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放化疗与介入性动脉化疗治疗局部晚期宫颈癌的临床研究

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摘要 目的:比较分析放化疗与介入性动脉化疗治疗局部晚期宫颈癌的临床效果。**方法:**选择我院局部晚期宫颈癌患者 97 例,依据治疗方法分为常规组(行传统放化疗)55 例和介入组(行介入性动脉化疗)42 例。观察治疗后肿瘤大小、近期疗效、根治性手术率、术后并发症,对生活质量指数进行评分,评价两种方法的临床效果。**结果:**治疗后,两组患者近期疗效比较差异无统计学意义($P>0.05$);介入组肿瘤直径明显小于常规组,而根治性手术率明显高于常规组,差异均具有统计学意义($P<0.05$);介入组患者日常生活、健康、总体情况以及总的评分均明显高于常规组,差异具有统计学意义($P<0.05$),同时介入组并发症较少。**结论:**放化疗与介入性动脉化疗治疗局部晚期宫颈癌近期临床疗效均较好,但介入性动脉化疗具有较高的根治性手术率以及生活质量,且并发症少。

关键词:局部晚期宫颈癌;放化疗;介入性动脉化疗

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Clinical Research of Radiotherapy and Chemotherapy and Interventional Artery Chemotherapy in the Treatment of Locally Advanced Cervical Cancer

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ABSTRACT Objective: To compare the clinical effects of radiotherapy and chemotherapy and interventional artery chemotherapy on the treatment of locally advanced cervical cancer. **Methods:** 97 patients with locally advanced cervical cancer in our hospital were selected and divided into the conventional group and the intervention group. 55 cases in the conventional group were treated with traditional radiotherapy and chemotherapy, while another 42 patients in the intervention group were treated with interventional artery chemotherapy. Then observed the tumor size, short-term curative effect, rate of radical operation, postoperative complications and the life quality of patients in the two groups were observed and compared. **Results:** There was no significant difference in short-term efficacy between the two groups ($P>0.05$). The diameter of the tumor in the intervention group was smaller than that of the patients in the conventional group, but the rate of radical operation was significantly higher with statistically significant difference ($P<0.05$); The scores of life quality of patients in the intervention group were higher than that of the patients in the conventional group ($P<0.05$); The incidence of postoperative complications of patients in the intervention group was lower than that of the conventional group ($P<0.05$). **Conclusion:** Both radiotherapy and chemotherapy and interventional artery chemotherapy have fairly good short-term effects in the treatment of locally advanced cervical cancer, while the interventional artery chemotherapy has high rate of radical operation and quality of life and fewer complications.

Key words: Locally advanced cervical cancer; Radiotherapy and chemotherapy; Interventional arterial chemotherapy

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前言

宫颈癌是女性生殖系统中最常见的三大恶性肿瘤之一,严重影响女性生活质量及生命^[1]。目前放疗和手术治疗是主要的宫颈癌治疗方法,虽然放疗以及手术治疗技术不断改进,但是

中晚期宫颈癌患者 5 年生存率没有得到明显的提高^[2,3]。近年来,术前介入性化疗方法逐步得到重视,可以有效控制微小转移及提高手术切除率,成为一种新的有效辅助化疗方法^[4]。本研究回顾性分析了在本院住院的 97 例局部晚期动脉宫颈癌患者的临床资料,旨在比较传统放化疗及介入性动脉化疗两种方式治疗局部晚期动脉宫颈癌的临床效果差异,现报道如下。

1 资料与方法

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1.1 研究对象

选择 2011 年 1 月至 2013 年在我院住院的局部晚期(I-Ia~IIIb 期) 宫颈癌患者 97 例, 年龄 (30~59) 岁, 平均年龄 (36.62± 7.12) 岁, 依据治疗方法分为常规组(行传统放化疗)55

例和介入组(行介入性动脉化疗)42 例, 所有患者主要临床表现为阴道不规则出血及流液, 均按 2009 年国际妇产科联盟(FIGO)标准进行诊断。两组患者临床一般资料比较差异均无统计学意义(均 $P>0.05$), 见表 1。

表 1 两组患者治疗前临床一般资料比较
Table 1 Comparison of clinical data of patients in the two groups

分组 Groups	N	年龄(岁) Age (years)	临床分期(例) Clinical stages (n)			肿瘤直径(cm) Tumor diameter (cm)	病理分级(例) Pathological grade(n)		
			IIa	IIb	IIIa~b		I	II	III
常规组 Conventional group	55	37.51± 5.92	10	28	17	5.23± 2.28	11	27	17
介入组 Intervention group	42	36.81± 7.22	7	21	14	5.09± 2.51	8	21	13
χ^2/t		0.525		0.079		0.287		0.015	
P		0.601		0.961		0.775		0.993	

1.2 治疗方法

常规组行传统放化疗:使用盆腔体外放疗,腔内近距离放疗以及顺铂增敏化疗方法,按 180~200cGy/次进行盆腔体外放疗,每周 5 次,达到 2500~3000cGy 时便进行腔内近距离放疗,500~700cGy/次,每周 1 次,达到 3000~4000cGy,放疗的同时给予浓度为 40 mg/m² 顺铂,每周 1 次。介入组行介入性动脉化疗:使用 seldinger's 技术进行单侧股动脉穿刺,在腹主动脉分叉上 2 cm 处放置 5.0F 猪尾型导管,按速度 10 mL/s 注射 30 mL 优维显,136.1 kpa 压力下延迟 1 秒进行 DSA 摄影显示肿瘤部位和肿瘤供血动脉,依据 DSA 影像学表现选择 RH、4.0~5.0FRS 或 Cobra 导管,超选择插入髂内动脉前干或子宫动脉。依据动脉化疗用药原则选择:奈达铂 80~100 mg/m² 或卡铂 300 mg/m² 或顺铂 60~90 mg/m²,用生理盐水稀释,液体总量为 150~100 mL。对所有患者进行化疗灌注后(时间 20 min,液体总量的 2/3)将含有抗癌药物(液体总量的 2/3)的明胶海绵颗粒栓塞子宫动脉或双髂内动脉。

1.3 观察指标

观察治疗后常规组及介入组临床特征表现及并发症,测量肿瘤直径大小,对临床分期变化进行分析,并按照 WHO 评价

标准进行疗效评价:完全缓解(CR)指肿瘤完全消失并维持 4 周以上;部分缓解(PR)指肿瘤缩小 50%以上并维持 4 周以上;稳定(SD)指肿瘤缩小或增大不超过 25%,且无新病灶出现;进展(PD)指肿瘤增大超过 25%,出现新病灶。同时采用生活质量指数表(QL-Index)^[9]对所有患者日常生活、活动、健康、支持及总体情况进行评价,每项分值 0 分、1 分和 2 分,每项加起来总分值越高表示健康状况越正常。

1.4 统计学分析

本次研究所得数据采用 Excel 建立数据库,由录入人员双人双录入且进行数据校对,用 SPSS 17.0 统计软件进行统计分析,计量资料采用 t 检验,计数资料采用卡方检验,等级资料采用秩和检验,检验水准 $\alpha=0.05$ 。

2 结果

2.1 两组患者治疗后临床特征比较

治疗后介入组肿瘤直径明显小于常规组,差异具有统计学意义($P<0.05$);另外介入组根治性手术率明显高于常规组,差异具有统计学意义($P<0.05$);而两组临床降期比例无明显差别,差异无统计学意义($P>0.05$),见表 2。

表 2 两组患者治疗后临床特征比较

Table 2 Comparison of clinical features of patients between the two groups

分组 Groups	N	肿瘤直径(cm) Tumor diameter (cm)	根治性手术(n,%) Radical surgery (n,%)	临床降期(n,%) Clinical downstage (n,%)
常规组 Conventional group	55	5.01± 2.01	39(70.9)	41(74.5)
介入组 Intervention group	42	4.04± 2.47	37(88.1)	32(76.2)
χ^2/t		2.088	4.147	0.035
P		0.040	0.042	0.852

2.2 两组患者治疗后近期疗效比较

常规组与介入组患者治疗后近期疗效比较差异无统计学

意义($P>0.05$),见表 3。

表 3 两组患者治疗后近期疗效比较(n,%)

Table 3 Comparison of clinical short-term effects between the two groups

分组 Groups	N	CR	PR	SD	PD
常规组 Conventional group	55	38(69.1)	12(21.8)	3(5.5)	2(3.6)
介入组 Intervention group	42	34(81.0)	6(14.3)	1(2.4)	1(2.4)

2.3 两组患者治疗后生活质量指数比较

分均明显高于常规组,差异具有统计学意义($P<0.05$),见表 4。

治疗后介入组患者日常生活、健康、总体情况以及总的评

表 4 两组患者治疗后生活质量指数比较

Table 4 Comparison of quality of life index between the two groups

分组 Groups	N	日常生活 Daily life	健康 Health	支持 Support	总体情况 Whole situation	总分 Overall score
常规组 Conventional group	55	1.04± 0.51	1.45± 0.59	1.25± 0.32	1.24± 0.33	5.08± 3.01
介入组 Intervention group	42	1.39± 0.28	1.86± 0.51	1.35± 0.36	1.36± 0.21	6.37± 2.98
t		4.310	3.593	1.445	2.182	2.100
P		0.001	0.001	0.152	0.032	0.038

2.4 两组患者治疗后并发症情况

治疗后介入组患者 3 例发生膀胱损伤,2 例发生直肠损伤,1 例发生输尿管损伤,而常规组所有患者均发生继发型闭经,10 例发生放射性直肠炎,6 例发生放射性膀胱炎,6 例继发肠道感染,3 例发生局部放射性皮肤及软组织损伤。

3 讨论

宫颈癌在世界各地都存在,是人体最常见的恶性肿瘤之一,不但在女性生殖器官肿瘤中占首位,而且是女性各种恶性肿瘤中最常见的癌瘤^[6]。很多患者因自我保健意识不强以及经济水平低下等多种原因造成宫颈癌诊断不及时,而发展成中晚期患者^[7],此时传统的放疗治疗以及手术治疗效果常常不理想,因为患者大部分都具有宫旁以及区域淋巴结转移,同时病灶较大,对放疗敏感性不高,从而造成手术困难或无法手术^[8-10]。近年来,随着医疗技术的发展以及各种辅助治疗的提出,使宫颈癌由之前以手术和放疗为主化疗为辅的术后治疗手段发展到术前治疗^[11,12],尤其术前介入动脉化疗得到较大重视,目前介入性子宫颈动脉栓塞术联合手术、放疗治疗方法已成为治疗各期宫颈癌患者的有效方法^[13,14]。本研究回顾性分析了 97 例局部晚期动脉宫颈癌患者的临床资料,欲比较传统放疗及介入性动脉化疗两种方式治疗局部晚期动脉宫颈癌的临床效果。

本研究结果显示,常规组与介入组患者治疗后的近期疗效以及临床降期比例均较高,且差异无统计学意义。而介入组患者治疗后肿瘤直径明显小于常规组,而根治性手术率明显高于常规组,差异均具有统计学意义。介入性动脉化疗是通过导管直接在肿瘤供血动脉内注入化疗药物,使以较少药物剂量令癌组织首先获得最高的冲击浓度,药物与血浆蛋白结合减少,药物利用度大幅度提高^[15],同时没有破坏病灶的各级血管、淋巴管^[16],另外病灶周围组织、微血管和区域淋巴道中也具有较高的药物浓度,从而达到高效杀伤作用,有助于缩小原发病灶,降低临床期别^[17,18]。介入性动脉化疗还有助于手术切除,控制淋巴

管、血管内的转移,减少术中及术后的远处转移,降低手术并发症,还让不能进行手术者获得手术机会,并且提高肿瘤细胞对放射的敏感性^[19,20]。本研究结果显示传统放疗组发生并发症的患者较多,易使患者发生继发型闭经、放射性直肠炎、放射性膀胱炎、局部放射性皮肤及软组织损伤以及继发肠道感染,而介入组发生并发症的患者较少。同时治疗后介入组患者日常生活、健康、总体情况以及总的评分均明显高于常规组,差异均具有统计学意义,常规组生活质量指数较低可能与患者放疗治疗后出现多种并发症有一定关系。

综上所述,传统放疗与介入性动脉化疗治疗局部晚期动脉宫颈癌患者均具有较好的近期效,但介入性动脉化疗能更有效降低肿瘤大小,具有较高的根治性手术率以及生活质量,同时并发症相对较少。

参考文献(References)

- [1] 邓柑雀,黄广优,蒙以良,等.同步放化疗治疗中晚期宫颈癌的疗效观察[J].广西医学,2012,34(9):1208-1209,1212
Deng Gan-que, Huang Guang-you, Meng Yi-liang, et al. Observation of curative effect of concurrent chemoradiotherapy in the treatment of advanced cervical cancer [J]. Guangxi medical journal, 2012, 34 (9): 1208-1209, 1212
- [2] Otahal B, Dolezel M, Cvek J, et al. Dosimetric comparison of MRI-based HDR brachytherapy and stereotactic radiotherapy in patients with advanced cervical cancer: A virtual brachytherapy study [J]. Rep Pract Oncol Radiother, 2014, 19(6): 399-404
- [3] Bazaeva I, Gorbunova V A, Kravets O A, et al. Chemoradiotherapy for locally advanced cervical cancer[J]. Vopr Onkol, 2014, 60(3): 280-287
- [4] Errachdi A, Asabbane A, Nkoua E B, et al. Advanced cervical cancer: Evolutionary and prognostic Moroccan experience [J]. Presse Med, 2014, 43(10 Pt 1): e257-e264
- [5] Fu J H, Gao Z, Ren C C, et al. Comparison of clinical efficacy of three different neoadjuvant approaches (chemotherapy combined vaginal

- intracavitary irradiation, neoadjuvant chemotherapy alone or radiotherapy) combined with surgery for patients with stage Ib2 and IIa2 cervical cancer[J]. Asian Pac J Cancer Prev, 2013, 14(4): 2377-2381
- [6] Fujiwara K, Monk B, Devouassoux-Shisheboran M. Adenocarcinoma of the Uterine Cervix: Why Is it Different? [J]. Curr Oncol Rep, 2014, 16(12): 416
- [7] Aragona A M, Soderini A H, Cuneo N A. Defining the concept of locally advanced squamous cell carcinoma of the vulva: a new perspective based on standardization of criteria and current evidence [J]. J Gynecol Oncol, 2014, 25(4): 272-278
- [8] Liu R, Wang X, Tian J H, et al. High dose rate versus low dose rate intracavity brachytherapy for locally advanced uterine cervix cancer [J]. Cochrane Database Syst Rev, 2014, 10: D7563
- [9] Li Z, Yang S, Liu L, et al. A comparison of concurrent chemoradiotherapy and radiotherapy in Chinese patients with locally advanced cervical carcinoma: a multi-center study [J]. Radiat Oncol, 2014, 9: 212
- [10] Marosevic G, Ljuca D, Osmic H, et al. Inter-application displacement of brachytherapy dose received by the bladder and rectum of the patients with inoperable cervical cancer [J]. Radiol Oncol, 2014, 48(2): 203-209
- [11] Touboul C, Skalli D, Guillo E, et al. Treatment of cervical cancer [J]. Rev Prat, 2014, 64(6): 802-806
- [12] Vizza E, Corrado G, Zanagnolo V, et al. Neoadjuvant chemotherapy followed by robotic radical hysterectomy in locally advanced cervical cancer: a multi-institution study [J]. Gynecol Oncol, 2014, 133(2): 180-185
- [13] Minig L, Patrono M G, Romero N, et al. Different strategies of treatment for uterine cervical carcinoma stage IB2-IIIB [J]. World J Clin Oncol, 2014, 5(2): 86-92
- [14] Chao A, Lin C T, Lai C H. Updates in systemic treatment for metastatic cervical cancer [J]. Curr Treat Options Oncol, 2014, 15(1): 1-13
- [15] Yang M, Zeng Y, Shen Z, et al. Clinical characteristics and efficiency of interventional therapy for coronary artery involvement in Takayasu's arteritis [J]. National Medical Journal of China, 2014, 94(24): 1874-1877
- [16] Yu H, Stavas J M. The role of interventional radiology in management of benign and malignant gynecologic diseases [J]. Obstet Gynecol Surv, 2013, 68(10): 691-701
- [17] Murata S, Mine T, Sugihara F, et al. Interventional treatment for unresectable hepatocellular carcinoma [J]. World J Gastroenterol, 2014, 20(37): 13453-13465
- [18] Molla N, AlMenieir N, Simoneau E, et al. The role of interventional radiology in the management of hepatocellular carcinoma [J]. Curr Oncol, 2014, 21(3): e480-e492
- [19] Ghaemmaghami F, Saleh-Gargari S, Sahebdel B, et al. Risk factors and clinical aspects of recurrent invasive cervical carcinoma [J]. J Obstet Gynaecol India, 2012, 62(6): 674-678
- [20] Levitchi M, Charra-Brunaud C, Quetin P, et al. Impact of dosimetric and clinical parameters on clinical side effects in cervix cancer patients treated with 3D pulse-dose-rate intracavitary brachytherapy [J]. Radiother Oncol, 2012, 103(3): 314-321

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- [11] Conrotto F, Scacciarella P, D'Ascenzo F, et al. Long-term outcomes of percutaneous coronary interventions or coronary artery bypass grafting for left main coronary artery disease in octogenarians (from a Drug-Eluting stent for Left main Artery registry substudy) [J]. Am J Cardiol, 2014, 113(12): 2007-2012
- [12] Patel VG, Brayton KM, Tamayo A, et al. Angiographic success and procedural complications in patients undergoing percutaneous coronary chronic total occlusion interventions: a weighted meta-analysis of 18,061 patients from 65 studies [J]. JACC Cardiovasc Interv, 2013, 6(2): 128-136
- [13] Hoebers LP, Claessen BE, Dangas GD, et al. Long-term clinical outcomes after percutaneous coronary intervention for chronic total occlusions in elderly patients (≥ 75 years): five-year outcomes from a 1,791 patient multi-national registry [J]. Catheter Cardiovasc Interv, 2013, 82(1): 85-92
- [14] Valenti R, Vergara R, Migliorini A, et al. Predictors of reocclusion after successful drug-eluting stent-supported percutaneous coronary intervention of chronic total occlusion [J]. J Am Coll Cardiol, 2013, 61(5): 545-550
- [15] De Felice F, Fiorilli R, Parma A, et al. Clinical outcome of patients with chronic total occlusion treated with drug-eluting stents [J]. Int J Cardiol, 2009, 132(3): 337-341
- [16] De Felice F, Fiorilli R, Parma A, et al. 3-year clinical outcome of patients with chronic total occlusion treated with drug-eluting stents [J]. JACC Cardiovasc Interv, 2009, 2(12): 1260-1265
- [17] Rubartelli P, Petronio AS, Guiducci V, et al. Comparison of sirolimus-eluting and bare metal stent for treatment of patients with total coronary occlusions: results of the GISSOC II-GISE multicentre randomized trial [J]. Eur Heart J, 2010, 31(16): 2014-2020
- [18] Patel MR, Marso SP, Dai D, et al. Comparative effectiveness of drug-eluting versus bare-metal stents in elderly patients undergoing revascularization of chronic total coronary occlusions: results from the National Cardiovascular Data Registry, 2005-2008 [J]. JACC Cardiovasc Interv, 2012, 5(10): 1054-1061
- [19] Zellerhoff C, Schneider S, Senges J, et al. Sirolimus-eluting stents in the treatment of chronic total coronary occlusions: results from the prospective multi-center German Cypher Stent Registry [J]. Clin Res Cardiol, 2008, 97(4): 253-259
- [20] Yeh RW, Drachman DE. Coronary chronic total occlusion in the elderly: demographic inevitability, treatment uncertainty [J]. Catheter Cardiovasc Interv, 2013, 82(1): 93-94