---------|-------------------|
| Physiological status | 28   | 12     | 26      | 21.16 $\pm$ 3.01  |
| Social/family status | 28   | 7      | 27      | 18.83 $\pm$ 3.24  |
| Emotional status     | 24   | 8      | 24      | 19.46 $\pm$ 3.69  |
| Functional status    | 28   | 10     | 28      | 20.23 $\pm$ 4.02  |
| Total                | 108  | 40     | 105     | 79.68 $\pm$ 10.85 |

FACT-G: functional assessment of cancer therapy-general.

### 2.2 两组患者一般资料比较

生活质量不良组癌灶 p53 突变率、3~4 级不良反应发生率及抑郁、焦虑、癌症复发恐惧发生率均高于生活质量良好组,差异有统计学意义( $P<0.05$ ;表 2)。

表 2 两组患者一般资料比较  
Table 2 Comparison of general data between two groups

| Item                                                | Poor QOF group( <i>n</i> = 76) | Good QOF group( <i>n</i> = 82) | $\chi^2/t$ | <i>P</i> value |
|-----------------------------------------------------|--------------------------------|--------------------------------|------------|----------------|
| Age[ <i>n</i> (%) ]                                 |                                |                                | 0.869      | 0.351          |
| 60~<70 years                                        | 37(48.68)                      | 46(56.10)                      |            |                |
| ≥70 years                                           | 39(51.32)                      | 36(43.90)                      |            |                |
| Body mass index[ <i>n</i> (%) ]                     |                                |                                | 0.841      | 0.657          |
| <25.0 kg/m <sup>2</sup>                             | 51(67.11)                      | 54(65.85)                      |            |                |
| 25.0~<30.0 kg/m <sup>2</sup>                        | 19(25.00)                      | 24(29.27)                      |            |                |
| ≥30.0 kg/m <sup>2</sup>                             | 6(7.89)                        | 4(4.88)                        |            |                |
| Marital status[ <i>n</i> (%) ]                      |                                |                                | 2.362      | 0.124          |
| Married                                             | 70(92.11)                      | 69(84.15)                      |            |                |
| Unmarried/divorced/widowed                          | 6(7.89)                        | 13(15.85)                      |            |                |
| Number of pregnancy(times, $\bar{x}\pm s$ )         | 4.08±0.71                      | 3.99±0.68                      | 0.814      | 0.417          |
| Current children number( $\bar{x}\pm s$ )           | 2.92±0.60                      | 2.79±0.54                      | 1.433      | 0.154          |
| Education level[ <i>n</i> (%) ]                     |                                |                                | 1.135      | 0.567          |
| Primary and junior high schools                     | 22(28.95)                      | 19(23.17)                      |            |                |
| Senior high school or technical secondary school    | 47(61.84)                      | 52(63.41)                      |            |                |
| Junior college or above                             | 7(9.21)                        | 11(13.41)                      |            |                |
| Clinical staging[ <i>n</i> (%) ]                    |                                |                                | 0.350      | 0.554          |
| I b- I c                                            | 40(52.63)                      | 47(57.32)                      |            |                |
| II a- II b                                          | 36(47.37)                      | 35(42.68)                      |            |                |
| Pathological type[ <i>n</i> (%) ]                   |                                |                                | 0.425      | 0.514          |
| Endometrioid adenocarcinoma                         | 64(84.21)                      | 72(87.80)                      |            |                |
| Non-endometrioid adenocarcinoma                     | 12(15.79)                      | 10(12.20)                      |            |                |
| Differentiation degree[ <i>n</i> (%) ]              |                                |                                | 0.816      | 0.665          |
| High differentiation                                | 21(27.63)                      | 27(32.93)                      |            |                |
| Moderate differentiation                            | 46(60.53)                      | 48(58.54)                      |            |                |
| Low differentiation                                 | 9(11.84)                       | 7(8.54)                        |            |                |
| Cancer foci p53 mutation[ <i>n</i> (%) ]            | 16(21.05)                      | 5(6.10)                        | 7.655      | 0.006          |
| Chemotherapy regimen[ <i>n</i> (%) ]                |                                |                                | 1.151      | 0.562          |
| Cyclophosphamide + cisplatin                        | 19(25.00)                      | 15(18.29)                      |            |                |
| Cyclophosphamide + epirubicin + carboplatin         | 28(36.84)                      | 31(37.80)                      |            |                |
| Paclitaxel + carboplatin                            | 29(38.16)                      | 36(43.90)                      |            |                |
| Chemotherapy courses[ <i>n</i> (%) ]                |                                |                                | 0.759      | 0.384          |
| <4                                                  | 30(39.47)                      | 38(46.34)                      |            |                |
| ≥4                                                  | 46(60.53)                      | 44(53.66)                      |            |                |
| Postoperative combined radiotherapy[ <i>n</i> (%) ] | 13(17.11)                      | 7(8.54)                        | 2.619      | 0.106          |
| Grade 3~4 adverse reactions[ <i>n</i> (%) ]         | 27(35.53)                      | 14(17.07)                      | 6.990      | 0.008          |
| Depression[ <i>n</i> (%) ]                          | 24(31.58)                      | 14(17.07)                      | 4.544      | 0.033          |
| Anxiety[ <i>n</i> (%) ]                             | 34(44.74)                      | 20(24.39)                      | 7.258      | 0.007          |
| Fear of cancer recurrence[ <i>n</i> (%) ]           | 41(53.95)                      | 30(36.59)                      | 4.805      | 0.028          |

QOF: quality of life.

2.3 患者生活质量不良影响因素的 logistic 回归分析

将单因素分析中有统计学意义的指标作为自变量赋值(表3),生活质量不良为因变量,带入 logistic 回归方程,结果显示,癌灶 p53 突变、3~4 级不良反应、抑郁、焦虑及癌症复发恐惧均为老年子宫内膜癌术后化疗患者生活质量不良的危险因素( $P<0.05$ ;表4)。

3 讨论

术后化疗是对存在高危因素的子宫内膜癌患者的常用治疗手段,可降低术后复发风险,提高生存时间,但化疗可引起疼痛及心理负担,造成生活质量下降<sup>[9]</sup>。本研究在老年子宫内膜癌患者术后化疗结束时行生活质量调查,发现 FACT-G 各维度评分处

于中等甚至相对较低的水平,如社会/家庭状况(18.83±3.24)分、功能状况(20.23±4.02)分,明显低于查善辉等<sup>[10]</sup>报道的未行化疗的老年子宫内膜癌术后1个月时评分[(24.53±3.25)分和(23.83±3.16)分]。相较于单纯手术治疗者,术后化疗可能造成老年子宫内膜癌患者生活质量下降。目前普遍认为,化疗常造成患者消化道、神经系统、血液系统等毒性反应,轻度尚可忍受,重度反应经对症处理也能引起疼痛,是导致患者生活质量下降的重要原因<sup>[11]</sup>。本研究结果显示,生活质量不良组3~4级不良反应发生率高于生活质量良好组,3~4级不良反应是患者生活质量不良的危险因素,提示重度不良反应仍是术后化疗者生活质量下降的重要原因,与目前报道一致。

表 3 自变量赋值

| Independent variable        | Assignment      |
|-----------------------------|-----------------|
| Cancer foci p53 mutation    | No = 0, Yes = 1 |
| Grade 3-4 adverse reactions | No = 0, Yes = 1 |
| Depression                  | No = 0, Yes = 1 |
| Anxiety                     | No = 0, Yes = 1 |
| Fear of cancer recurrence   | No = 0, Yes = 1 |

表 4 患者生活质量不良影响因素的 logistic 回归分析  
Table 4 Logistic regression analysis of influencing factors of poor quality of life

| Factor                      | $\beta$ | SE    | Wald $\chi^2$ | P value | OR    | 95%CI       |
|-----------------------------|---------|-------|---------------|---------|-------|-------------|
| Cancer foci p53 mutation    | 0.992   | 0.344 | 8.149         | 0.004   | 2.670 | 1.343-5.309 |
| Grade 3-4 adverse reactions | 1.536   | 0.427 | 12.940        | <0.001  | 4.646 | 2.734-7.896 |
| Depression                  | 0.960   | 0.335 | 8.212         | 0.004   | 2.612 | 1.315-5.186 |
| Anxiety                     | 1.189   | 0.374 | 10.107        | 0.001   | 3.284 | 1.787-6.036 |
| Fear of cancer recurrence   | 1.236   | 0.383 | 10.415        | 0.001   | 3.442 | 1.892-6.262 |

既往研究普遍认为,病理分期、分化程度等是影响癌症预后的独立危险因素,随着分子生物学技术的进展,近年研究发现,癌灶的分子分型与癌症患者预后关联紧密<sup>[12]</sup>。本研究 logistic 回归分析发现,癌灶 p53 突变是老年子宫内 膜癌术后化疗患者生活质量不良的危险因素。León-Castillo 等<sup>[13]</sup>一项对高危子宫内 膜癌长期随访调查成果显示,p53 突变型是预后最差的一种子宫内 膜癌,p53 突变的肿瘤细胞呈最强的侵袭性与致死性,需放疗联合化疗,或交替序贯放化疗。分析原因可能与癌灶 p53 突变患者在术后常需联合多种辅助治疗方案、对其他正常器官组织的损伤更大、造成患者严重生理不适而生活质量下降有关<sup>[14]</sup>。

另外,心理状态也是影响老年慢性疾病患者或恶性肿瘤患者生活质量的关键因素,抑郁焦虑严重 者生活质量较差<sup>[15]</sup>。本研究结果显示,抑郁、焦虑均为老年子宫内 膜癌术后化疗患者生活质量不良的危险因素,提示抑郁、焦虑严重 者心理健康水平较低,可引起生活质量下降,SDS、SAS 作为临床最常用 的心理状况测量工具之一,在评估生活质量中也具有良好的应用效果。癌症复发恐惧是癌症患者所特有的一种情绪障碍,严重者可对治疗出现怀疑、退缩、排斥等表现,不仅影响患者日常生活,也易造成治疗依从性下降<sup>[16]</sup>。本研究中,癌症复发恐惧也是患者生活质量不良的危险因素,提示除了常规的抑郁焦虑评估外,对预后的恐惧也是造成患者生活质量下降的重要原因,对患者实施个性化治疗的相关知识宣教及情感支持,可能会对提升老年子宫内 膜癌患者生活质量有利。

综上所述,老年子宫内 膜癌术后化疗患者生活质量不高,可从癌灶 p53 突变、重度不良反应及抑郁、焦虑、癌症复发恐惧方面着手制定干预对策。

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