

顺铂周方案化疗联合大分割适形放疗治疗复发鼻咽癌

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Title: Cisplatin weekly regimen combined with large segmentation conformal radiotherapy for recurrent nasopharyngeal carcinoma

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摘要: 目的:观察顺铂周方案化疗联合大分割适形放疗治疗复发鼻咽癌的相关放化疗不良反应、生活质量及疗效。方法:2008年10月至2013年2月我科收治鼻咽癌复发患者101例,倾向性得分匹配法分成鼻咽癌单纯放疗组(对照组:全部采用三维适形放疗,大分割,每次3 Gy,每周5次,共17-20次,总量51-60 Gy/4周)和鼻咽癌同步放化疗组(研究组:在对照组的基础上,采取顺铂周方案化疗,顺铂30 mg/m²,第1天,1次/周,共4周)。观察放化疗不良反应、生活质量影响、近远期疗效等。结果:两组患者近期放射损伤反应如口干、口腔黏膜损伤、颌面部皮肤损伤、乏力等,远期反应如口干、耳聋、张口困难、颌面部肌肉纤维化、放射性脑病等比较均无统计学差异($P > 0.05$),两组患者生活质量评价(KPS评分、体重变化)治疗前与治疗结束时及治疗结束时与治疗3个月对比,均无统计学差异($P > 0.05$),对照组3个月后、6个月后、9个月后、12个月后有效率分别为52.9%、60.8%、64.7%、66.7%,而研究组有效率分别为70.0%、78.0%、84.0%、88.0%,9个月后、12个月后有效率对比两组有统计学差异($P < 0.05$),对照组1年、2年、3年、4年、5年生存率分别为94.1%、74.5%、58.8%、43.1%、33.3%,研究组1年、2年、3年、4年、5年生存率分别为96.0%、84.0%、74.0%、64.0%、54.0%,两组4年生存率、5年生存率对比有统计学差异($P < 0.05$)。结论:顺铂周方案化疗联合大分割适形放疗治疗复发鼻咽癌,有较好的近期疗效与远期疗效,可明显提高肿瘤的局部控制率,且不良反应可耐受,安全性较好。

Abstract: Objective: To observe the adverse reactions of radiotherapy and chemotherapy, quality of life, and curative effect in the treatment of NPC recurrence with cisplatin weekly regimen chemotherapy and large segmentation conformal radiotherapy. Methods: From October 2008 to February 2013, 101 patients with recurrent NPC were treated. The propensity score matching method was divided into NPC alone radiotherapy group (control group: All three-dimensional conformal radiotherapy, large segmentation, 3 Gy each time, 5 times a week, a total of 17-20 times, total 51-60 Gy/4 weeks) and concurrent radiotherapy and chemotherapy group of NPC (study group: On the basis of the control group, cisplatin weekly chemotherapy, cisplatin 30 mg/m², day 1, once/week, for a total of 4 weeks). Observe adverse effects of radiotherapy and chemotherapy, quality of life, curative effect in the near and far. Results: The two groups of patients had recent radiation injury reactions such as dry mouth, oral mucous membrane, maxillofacial skin, and fatigue. Long-term reactions such as dry mouth, deafness, difficulty in opening mouth, maxillofacial muscle fibrosis, and radiation encephalopathy, which were not statistically significant. There was no significant difference in the quality of life (KPS score, weight change) between the two groups before and after the end of treatment and at the end of treatment and 3 months after treatment ($P > 0.05$). The effective rates of the control group after 3 months, 6 months, 9 months, and 12 months were 52.9%, 60.8%, 64.7%, and 66.7%, respectively, while the study group's effective rates were 70.0% and 78.0%, 84.0%, 88.0%. In 9 months, 12 months after the effective rate the two groups were

statistically significant ($P < 0.05$). In the control group 1-year, 2-year, 3-year, 4-year and 5-year survival rates were 94.1%, 74.5%, 58.8%, 43.1%, and 33.3%, respectively. The 1-year, 2-year, 3-year, 4-year, and 5-year survival rates of the study group were 96.0%, 84.0%, 74.0%, 64.0%, and 54.0%, respectively. There was a statistically significant difference between the two groups in 4-year survival rate and 5-year survival rate ($P < 0.05$). Conclusion: The cisplatin weekly regimen combined with large segmental conformal radiotherapy for recurrent NPC has good short-term efficacy and long-term efficacy. It can significantly increase the local control rate of the tumor, and the adverse reactions can be tolerated with good safety.

参考文献/REFERENCES

- [1] Liu LT, Chen QY, Tang LQ, et al. With or without reirradiation in advanced local recurrent nasopharyngeal carcinoma: a case-control study [J]. *Bmc Cancer*, 2016, 16(1):774.
- [2] Yao JJ, Zhou GQ, Zhang F, et al. Neoadjuvant and concurrent chemotherapy have varied impacts on the prognosis of patients with the ascending and descending types of nasopharyngeal carcinoma treated with intensity-modulated radiotherapy [J]. *Plos One*, 2016, 11(10):e0161878.
- [3] Gao TS, Fan XL, Li G, et al. Clinical efficacy analysis of sequential palliative radiotherapy for recurrent nasopharyngeal carcinoma treated with gemcitabine and nedaplatin [J]. *Chinese Journal of Clinical Rational Drug Use*, 2015, 8(24):38-40. [高天生, 范小玲, 李庚, 等. 吉西他滨联合奈达铂化疗后序贯行姑息性放疗治疗复发性鼻咽癌的临床疗效分析 [J]. *临床合理用药杂志*, 2015, 8(24):38-40.]
- [4] Liu B, Liu LX, Zang AM, et al. Clinical observation of the efficacy and adverse reactions of nedaplatin combined with 5-fluorouracil in the treatment of recurrent nasopharyngeal carcinoma [J]. *Hebei Medical Journal*, 2015, 37(11):1646-1648. [刘斌, 刘丽霞, 臧爱民, 等. 奈达铂联合5-氟尿嘧啶治疗复发性鼻咽癌的有效性及其不良反应的临床观察 [J]. *河北医药*, 2015, 37(11):1646-1648.]
- [5] Wambersie A, Landberg T. ICRU report 62: Prescribing, recording and reporting photon beam therapy (supplement to ICRU report 50) [J]. *Journal of the ICRU*, 1999, 32(1):1-52.
- [6] Lee N, Harris J, Garden AS, et al. Intensity-modulated radiation therapy with or without chemotherapy for nasopharyngeal carcinoma: radiation therapy oncology group phase II trial 0225 [J]. *J Clin Oncol*, 2009, 27(22):3684-3690.
- [7] Ouyang PY, Bi ZF, Zhang LN, et al. Outcomes of induction chemotherapy plus intensity-modulated radiotherapy (IMRT) versus IMRT plus concurrent chemotherapy for locoregionally advanced nasopharyngeal carcinoma: A propensity matched study [J]. *Translational Oncology*, 2016, 9(4):329-335.
- [8] Hong S, Zhang L. Gemcitabine improves survival in patients with recurrent or metastatic nasopharyngeal carcinoma [J]. *Chinese Journal of Cancer*, 2016, 35(12):645-646.
- [9] Li NP, Huang RW, Feng Q, et al. Therapeutic effect of IMRT combined with gemcitabine and cisplatin on recurrent nasopharyngeal carcinoma [J]. *Journal of Basic and Clinical Oncology*, 2017, 30(5):407-409. [李能平, 黄瑞文, 冯庆, 等. 调强放疗联合吉西他滨加顺铂化疗治疗复发性鼻咽癌的近期疗效观察 [J]. *肿瘤基础与临床*, 2017, 30(5):407-409.]
- [10] Blanchard P, Lee A, Marguet S, et al. Chemotherapy and radiotherapy in nasopharyngeal carcinoma: an update of the MAC-NPC meta-analysis [J]. *Lancet Oncology*, 2015, 16(6):645-655.
- [11] Zhang H, Liang JM, Feng WN, et al. Gemcitabine combined with oxaliplatin in the treatment of recurrent nasopharyngeal carcinoma [J]. *Chinese Journal of Clinical Oncology and Rehabilitation*, 2015, 22(10):1203-1205. [张华, 梁剑苗, 冯卫能, 等. 吉西他滨联合奥沙利铂治疗复发性鼻咽癌的疗效 [J]. *中国肿瘤临床与康复*, 2015, 22(10):1203-1205.]
- [12] Song JH, Wu HG, Suk KB, et al. The role of neoadjuvant chemotherapy in the treatment of nasopharyngeal carcinoma: A multi-institutional retrospective study (KROG 11-06) using propensity score matching analysis [J]. *Cancer Research & Treatment*, 2015, 48(3):917-927.
- [13] Lan XW, Zou XB, Yao X, et al. Retrospective analysis of the survival benefit of induction chemotherapy in stage IVa-b nasopharyngeal carcinoma [J]. *Plos One*, 2016, 11(8):e0160758.
- [14] Peng RY, Cai S, Zhao H, et al. Effect of Shanbang nasal lotions on radiotherapeutic side reactions in nasopharyngeal carcinoma [J]. *The Journal of Practical Medicine*, 2011, 27(10):1846-1848. [彭如筠, 蔡霜, 赵慧, 等. 善邦通鼻冲洗剂防治鼻咽癌放射治疗的副反应观察 [J]. *实用医学杂志*, 2011, 27(10):1846-1848.]
- [15] Xie D. Comparison of conventional and large segmentation results of three-dimensional conformal radiotherapy for nasopharyngeal carcinoma [J]. *Contemporary Medicine*, 2014, 3(8):61-64. [谢地. 三维适形放射治疗鼻咽癌的常规分割和大分割效果比较 [J]. *当代医学*, 2014, 3(8):61-64.]
- [16] Chan WW, Keam B, Heo DS, et al. Locoregionally advanced nasopharyngeal carcinoma treated with intensity-modulated radiotherapy plus concurrent weekly cisplatin with or without neoadjuvant chemotherapy [J]. *Radiation Oncology Journal*, 2015, 33(2):98-108.
- [17] Zhang L, Huang Y, Hong S, et al. Gemcitabine plus cisplatin versus fluorouracil plus cisplatin in recurrent or metastatic nasopharyngeal carcinoma: a multicentre, randomised, open-label, phase 3 trial [J]. *Lancet*, 2016, 388(10054):1883-1892.
- [18] Lin KM, Chaosu Hu MD, Xiaoshuang Niu MD, et al. Neoadjuvant chemotherapy followed by concurrent chemoradiation for locoregionally advanced nasopharyngeal carcinoma [J]. *Cancer*, 2013, 119(23):4111-4118.
- [19] Du C, Ying H, Zhou J, et al. Experience with combination of docetaxel, cisplatin plus 5-fluorouracil chemotherapy, and intensity-modulated radiotherapy for locoregionally advanced nasopharyngeal

carcinoma [J]. International Journal of Clinical Oncology, 2013, 18(3):464-471.

[20] Zhong YH, Dai J, Wang XY, et al. Phase II trial of neoadjuvant docetaxel and cisplatin followed by intensity-modulated radiotherapy with concurrent cisplatin in locally advanced nasopharyngeal carcinoma [J]. Cancer Chemotherapy & Pharmacology, 2013, 71(6):1577-1583.

[21] Sun Y, Li WF, Chen NY, et al. Induction chemotherapy plus concurrent chemoradiotherapy versus concurrent chemoradiotherapy alone in locoregionally advanced nasopharyngeal carcinoma: a phase 3, multicentre, randomised controlled trial [J]. Lancet Oncology, 2016, 17(11):1509-1520.

[22] Lv X, Xia WX, Ke LR, et al. Comparison of the short-term efficacy between docetaxel plus carboplatin and 5-fluorouracil plus carboplatin in locoregionally advanced nasopharyngeal carcinoma [J]. Oncotargets & Therapy, 2016, 9:5123-5131.

[23] Chai SJ, Yap YY, Foo YC, et al. Identification of four-jointed box 1 (FJX1)-specific peptides for immunotherapy of nasopharyngeal carcinoma [J]. Plos One, 2015, 10(11):e0130464.

[24] Ji RJ, Guan K, Zhuang JF, et al. Efficacy and adverse effect of gemcitabine combined with nedaplatin followed by sequential palliative radiotherapy for treatment of recurrent nasopharyngeal carcinoma [J]. Medical Recapitulate, 2017, 23(11):2285-2288. [纪荣佳, 管凯, 庄建发, 等. 吉西他滨联合奈达铂化疗后序贯行姑息性放疗治疗复发性鼻咽癌的疗效及不良反应分析 [J]. 医学综述, 2017, 23(11):2285-2288.]

[25] Chan OS, Sze HC, Lee MC, et al. Reirradiation with intensity-modulated radiotherapy for locally recurrent T3 to T4 nasopharyngeal carcinoma [J]. Head & Neck, 2017, 39(3):533-540.

[26] Karam I, Huang SH, Mcniven A, et al. Outcomes after reirradiation for recurrent nasopharyngeal carcinoma: North American experience [J]. Head & Neck, 2016, 38(S1):E1102-E1109.

[27] Chen YP, Rui G, Na L, et al. Efficacy of the additional neoadjuvant chemotherapy to concurrent chemoradiotherapy for patients with locoregionally advanced nasopharyngeal carcinoma: A Bayesian network Meta-analysis of randomized controlled trials [J]. 2015, 6(9):883-892.

[28] Ou D, Blanchard P, El KC, et al. Induction chemotherapy with docetaxel, cisplatin and fluorouracil followed by concurrent chemoradiotherapy or chemoradiotherapy alone in locally advanced non-endemic nasopharyngeal carcinoma [J]. Oral Oncology, 2016, 62:114-121.

[29] Sun Y, Li WF, Chen NY, et al. Induction chemotherapy plus concurrent chemoradiotherapy versus concurrent chemoradiotherapy alone in locoregionally advanced nasopharyngeal carcinoma: a phase 3, multicentre, randomised controlled trial [J]. Lancet Oncol, 2016, 17(11):1509-1520.

[30] Zou Wenhui, Tian Yunming, Pan Xiuhua, et al. Clinical observation of intensity modulated radiotherapy combined with chemotherapy for locally advanced nasopharyngeal carcinoma [J]. Modern Oncology, 2016, 24(02):215-218. [邹文蕙, 田允铭, 潘秀花, 等. 调强放疗同期化疗治疗局部中晚期鼻咽癌 [J]. 现代肿瘤医学, 2016, 24(02):215-218.]

[31] Guan Y, Liu S, Wang HY, et al. Long-term outcomes of a phase II randomized controlled trial comparing intensity-modulated radiotherapy with or without weekly cisplatin for the treatment of locally recurrent nasopharyngeal carcinoma [J]. Chinese Journal of Cancer, 2016, 35(4):181-189.

[32] Yoshizaki T, Kondo S, Muroto S, et al. Progress and controversy for the role of chemotherapy in nasopharyngeal carcinoma [J]. Japanese Journal of Clinical Oncology, 2015, 45(3):244-247.

[33] Zhong Q, Liu JS, Wu RR. Clinical study of metastatic NPC nimotuzumab combined with radiotherapy [J]. Contemporary Medicine, 2017, 23(11):40-42. [钟琼, 刘建生, 吴仁瑞. 尼妥珠单抗联合放疗治疗复发转移性鼻咽癌的临床研究 [J]. 当代医学, 2017, 23(11):40-42.]

[34] Kong L, Hu J, Guan X, et al. Phase I/II trial evaluating carbon ion radiotherapy for salvaging treatment of locally recurrent nasopharyngeal carcinoma [J]. Journal of Cancer, 2016, 7(7):774-783.

[35] Xiao WW, Liu S, Tian YM, et al. Prognostic significance of tumor volume in locally recurrent nasopharyngeal carcinoma treated with salvage intensity-modulated radiotherapy [J]. Plos One, 2015, 10(4):e0125351.

[36] Chen X, Lei H, Liang Z, et al. Intensity-modulated radiotherapy controls nasopharyngeal carcinoma distant metastasis and improves survival of patients [J]. Springerplus, 2016, 5(1):1459.

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