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紫杉醇联合奈达铂新辅助治疗局部晚期宫颈癌的临床效果研究*

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摘要 目的:探讨紫杉醇联合奈达铂治疗局部晚期宫颈癌患者的近远期疗效。**方法:**选择2010年3月~2011年8月在我院进行诊治的局部晚期宫颈癌患者67例,按住院序号分为观察组33例和对照组34例。对照组单纯给予腹腔镜宫颈癌根治手术治疗,观察组联合给予新辅助化疗(静脉注射紫杉醇135 mg/m²以及奈达铂75 mg/m²)。比较两组的临床治疗效果,术后的宫旁累及阳性率、阴道切缘阳性率、淋巴结转移阳性率以及脉管浸润阳性率。对两组患者进行3年的随访,比较两组的复发率、转移率以及3年生存率。**结果:**观察组的近期治疗有效率为93.94%(31/33),明显高于对照组的70.59%(24/34)($P<0.05$);与对照组相比,观察组术后宫旁累及阳性率、阴道切缘阳性率、淋巴结转移阳性率、脉管浸润阳性率均明显较低($P<0.05$);经过3年的随访,观察组的复发率以及转移率明显低于对照组($P<0.05$),3年生存率明显高于对照组($P<0.05$)。**结论:**紫杉醇联合奈达铂新辅助治疗局部晚期宫颈癌的近期疗效以及远期疗效明显优于单纯给予腹腔镜宫颈癌根治手术治疗。

关键词:紫杉醇;奈达铂;新辅助化疗;局部晚期宫颈癌;临床疗效

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Clinical Efficacy of Paclitaxel Combined with Nedaplatin in the Treatment of Locally Advanced Cervical Cancer*

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ABSTRACT Objective: To investigate the clinical efficacy of paclitaxel combined with nedaplatin in the treatment of locally advanced cervical cancer. **Methods:** 67 cases of patients with locally advanced cervical cancer who were treated in our hospital from March 2010 to August 2011 were selected and divided into two groups, 33 cases in the observation group, 34 cases in the control group. The control group was treated with laparoscopic radical surgery alone, while the observation group was given neoadjuvant chemotherapy (intravenous paclitaxel 135 mg/m² and nedaplatin 75 mg/m²). The clinical effects, positive rates of vaginal margins, lymph node metastasis, uterine involvement and vascular invasion were observed and compared between two groups. Both groups of patients were followed up for 3 years, the recurrence rate, metastasis rate and long-term survival rate of two groups were observed and compared. **Results:** After treatment, the effective rate of observation group was 93.94 % (31/33), which was significantly higher than that of the control group [70.59 % (24/34)] ($P<0.05$); the positive rate of vaginal margins, lymph node metastasis, uterine involvement and vascular invasion of observation group were significantly lower than those of the control group ($P<0.05$). After 3 years of follow-up, it was found that the recurrence rate and metastasis rate of observation group were significantly lower than those of the control group ($P<0.05$), and the 3-year survival rate of observation group was significantly higher than that of the control group ($P<0.05$). **Conclusion:** The short-term efficacy and long-term efficacy of paclitaxel combined with nedaplatin in the treatment of locally advanced cervical cancer were better than those of laparoscopic radical surgery alone for cervical cancer.

Key words: Paclitaxel; Nedaplatin; Neoadjuvant chemotherapy; Locally advanced cervical cancer; Clinical efficacy

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前言

宫颈癌为女性生殖系统最为常见恶性肿瘤之一,是全球妇女中仅次于结直肠癌及乳腺癌的恶性肿瘤,在我国发病率仅次

于乳腺癌,与分娩次数过多、性生活紊乱、早婚、高危型人类乳头瘤病毒感染等因素有关,严重影响了女性的身体健康以及生活质量^[1-3]。传统手术方式多采用手术或局部放疗,但其对晚期局部宫颈癌的疗效较差。新辅助化疗是一种在实施局部手术或

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放疗前行全身性化疗的方法,可以明显降低肿瘤分期及远处转移^[4,5],近年来在治疗局部晚期宫颈癌患者中取得了较好的应用成果。

在手术治疗前期开展新辅助化疗能有效减少病理危险因素、缩小肿瘤病灶、提高手术的切净率、降低术后的转移和复发率、提高患者的生存率。临床上的新辅助化疗的用药方案有多种,部分化疗方案的治疗效果往往不佳,且毒副反应发生率高。铂类药物联合紫杉类药物作为临床治疗宫颈癌的一线方案在临床广泛应用^[6,7]。本研究选择我院的33例局部晚期宫颈癌患者,联合给予新辅助化疗(静脉注射紫杉醇以及奈达铂),旨在探讨一种对局部晚期宫颈癌更高效、低毒副反应的治疗方案。

1 资料与方法

1.1 一般资料

选择2010年3月~2011年8月我院收治的67例局部晚期宫颈癌患者,均经宫颈活组织检查明确诊断,且无明显的化疗禁忌,按住院序号分为两组。观察组33例,年龄33~81岁,平均(45.24±12.37)岁;病理分型:鳞癌20例,腺癌13例;FIGO分期:IIb期13例,IIIa期12例,IIIb期6例,IV期2例。对照组34例,年龄32~80岁,平均(45.19±12.23)岁;病理分型:鳞癌19例,腺癌15例;FIGO分期:IIb期12例,IIIa期11例,IIIb期7例,IV期3例。所有患者均签署知情同意书。

1.2 治疗方法

对照组单纯给予腹腔镜宫颈癌根治手术治疗,取膀胱截石位,对所有患者采取全身静脉麻醉,在脐下部位做一长约1cm的切口,建立气腹,建立穿刺孔,放入操作钳,对子宫固有韧带、子宫圆韧带以及输卵管进行电凝切断,切开腹膜以及膀胱,使

膀胱以及宫颈分离,进行子宫全切。观察组联合给予新辅助化疗,静脉注射紫杉醇(批号:国药准字H20043045,生产厂家:海口市制药厂有限公司,规格:16.7mL:100mg)135mg/m²,并静脉注射奈达铂(批号:国药准字H20030884,生产厂家:南京先声东元制药有限公司,规格:10mg)75mg/m²进行治疗。28d为一化疗周期,化疗间隔为21d,两组均开展2个疗程的化疗。

1.3 观察指标

比较两组的治疗效果^[8]:①经过2个治疗疗程,患者肿瘤病灶均全部消失为完全缓解;②经过2个治疗疗程,患者的肿瘤病灶最大直径降低超过50%,并且未出现新的肿瘤病灶为部分缓解;③无变化:经过2个疗程的治疗后,患者的肿瘤病灶最大直径增加小于25%或降低小于50%,未发现新的肿瘤病灶;④进展:经过2个疗程的治疗后,患者的肿瘤病灶最大直径增加超过25%或已出现新的肿瘤病灶。观察两组术后的宫旁累及阳性率、阴道切缘阳性率、淋巴结转移阳性率以及脉管浸润阳性率。对两组患者进行3年的随访,观察两组的复发率、转移率以及3年生存率。

1.4 统计学分析

采用SPSS16.00进行统计学分析,组间计量资料的比较采用t检验,组间计数资料的比较用 χ^2 检验,以 $P<0.05$ 表明差异有统计学意义。

2 结果

2.1 两组近期疗效的对比

与对照组(70.59%)相比,观察组近期治疗有效率(93.94%)明显升高($P<0.05$),见表1。

表1 两组近期疗效的对比[例(%)]

Table 1 Comparison of the short-term effect between two groups[n(%)]

Groups	n	CR	PR	SD	PD	Total effect rate(%)
Observation group	33	22	9	2	0	93.94*
Control group	34	14	10	7	3	70.59

Note: Compared with the control group, * $P<0.05$.

2.2 两组术后病理阳性率对比

与对照组相比,观察组术后的宫旁累及阳性率、阴道切缘

阳性率、淋巴结转移阳性率、脉管浸润阳性率明显较低($P<0.05$),见表2。

表2 两组术后病理阳性率对比[例(%)]

Table 2 Comparison of the Postoperative pathological positive rate between two groups [n(%)]

Groups	n	Incisal margin of vagina	Lymph node metastasis	Para uterine involvement	Vascular invasion
Observation group	33	1(3.03)*	5(15.15)*	2(6.06)*	1(3.03)*
Control group	34	5(14.71)	10(29.41)	6(17.65)	4(11.76)

Note: Compared with the control group, * $P<0.05$.

2.3 两组远期疗效的对比

经过3年的随访,观察组的复发率以及转移率均明显低于对照组($P<0.05$),3年生存率明显高于对照组($P<0.05$),见表3。

3 讨论

宫颈癌患者在发病初期的临床症状主要为阴道出现异常分泌物以及接触性出血等,但大多数患者在发病初期并无较为显著的临床体征,宫颈癌患者晚期会出现阴道不规则流血,癌组织累及其他组织器官而会引发的继发性临床症状^[9,10]。临床上,早期宫颈癌患者主要采取手术治疗,中晚期患者则主要采

表 3 两组远期疗效的对比[例(%)]

Table 3 Comparison of the long-term effect between two groups [n(%)]

Groups	n	Recurrence rate	Transfer rate	3 year survival rate
Observation group	33	2(6.06)*	3(9.09)*	29(87.87)*
Control group	34	6(17.65)	7(20.59)	25(73.53)

Note: Compared with the control group, * $P < 0.05$.

取放疗^[11,12],但对于局部晚期宫颈癌患者,其腹腔淋巴结转移率较高,且肿瘤体积较大,若直接给予手术治疗难度较大,极易造成手术副损伤^[13,14],且单纯采用外科手术治疗无法取得理想的治疗效果,术后病灶极易发生残留;且由于肿瘤组织内的乏氧细胞数量显著增加,肿瘤细胞对放疗的敏感性降低,导致术前放疗不能有效缩小肿瘤体积、预防淋巴结转移,且放疗会使患者的卵巢功能丧失,严重影响患者的生活质量^[15-17]。

新辅助化疗为局部晚期宫颈癌患者的综合治疗提供了一条新的希望^[18-20]。其对局部晚期宫颈癌患者具有多种效果:①抑制肿瘤细胞的活性,防治术后发生转移;②降低肿瘤体积,手术时更易于被切除;③降低肿瘤分期,减少宫旁浸润;④使放疗的敏感性得到协同增加;⑤使潜在的病灶得以清除,预防发生远处转移,改善患者的预后情况;⑥通过观察患者对新辅助化疗的敏感性,为术后患者的治疗方案的选择提供参考依据^[21-23]。紫杉醇作为一种临床广泛使用的抗微管药物^[24],可以通过促进细胞中微管发生聚合,使得细胞的有丝分裂受到阻碍,抑制了对于有丝分裂期以及分裂间期细胞功能至关重要的微管,从而对肿瘤细胞的生长发挥抑制作用^[25,26],并且还可以使细胞停止在M期和G2期,对放疗较为敏感,具有放疗增敏的功能^[27,28]。奈达铂能有效抑制细胞损伤后修复过程以及DNA修复酶的生理学功能,缩小肿瘤体积,改善肿瘤组织血供。

本研究结果显示观察组的近期治疗有效率为93.94%(31/33),明显高于对照组;经过3年的随访,观察组的复发率以及转移率明显低于对照组,3年生存率明显高于对照组,表明紫杉醇联合奈达铂新辅助治疗局部晚期宫颈癌的近期疗效以及远期疗效明显优于单纯给予腹腔镜宫颈根治手术治疗。Wang H^[29]等研究发现根治术与新辅助化疗联合使用与传统治疗方法相比,前者对治疗局部晚期宫颈癌患者的效果更佳,对提高患者的生存质量以及控制肿瘤进展方法具有显著的优势,与本研究结果相一致。与对照组相比,观察组术后的阴道切缘阳性率、淋巴结转移阳性率、宫旁累及阳性率、脉管浸润阳性率明显较低,表明紫杉醇联合奈达铂新辅助化疗有重要作用。Chen H^[30]等研究发现对于局部晚期宫颈癌患者采用新辅助化疗可以有效降低宫旁浸润率以及盆腔转移率,与本研究结果相一致。因此,手术联合新辅助化疗对于局部晚期宫颈癌患者是较好的选择。

综上所述,紫杉醇联合奈达铂新辅助治疗局部晚期宫颈癌的近期疗效以及远期疗效明显优于单纯给予腹腔镜宫颈根治手术治疗。

参考文献(References)

[1] Takeda N, Sakuragi N, Takeda M, et al. Multivariate analysis of histopathologic prognostic factors for invasive cervical cancer treated with radical hysterectomy and systematic retroperitoneal

lymphadenectomy [J]. Acta Obstetrica Et Gynecologica Scandinavica, 2015, 81(12): 1144-1151

- [2] Mathur SP, Mathur RS, Rust PF, et al. Human papilloma virus (HPV) -E6/E7 and epidermal growth factor receptor (EGF-R) protein levels in cervical cancer and cervical intraepithelial neoplasia (CIN) [J]. American Journal of Reproductive Immunology, 2015, 46(4): 280-287
- [3] Wright T C, Stoler M H, Behrens C M, et al. Primary cervical cancer screening with human papillomavirus: end of study results from the ATHENA study using HPV as the first-line screening test [J]. Gynecologic Oncology, 2015, 136(2): 189-197
- [4] Mathur S P, Mathur R S, Rust P F, et al. Human papilloma virus (HPV)-E6/E7 and epidermal growth factor receptor (EGF-R) protein levels in cervical cancer and cervical intraepithelial neoplasia (CIN) [J]. American Journal of Reproductive Immunology, 2015, 46 (4): 280-287
- [5] Forsmo S, Buhaug H, Skjeldestad F E, et al. Treatment of pre-invasive conditions during opportunistic screening and its effectiveness on cervical cancer incidence in one Norwegian county [J]. International Journal of Cancer Journal International Du Cancer, 2015, 71(1): 4-8
- [6] Nakamura T, Ueda T, Oishi M, et al. Salvage combined chemotherapy with paclitaxel, ifosfamide and nedaplatin for patients with advanced germ cell tumors[J]. International Journal of Urology Official Journal of the Japanese Urological Association, 2015, 22(3): 288-293
- [7] Zhan P, Xie H, Li-Ke Y U. Response to nab-paclitaxel and nedaplatin in a heavily-metastatic thymic carcinoma: A case report[J]. Oncology Letters, 2015, 9(4): 1715-1718
- [8] Jang H J, Kim B C, Kim H S, et al. Comparison of RECIST 1.0 and RECIST 1.1 on computed tomography in patients with metastatic colorectal cancer[J]. Oncology, 2014, 86(2): 117-121
- [9] Penson R T, Huang H Q, Wenzel L B, et al. Bevacizumab for advanced cervical cancer: patient-reported outcomes of a randomised, phase 3 trial (NRG Oncology-Gynecologic Oncology Group protocol 240)[J]. Lancet Oncology, 2015, 16(3): 301
- [10] Kitagawa R, Katsumata N, Shibata T, et al. Paclitaxel Plus Carboplatin Versus Paclitaxel Plus Cisplatin in Metastatic or Recurrent Cervical Cancer: The Open-Label Randomized Phase III Trial JCOG0505 [J]. Journal of Clinical Oncology Official Journal of the American Society of Clinical Oncology, 2015, 33(19): 2129
- [11] Gill B S, Kim H, Houser C J, et al. MRI-Guided High-Dose-Rate Intracavitary Brachytherapy for Treatment of Cervical Cancer: The University of Pittsburgh Experience [J]. International Journal of Radiation Oncology Biology Physics, 2015, 91(3): 540-547
- [12] Verdoodt F, Jentschke M, Hillemanns P, et al. Reaching women who do not participate in the regular cervical cancer screening programme by offering self-sampling kits: A systematic review and meta-analysis of randomised trials [J]. European Journal of Cancer, 2015, 51(16): 280-290

2375-2385

- [13] Kirchheiner K, Pötter R, Tanderup K, et al. Health-Related Quality of Life in Locally Advanced Cervical Cancer Patients After Definitive Chemoradiation Therapy Including Image Guided Adaptive Brachytherapy: An Analysis From the EMBRACE Study [J]. *International Journal of Radiation Oncology Biology Physics*, 2016, 94(5): 1088-1098
- [14] De Kok I M, Van Rosmalen J, Van Ballegooijen M. Authors' reply re: Cost effectiveness of cervical cancer screening: cytology versus human papillomavirus DNA testing [J]. *BJOG An International Journal of Obstetrics & Gynaecology*, 2016, 123(8): 1401
- [15] Trudeau E, Regn R, Robinson W, et al. Overall Survival of Women with Locally Advanced Cervical Cancer (STAGE IIB-IVA) is Adversely Affected by Treatment Delays Measureable in Days [J]. *Gynecologic Oncology*, 2016, 143(1): 198-198
- [16] Rodriguez S, Otal A, Richart J, et al. Interstitial Brachytherapy in Locally Advanced Cervical Cancer: From MUPIT to Full Compatible MRI Mixed Intracavitary/Interstitial Template. 10 Years of Experience [J]. *Brachytherapy*, 2016, 15(1): S119-S119
- [17] Ramlov A, Pedersen E M, Røhl L, et al. Risk Factors for Pelvic Insufficiency Fractures in Locally Advanced Cervical Cancer Following Intensity Modulated Radiation Therapy [J]. *International Journal of Radiation Oncology Biology Physics*, 2017, 97(5): 1032
- [18] Petitnicolas C, Azaïs H, Ghesquière L, et al. Morbidity of Staging Inframesenteric Para-aortic Lymphadenectomy in Locally Advanced Cervical Cancer Compared With Infrarenal Lymphadenectomy [J]. *International Journal of Gynecological Cancer Official Journal of the International Gynecological Cancer Society*, 2017, 27(3): 575
- [19] Chagari C, Mazon R, Dunant A, et al. Impact of primary para-aortic lymphadenectomy on distant failure in locally advanced cervical cancer patients treated in the era of image-guided adaptive brachytherapy [J]. *Clinical & Experimental Metastasis*, 2016, 33(8): 1-11
- [20] Pereira E, Cooper H H, Zelaya P G, et al. Concurrent chemoradiation versus radiotherapy alone for the treatment of locally advanced cervical cancer in a low-resource setting [J]. *Gynecologic Oncology Reports*, 2017, 19(C): 50-52
- [21] Rivera A, Mehta K J, Yaparalvi R, et al. Outcomes of Locally Advanced Cervical Cancer Patients Following the Use of the Hybrid Intracavitary and Interstitial Utrecht Tandem and Ovoids Applicator in an Outpatient Setting [J]. *Brachytherapy*, 2017, 16(3): S60
- [22] Yang Z, Chen D, Zhang J, et al. The efficacy and safety of neoadjuvant chemotherapy in the treatment of locally advanced cervical cancer: A randomized multicenter study [J]. *Gynecologic Oncology*, 2016, 141(2): 231-239
- [23] Vici P, Buglioni S, Sergi D, et al. DNA Damage and Repair Biomarkers in Cervical Cancer Patients Treated with Neoadjuvant Chemotherapy: An Exploratory Analysis [J]. *Plos One*, 2016, 11(3): e0149872
- [24] Yao Y Y, Wang Y, Wang J L, et al. Outcomes of fertility and pregnancy in patients with early-stage cervical cancer after undergoing neoadjuvant chemotherapy [J]. *European Journal of Gynaecological Oncology*, 2016, 37(1): 109
- [25] Jin Z, Xiong L, Huang K, et al. Young Cervical Cancer Patients May Be More Responsive than Older Patients to Neoadjuvant Chemotherapy Followed by Radical Surgery [J]. *Plos One*, 2016, 11(2): e0149534
- [26] Minig L, Zanagnolo V, Cárdenas-Rebollo J M, et al. Feasibility of robotic radical hysterectomy after neoadjuvant chemotherapy in women with locally advanced cervical cancer [J]. *European Journal of Surgical Oncology*, 2016, 42(9): 1372-1377
- [27] Park H S, Lim S M, Cho A, et al. Pharmacogenetic analysis of advanced non-small-cell lung cancer patients treated with first-line paclitaxel and carboplatin chemotherapy [J]. *Pharmacogenetics & Genomics*, 2016, 26(3): 116
- [28] Chiorean E G, Hoff D D V, Reni M, et al. CA19-9 decrease at 8 weeks as a predictor of overall survival in a randomized phase III trial (MPACT) of weekly nab-paclitaxel plus gemcitabine versus gemcitabine alone in patients with metastatic pancreatic cancer [J]. *Annals of Oncology*, 2016, 27(4): 654-660
- [29] Wang H, Zhu L, Lu W, et al. Clinicopathological risk factors for recurrence after neoadjuvant chemotherapy and radical hysterectomy in cervical cancer [J]. *World Journal of Surgical Oncology*, 2013, 11(1): 301
- [30] Chen H, Liang C, Zhang L, et al. Clinical efficacy of modified preoperative neoadjuvant chemotherapy in the treatment of locally advanced (stage IB2 to IIB) cervical cancer: randomized study [J]. *Gynecol Oncol*, 2008, 110(3): 308-315

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- [29] Jr W K, Shamim A A, Mehra S, et al. Effect of maternal multiple micronutrient vs iron-folic acid supplementation on infant mortality and adverse birth outcomes in rural Bangladesh: the Jivita-3 randomized trial [J]. *Jama*, 2016, 312(24): 2649-2658
- [30] Hodgetts V, Morris R, Francis A, et al. Effectiveness of folic acid supplementation in pregnancy on reducing the risk of small-for-gestational age neonates: a population study, systematic review and meta-analysis [J]. *BJOG An International Journal of Obstetrics & Gynaecology*, 2015, 122(4): 478-490
- [31] Geddes J R, Gardiner A, Rendell J, et al. Comparative evaluation of quetiapine plus lamotrigine combination versus quetiapine monotherapy (and folic acid versus placebo) in bipolar depression (CEQUEL): a 2 × 2 factorial randomised trial [J]. *Lancet Psychiatry*, 2015, 3(1): 31-39