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动态监测上皮性卵巢癌患者血清 CA125 水平对疗效及预后的评估价值 *

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摘要 目的:通过观察卵巢上皮性癌患者术前、术后及化疗后 CA125 水平变化,探讨其水平变化对患者预后的评价价值。**方法:**选取 2012 年 3 月至 2013 年 2 月间医院诊治的卵巢上皮性癌患者 85 例为研究对象,所有患者均接受规范的卵巢癌分期手术或卵巢癌细胞减灭术,术后常规进行系统化疗。比较手术及化疗后患者血清 CA125 水平的变化,分析患者血清 CA125 水平动态变化、转阴时间与患者预后关系。**结果:**治疗后,患者 CA125 水平呈明显下降趋势,差异具有统计学意义($P < 0.05$)。 $T_{1/2} \leq 20$ d 患者存活时间明显长于 $T_{1/2} > 20$ d 的患者,差异具有统计学意义 ($P < 0.05$)。CA125 转阴时间≤ 8 周的患者存活时间长于 CA125 转阴时间>8 周的患者,差异具有统计学意义($P < 0.05$)。其复发率明显低于 CA125 转阴时间>8 周的患者,复发时间长于 CA125 转阴时间>8 周的患者,差异具有统计学意义($P < 0.05$)。**结论:**通过检测血清 CA125 水平变化可以对卵巢上皮性癌患者预后进行较为准确的评价。

关键词:卵巢;卵巢上皮性癌;CA125;预后

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Value of Dynamic Monitoring of Serum CA125 in Patients with Epithelial Ovarian Cancer to Evaluate the Efficacy and Prognosis of Patients with Epithelial Ovarian Cancer*

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ABSTRACT Objective: To investigate the value of CA125 levels on the clinical effects and prognosis of patients with epithelial ovarian cancer. **Methods:** 85 cases with epithelial ovarian cancer who were treated with uterine plus bilateral accessory resection and chemotherapy in our hospital from March 2015 to March 2016 were selected as the study subjects. Then the serum levels of CA125 in patients before and after the treatment were observed and compared, and the relationship between the dynamic change of serum CA125, the clearance time and the prognosis of patients were analyzed. **Results:** The serum levels of CA125 significantly decreased after the treatment and the difference was statistically significant ($P < 0.05$). The survival time of those whose $T_{1/2}$ were less than 20 days was significantly longer than those of the patients with $T_{1/2}$ more than 20 days, and the difference was statistically significant ($P < 0.05$). The survival time of those whose CA125 negative time were less than 8 weeks was longer than those of the patients with CA125 negative more than 8 weeks, and the difference was statistically significant ($P < 0.05$). The recurrence rate was significantly lower than CA125 negative patients more than 8 weeks, and longer than those CA125 negative patients more than 8 weeks, and the differences were statistically significant ($P < 0.05$). **Conclusion:** It is accurate to evaluate the prognosis of patients with epithelial ovarian cancer by detecting the change of serum levels of CA125.

Key words: Ovary; Epithelial ovarian cancer; CA125; Prognosis

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前言

卵巢上皮性癌是女性常见的恶性肿瘤之一,其发病率高,恶性程度高,发生转移多。患者死亡率高,5 年生存率不足 50 %,由于病变位置深在盆腔,早期恶性肿瘤不易被发觉,诊治时多已处于中晚期,丧失了治疗的最佳时期^[1]。手术联合化疗是卵巢上皮性癌最佳的治疗方法,可以延长患者生存时间。但由于

各种因素的存在,患者存在一定的复发率,复发加重了治疗难度,预后不佳。血清癌抗原 125 (CA125)属于糖类抗原,是卵巢上皮性肿瘤最敏感的标记物之一,可以敏感和准确的反应患者卵巢上皮性肿瘤的存在及复发情况^[2,3]。本研究通过观察 85 例卵巢上皮性癌患者术前、术后及化疗后 CA125 水平变化,探讨其水平变化对患者预后的评价价值。

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1 资料与方法

1.1 一般资料

选取 2012 年 3 月至 2013 年 2 月间医院诊治的卵巢上皮性癌患者 85 例为研究对象,年龄 36~74 岁,平均年龄(55.3±11.8)岁,经手术证实为卵巢浆液性囊腺癌 50 例,卵巢粘液性囊腺癌 35 例。病理分期 I 期 10 例,II 期 20 例,III 期 40 例,IV 期 15 例。纳入标准:年龄<75 岁;均接受手术治疗并经病理证实;初次就诊,未经其它治疗;术后接受化疗,并完成 6 周期治疗;临床资料完整。排除标准:急性炎症;先天畸形;其它部位恶性肿瘤;结缔组织病、免疫功能缺陷者;存在影响肿瘤标记物水平因素者;严重心、肝、肾功能不全;血液系统疾患;过敏史;各种不能配合研究者;失访及研究期间死亡者。

1.2 研究方法

所有患者均接受规范的卵巢癌分期手术或卵巢癌细胞减灭术,术后常规进行系统化疗。化疗方案采用紫杉醇+铂类(均按患者个体采用统一剂量标准)。分别于手术前 1 d,术后 1 d 及化疗 6 周期后 1 d 检测患者血清 CA125 水平。

检测方法:抽取患者清晨空腹静脉血 5 mL,经抗凝处理后以 3000 r/min 离心 10 min,取上清置于 -20 ℃ 冰箱中保存备用。CA125 检测采用新产业公司生产的 MAGLUMI2000Plus 全自动化学发光分析仪,检测试剂盒选择 OC125 试剂盒,检验方

法采用免疫法,具体操作步骤按说明书进行。正常值 0~35 U/mL。

1.3 观察指标

比较手术及化疗后患者血清 CA125 水平的变化,分析患者血清 CA125 水平动态变化、转阴时间与患者预后关系。采用血清 CA125 半衰期(T_{1/2})及转阴时间评价其变化,CA125 半衰期(T_{1/2})=(术前时间 - 第一次降至正常范围水平或未降至正常水平者术后 3 个月内最低值时间)/2log(手术前 CA125 水平 / 第一次降至正常范围水平或未降至正常水平者术后 3 个月内最低值)^[4]。CA125 转阴时间为术后血清 CA125 降至正常范围的时间。

1.4 统计学方法

应用 SPSS19.0 统计软件包进行统计分析,正态分布的各统计指标均以均数± 标准差(± s)表示,两组组间数值比较采用 t 检验,多组间比较采用方差分析,计量资料用百分比或者率表示,P<0.05 为差异具有统计学意义。

2 结果

2.1 手术及化疗后患者血清 CA125 水平的比较

手术前、手术后及化疗后 6 周期后,患者 CA125 水平呈明显下降趋势,经统计学分析,差异均具有统计学意义(P<0.05)。

表 1 观察组患者化疗前后血清 uPA 含量与对照组对比(± s)

Table 1 Comparison of the serum levels of uPA between the observation group and the control group before and after chemotherapy(± s)

	CA125(U/mL)	F value	P value
Before operation	143.4± 35.4		
After operation	78.9± 22.3	270.820	0.000
6 week after chemotherapy	57.5± 11.5		

2.2 患者血清 CA125 水平动态变化与患者预后关系

见表 2, T_{1/2}≤ 20 d 患者存活时间明显长于 T_{1/2}>20 d 的患

者,差异具有统计学意义(P<0.05)。

表 2 患者血清 CA125 水平动态变化与患者预后关系

Table 2 The relationship between dynamic changes of serum CA125 level and prognosis

	n	Survival time	t value	P value
T _{1/2} ≤ 20 d	50	38.4± 11.2	5.637	0.000
T _{1/2} >20 d	35	25.4± 9.3		

2.3 CA125 转阴时间与患者预后关系

CA125 转阴时间≤ 8 周的患者存活时间长于 CA125 转阴时间>8 周的患者,差异具有统计学意义(P<0.05)。其复发率

明显低于 CA125 转阴时间>8 周的患者,复发时间长于 CA125 转阴时间>8 周的患者,差异具有统计学意义(P<0.05)。

表 3 CA125 转阴时间与患者预后关系

Table 3 The relationship between CA125 Clearance time and prognosis

	n	Survival time (m)	Recurrence (n,%)	Recurrence timen (m)	Relieve (n,%)
CA125 Clearance time≤ 8 w	45	38.6± 10.2	10(22.2)	18.4± 3.2	35(77.8)
CA125 Clearance time>8 w	40	25.3± 8.2	23(57.5)	9.8± 2.1	17(42.5)
t/x ² value	-	6.571	11.096	14.450	11.096
P value	-	0.000	0.001	0.000	0.001

3 讨论

卵巢上皮类癌占卵巢肿瘤的 90 %以上，是中老年女性常见的生殖系统肿瘤，我国每年约有 14 万± 的新发病例，且具有明显年轻化趋势^[5-7]。由于解剖特征及肿瘤特征，早期就诊及确诊的比例低，接受治疗时多已经处于中晚期，错过最佳治疗时机，导致其 2 年死亡率为 70 %,5 年死亡率高达 90 %，严重的威胁了女性患者的生命安全和生活质量^[8-9]。虽然手术及化疗可以切除及抑制肿瘤，但患者术后仍存在一定的残余及复发率，术后影像学及实验室检查评估对了解患者病情变化，及时采取积极合理的干预措施十分重要。

CA125 属于多聚糖蛋白，分子质量 20-100 万，可以被 OC125 单克隆抗体特异性识别。他是卵巢上皮类癌的最重要抗原之一，被认为是最有价值的卵巢肿瘤标志物，对诊断卵巢上皮类癌的敏感性为 71.4 %，特异性为 80 %^[10,11]。在卵巢上皮类癌的早期诊断、病情监测及预后评价中有一定的价值。在粘液性囊腺瘤、浆液性囊腺瘤中，CA125 水平存在明显的升高，其水平高低与肿瘤体积、肿瘤细胞数量存在密切的关系，并可以用于预测肿瘤的病理分期^[12-14]。

本研究中，手术前、手术后及化疗后 6 周期后，患者 CA125 水平呈明显下降趋势，说明经过手术治疗，患者体内肿瘤组织完全或大部切除，肿瘤细胞数量大幅减少，与之相关的 CA125 水平也明显下降。在正规化疗中，病变部位肿瘤组织及血液中的肿瘤细胞均得到有效的杀灭或抑制，CA125 水平也存在大幅的降低。CA125 半衰期及转阴时间均是反应其水平动态变化的指标，通过其动态变化，可以反应患者体内肿瘤组织或细胞存在情况，从而评价患者预后，包括肿瘤缓解及复发等^[15-18]。曾有研究显示，卵巢上皮类癌的预后与 CA125 水平的下降存在密切关系，经手术和化疗治疗后，由于肿瘤细胞的灭杀和抑制，其分泌的 CA125 明显降低^[19,20]。本研究通过分析 CA125 半衰期及转阴时间，结果显示 T1/2≤ 20 d 患者存活时间明显长于 T1/2>20 d 的患者，CA125 转阴时间≤ 8 周的患者存活时间长于 CA125 转阴时间>8 周的患者，其复发率明显低于 CA125 转阴时间>8 周的患者，复发时间长于 CA125 转阴时间>8 周的患者，差异均具有统计学意义。虽然研究显示术前血清 CA125 水平无法预测患者预后，但术后及化疗后 CA125 水平的变化是评价和预测患者预后最佳的指标，随着肿瘤负荷的缩小，CA125 水平应该明显降低，而化疗后其水平再次升高可以早期提示肿瘤复发的可能。CA125 半衰期及转阴时间的延长均提示肿瘤负荷的持续存在，预后不佳，是评价卵巢上皮癌术后化疗预后的有效指标。

综上所述，血清 CA125 是卵巢上皮性癌重要的血清标记物，通过检测血清 CA125 水平变化可以对卵巢上皮性癌患者预后进行准确的评价，CA125 半衰期及转阴时间的缩短均提示预后良好。

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