

# CT引导下三管式腔内后装与腔内结合插植后装用于宫颈癌治疗的对比研究

《现代肿瘤医学》[ISSN:1672-4992/CN:61-1415/R] 期数: 2019年22期 页码: 4077-4080 栏目: 论著(放射治疗) 出版日期: 2019-10-08

**Title:** A comparative study of the CT-guided three tube intracavitary brachytherapy and intracavitary/interstitial brachytherapy for cervical cancer

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**关键词:** 宫颈癌; 三维腔内后装; 腔内; 组织间插植; 剂量学

**Keywords:** cervical cancer; three-dimensional brachytherapy; intracavitary; inrerstitial interpolation; dosimetry

**分类号:** R737.33

**DOI:** 10.3969/j.issn.1672-4992.2019.22.033

**文献标识码:** A

**摘要:** 目的: 比较局部晚期宫颈癌采用标准三管施源器的腔内后装(tandem and ovoid)与腔内结合组织间插植后装的剂量学差异。方法: CT引导下的三维适形近距离治疗局部晚期宫颈癌患者20例, 间隔采用三管式腔内后装与腔内结合组织间插植共72次。按照施源器的不同分成2个组, 每组36次, 对靶区剂量、危及器官等进行比较。结果: 在给予A点相同处方剂量的情况下, HR-CTV D90、D100在三管式腔内后装组与腔内结合组织间插植后装组中分别为(590.0±46.4) cGy、(471.2±66.2) cGy, (502.8±67.7) cGy、(335.9±46.0) cGy,  $P < 0.05$ ), 膀胱、直肠、乙状结肠D2cc均相近( $P=0.85, 0.28, 0.53$ )。结论: 采用腔内结合插植后装治疗局部晚期宫颈癌比三管式腔内后装可获得更高的靶区剂量, 但长期疗效及晚期反应仍需进一步研究。

**Abstract:** Objective: To investigate the dosimetric differences between the three tube intracavitary brachytherapy(tandem and ovoid) and the intracavitary/interstitial(IC/IS)brachytherapy for locally advanced cervical cancer.Methods: Twenty patients with locally advanced cervical cancer were treated with CT-guided 3D conformal brachytherapy.The intracavitary brachytherapy and the IC/IS brachytherapy were used interchangeably for 72 cycles.Patients were divided into two groups according to the type of technique.Each group received 36 cycles of treatment.Dosimetric difference in the planning for clinical target and OAR was compared.Results:Gaving point A same prescription dose,HR-CTV D90,D100 was (590.0±46.4) cGy, (471.2±66.2) cGy in intracavitary brachytherapy group and IC/IS brachytherapy group were (502.8±67.7) cGy, (335.9±46.0) cGy, $P < 0.05$ .The average D2cc values for the bladder,rectum and sigmoid were similar ( $P=0.85,0.28,0.53$ ).Conclusion:IC/IS brachytherapy shows a significant dosimetric advantage compared with intracavitary brachytherapy.However,the long term curative effect and toxicity need to be further investigated.

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**备注/Memo:** 中山市科技计划项目 (编号: 2017B1054)

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更新日期/Last Update: 1900-01-01