

doi: 10.13241/j.cnki.pmb.2019.11.043

## 经尿道针状电极膀胱肿瘤整块切除术治疗膀胱癌的临床分析 \*

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**摘要 目的:**探讨经尿道针状电极膀胱肿瘤整块切除术治疗膀胱癌的临床疗效及安全性。**方法:**选择2015年1月-2017年1月我院收治的膀胱癌患者100例纳入本次研究,根据简单随机分组法分为观察组(n=51)和对照组(n=49)。对照组使用尿道膀胱肿瘤电切术治疗,观察组采用经尿道针状电极膀胱肿瘤整块切除术进行治疗。比较两组患者临床疗效、手术情况、治疗前后生活质量的变化及并发症的发生情况和复发率。**结果:**治疗后,两组患者的临床总有效率分别为82.35%,61.22%,观察组显著高于对照组( $P < 0.05$ );两组患者手术时间比较无显著性差异( $P > 0.05$ );观察组患者尿管留置时间、术中出血量及住院时间均显著低于对照组( $P < 0.05$ );两组患者治疗后生活质量评分均较治疗前显著提高,且观察组显著高于对照组( $P < 0.05$ );两组患者并发症总发生率分别为1.96%,24.49%,复发率分别为9.8%,34.69%,观察组均显著低于对照组( $P < 0.05$ )。**结论:**采用经尿道针状电极膀胱肿瘤整块切除术治疗膀胱癌的临床疗效显著优于尿道膀胱肿瘤电切术治疗,其可有效改善患者的生活质量,且安全性更高。

**关键词:**尿道针状电极膀胱肿瘤整块切除术;膀胱癌;疗效;生活质量

中图分类号:R737.14 文献标识码:A 文章编号:1673-6273(2019)11-2197-04

## Curative Efficacy of Transurethral Needle Electrode Excision for Bladder Tumor in the Treatment of Bladder Cancer\*

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**ABSTRACT Objective:** To study Curative efficacy of Transurethral needle electrode excision for bladder tumor in treatment of Bladder cancer. **Methods:** 100 cases of bladder cancer patients admitted to our hospital from January 2015 to January 2017 were selected for this study, the patients were divided into observation group (n=51) and control group (n=49) by simple random grouping. The control group was treated with urethrocystectomy, and the observation group was treated with transurethral needle electrode complete cystectomy. The clinical efficacy, surgical conditions, changes in quality of life before and after treatment, complications and recurrence rates were compared between the two groups. **Results:** After treatment, the total clinical effective rates of the two groups were 82.35% and 61.22%, respectively. The observation group was significantly higher than the control group ( $P < 0.05$ ). There was no significant difference in operation time between the two groups ( $P > 0.05$ ). The indwelling time, intraoperative blood loss and hospitalization time of the observation group were significantly lower than those of the control group ( $P < 0.05$ ). Quality of life scores of patients in the two groups after treatment were significantly improved compared with that before treatment, and the observation group was significantly higher than the control group ( $P < 0.05$ ). The total incidence of complications in the two groups were 1.96%, 24.49%, 9.8% and 34.69%, respectively. The observation group was significantly lower than the control group ( $P < 0.05$ ). **Conclusion:** The clinical efficacy of transurethral needle electrode complete cystectomy for bladder cancer is significantly better than that of urethrocystectomy, which can effectively improve the quality of life of patients with higher safety.

**Key words:** Urethral needle electrode lumpectomy for bladder tumor; Bladder cancer; Curative effect; The quality of life

**Chinese Library Classification(CLC): R737.14 Document code: A**

**Article ID:** 1673-6273(2019)11-2197-04

### 前言

膀胱癌是泌尿系统常见的恶性肿瘤,通常是指发生在膀胱黏膜上的恶性肿瘤,临床表现为无痛、间歇血尿及排尿困难等症状,具有易复发性<sup>[1,2]</sup>。研究显示膀胱癌在成人恶性肿瘤中占

3.2%,与西方国家相比,其发病率呈逐年上升趋势<sup>[3,4]</sup>。目前临上对于膀胱癌的治疗通常以传统术式经尿道膀胱肿瘤电切术为主,具有复发率低等优点,但其不能完整切除肿瘤组织,无法为肿瘤病理提供标本,不利于临床分期的准确性;且需要借助电物理效应分成切割肿瘤,对周边组织具有较大的破坏性,诱

\* 基金项目:陕西省自然科学基础研究计划项目(2015JQ8308)

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(收稿日期:2019-02-12 接受日期:2019-03-04)

发肿瘤扩大、转移等缺点<sup>[5,6]</sup>。

近年来,随着患者对生活质量要求的提高,微创手术方法被广泛应用于膀胱癌的治疗<sup>[7,8]</sup>。经尿道针状电极膀胱肿瘤整块切除术是近年来提出的手术方式,可获得完整的膀胱肿瘤标本,有助于更准确地诊断膀胱肿瘤的切缘和浸润深度,利于病理分期<sup>[9,10]</sup>。本研究主要探讨了经尿道针状电极膀胱肿瘤整块切除术治疗膀胱癌的临床效果和安全性,现报道如下。

## 1 资料与方法

### 1.1 一般资料

选择2015年1月-2017年1月于我院进行治疗的100例膀胱癌患者进行研究,本次研究获得伦理委员会批准。采用简单随机分组法将患者分为观察组,其中男29例,女22例;年龄52~83岁,平均(66.25±7.31)岁;对照组男28例,女21例;年龄52~80岁,平均(65.13±7.45)岁。两组患者一般资料比较差异不显著,具有可比性。

纳入标准:(1)符合《表浅膀胱癌的诊断与治疗》<sup>[11]</sup>诊断标准;(2)符合手术指征;(3)知情同意且签署知情同意书。排除标准:(1)患有意识障碍、精神障碍者;(2)手术禁忌者;(3)恶性血液病患者。

### 1.2 治疗方法

对照组使用尿道膀胱肿瘤电切术:患者麻醉后从肿瘤表面切割,深肌层停止,电凝止血。观察组患者采用经尿道针状电极膀胱肿瘤整块切除术:腰硬麻醉后,患者取截石位,在操作镜的辅助下从肿瘤基底外缘10 mm处开始扇形切割,至可见清晰深肌层纤维为止,切除后,创面止血。两组患者术后均辅以即刻膀胱灌注化疗。

### 1.3 观察指标

采用生活质量量表SF-36对患者进行评定,得分越高,生活质量越好;观察记录手术时间、尿管留置时间、术中出血量、住院时间、并发症发生情况及复发情况。

疗效评定标准:显效:肿瘤完全消失;有效:肿瘤消失但有残留;无效:出现新病灶或肿瘤增大。显效+有效=总有效率。

### 1.4 统计学分析

以SPSS 22.00软件包处理,计量资料用均数±标准差( $\bar{x} \pm s$ )表示,均为正态分布,组间比较使用独立样本t检验,计数资料以率表示, $\chi^2$ 检验,以P<0.05表示差异具有统计学意义。

## 2 结果

### 2.1 两组疗效的比较

手术后,观察组和对照组总有效率分别82.35%、61.22%,观察组显著高于对照组(P<0.05),见表1。

表1 两组疗效比较[例(%)]

Table 1 Comparison of the efficacy between the two groups[n(%)]

Groups	n	Effective	Valid	Invalid	Total effective rate
Observation group	51	35(68.63)	7(13.73)	9(17.65)	42(82.35)
Control group	49	16(32.65)	14(28.57)	19(38.78)	30(61.22)
$\chi^2$ value					5.534
P value					0.019

### 2.2 两组患者手术情况的比较

观察组患者术中出血量、术后住院时间及尿管留置时间均

低于对照组(P<0.05),两组手术时间比较无显著性差异(P>0.05),见表2。

表2 两组患者手术情况的比较( $\bar{x} \pm s$ )

Table 2 Comparison of the surgical conditions between the two groups( $\bar{x} \pm s$ )

Groups	n	Operation time(min)	Duration of catheter indwelling(h)	Intraoperative blood loss(mL)	Length of time(d)
Observation group	51	27.46±4.15	27.14±7.13	7.96±2.41	3.47±1.16
Control group	49	27.51±5.13	59.24±18.16	18.39±4.24	6.54±1.51
t value		0.054	11.720	15.199	11.428
P value		0.957	0.000	0.000	0.000

### 2.3 两组患者治疗前后生活质量评分的比较

治疗后,两组患者生活质量评分均较治疗前显著提高,且观察组显著高于对照组(P<0.05),见表3。

### 2.4 两组患者并发症及复发情况的比较

两组患者并发症总发生率分别为1.96%、24.49%,复发率分别为9.8%、34.69%,观察组均显著低于对照组(P<0.05),见表4。

## 3 讨论

膀胱癌是泌尿外科常见恶性肿瘤之一,占我国泌尿生殖系肿瘤发病率的第一位<sup>[12,13]</sup>。常见的膀胱尿路上皮癌,占膀胱患者总数的90%,也被称为膀胱移行细胞癌<sup>[14,15]</sup>。通常由粘膜层、粘膜层与内纵、中环、外纵三层相互交叉构成肌层,发病率较高,以男性多见,且随着年龄的增长,其发病可逐渐升高,严重影响患者的生活质量<sup>[16,17]</sup>。

近年来,随着医学研究的不断深入,多种方法被临床应用于治疗膀胱癌,患者术后生存率也逐渐提高<sup>[18,19]</sup>。经尿道膀胱肿瘤电切术是治疗膀胱癌的常用手术,但是该种方式需要将肿瘤

表3 两组患者治疗前后生活质量评分的比较( $\bar{x} \pm s$ ,分)Table 3 Comparison of the quality of life scores between the two groups before and after treatment( $\bar{x} \pm s$ , points)

Groups	n	Physical quality of life		Psychological quality of life	
		Before treatment	After treatment	Before treatment	After treatment
Observation group	51	54.66± 4.77	74.83± 5.68	54.56± 4.46	70.19± 5.04
Control group	49	54.69± 4.81	63.47± 5.41	54.63± 4.61	61.49± 4.38
t value		0.031	10.233	0.077	9.198
P value		0.975	0.000	0.939	0.000

表4 两组患者并发症及复发情况比较[例(%)]

Table 4 Comparison of complications and recurrence between the two groups[n(%)]

Groups	n	Bladder perforation	Obturator nerve reflex	The total incidence of	Recurrence
Observation group	51	1	0	1(1.96)	5(9.80)
Control group	49	3	9	12(24.49)	17(34.69)
x <sup>2</sup> value					9.022
P value					0.003

分块切除,在这个过程中,肿瘤会被变为碎块,在取出的同时,肿瘤细胞也在散播,增加术后疾病复发率<sup>[20,21]</sup>;且对于膀胱后壁附近的肿瘤,由于闭孔神经盆腔段跟随小骨盆侧壁,且靠近膀胱后壁,所以在手术中容易发生闭孔神经反射,造成严重并发症<sup>[22,23]</sup>。近年来,有学者提出了经尿道针状电极膀胱肿瘤整块切除术<sup>[24,25]</sup>,其能够获得完整的肿瘤标本,有利于准确分期,且全片高质量切除,使病理标本准确指导临床实践,可有效避免二次电切,减轻患者负担,同时还能有效止血,避免闭孔神经反射<sup>[26,27]</sup>。

本研究结果显示使用经尿道针状电极膀胱肿瘤整块切除术治疗的患者的临床总有效率高达 82.35%, 明显高于使用经尿道膀胱肿瘤电切术治疗的患者,提示经尿道针状电极膀胱肿瘤整块切除术能够明显提高患者的临床疗效。Aurélie M<sup>[28]</sup>等研究表明经尿道针状电极膀胱肿瘤整块切除术用于治疗膀胱癌可有效减少膀胱穿孔的发生,本研究也显示使用经尿道针状电极膀胱肿瘤整块切除术可有效降低并发症及复发情况比较。分析是因为经尿道针状电极膀胱肿瘤整块切除术可及时观察肿瘤有无深部肌层浸润,可获得完整的肿瘤标本清晰的肿瘤、肌层的分布层次,有助于准确地判断肿瘤浸润深度并进行病理分期,减少破碎肿瘤组织在膀胱内弥散,减少创面种植,降低不良反应的发生率。Zhang J<sup>[29]</sup>研究表明整块切除可减少患者术中出血量及住院时间,本研究结果显示使用经尿道针状电极膀胱肿瘤整块切除术治疗的患者尿管留置时间、术中出血量及住院时间均显著低于使用经尿道膀胱肿瘤电切术的患者,且躯体生活质量、心理生活质量评分显著高于对照组,这与 Lombard A P 研究相似<sup>[30]</sup>。以上结果提示整块切除能明显改善患者手术情况,改善其生活质量。分析是因为经尿道针状电极膀胱肿瘤整块切除术肿瘤基底以钝性剥离为主,手术过程中可清晰看到肿瘤是否完整切除,且术中视野清晰,可最大限度减少手术中出血量及肿瘤挤压动作、减少闭孔反射等优势,减少术后出血量。综上所述,采用经尿道针状电极膀胱肿瘤整块切除术治疗膀胱癌的临床疗效显著优于尿道膀胱肿瘤电切术治疗,其可有效改善患者的生活质量,且安全性更高。

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