

· 研究原著 ·

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鸦胆子油乳灌注预防膀胱癌术后复发

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Clinical study on intravesical instillation of Brucea Javanica oil emulsion in preventing postoperative recurrence of bladder cancer

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[Abstract] AIM: To study the effects of intravesical instillation of Brucea Javanica oil emulsion on the prevention of postoperative recurrence of bladder cancer. **METHODS:** 63 cases of bladder carcinoma were treated by operations with reserved bladder including TURBT and partial cystectomy. After surgical management, intravesical instillation of Brucea Javanica oil emulsion and instillation of other drugs were used to prevent tumor recurrence. **RESULTS:** Follow-up showed that the recurrence rate was 19.0% in the Brucea Javanica oil emulsion instillation group, which was lower than that in groups of instillations of other drugs, and the side effects of Brucea Javanica oil emulsion instillation were very mild. **CONCLUSION:** Intravesical instillation of Brucea Javanica oil emulsion, with better curative effects and less side effects, is a favorable choice for the prevention of postoperative recurrence of bladder cancer.

[Keywords] bladder neoplasms; perfusion; postoperative recurrence

[摘要] 目的: 观察鸦胆子油乳灌注对膀胱癌术后复发的预防作用。方法: 对保留膀胱手术治疗的63例膀胱癌患者, 术后采用鸦胆子油乳行膀胱灌注治疗, 并与同期做其他药物灌注者进行比较。结果: 63例全部随访, 随访时间1~6(平均3.8)a, 复发12例, 复发率为19.0%(12/63), 优于同期内其他药物灌注的预防效果, 且并发症和副作用小。结论: 鸦胆子

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油乳灌注预防膀胱癌术后复发有较好的效果和较多优点, 毒副作用少, 明显优于其他灌注药物。

[关键词] 膀胱肿瘤; 灌注; 术后复发

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0 引言

我科1996-05/2001-05共收治膀胱癌447例, 除9例未手术、127例行全膀胱切除外, 其余311例均行保留膀胱的手术。术后选用卡介苗、鸦胆子油乳、丝裂霉素和其他药物灌注治疗。现将卡介苗、鸦胆子油乳和丝裂霉素灌注的用药情况、疗效进行比较, 以探讨预防膀胱癌术后复发的有效预防方法。

1 材料和方法

1.1 材料 膀胱移行细胞癌311例中灌注卡介苗62例(A组), 丝裂霉素104例(B组), 鸦胆子油乳63例(C组), 其他药物82例。C组T1期15例、T2期37例、T3期11例, 行膀胱部分切除术11例, 经尿道膀胱肿瘤电切术(TURBT)52例。各组病例均经病理证实为膀胱移行细胞癌, T1~T3期; 初发未经治疗者; 行保留膀胱手术者; 术后能坚持膀胱灌注者; 能坚持随访1a以上者。各组病例的性别、年龄及肿瘤病理分级情况见Tab 1。

表1 患者及肿瘤情况

Tab 1 Information of patients and tumors

Group	n	Male	Female	Average age	Transitional cell carcinoma (grade)		
					I	II	III
A	62	43	19	59.7	15	40	7
B	104	73	31	59.3	21	72	11
C	63	47	16	60.4	14	41	8

1.2 方法 灌注药物前嘱患者排尽尿液并不饮水。卡介苗120 mg、丝裂霉素20 mg加生理盐水20 mL、100 g·L⁻¹鸦胆子油乳40 mL灌注入膀胱内, 并向左、右、前、后4个方向转动卧位, 共保留2 h。所有患者均自术后2 wk开始膀胱灌注。开始为每周1次,

共6次;以后每2 wk 1次,共6次;然后为每月1次,共6次. 灌注期间每3 mo 复查1次膀胱镜,对中途不愿接受膀胱镜检查者可采用B超、CT检查. 此期间如有肿瘤复发,经手术治疗后重新开始.

统计学处理:数据用SPSS 10.0统计学软件进行 χ^2 检验.

2 结果

2.1 疗效 全部随访. 鸦胆子油乳组随访时间1~6(平均3.8)a. 51例无肿瘤复发,占81.0%,1a无病率87.3%(55/63);12例于不同时间内复发,占19.0%. 其余各组平均随访时间分别为丝裂霉素组3.6a,卡介苗组3.9a. 计算各组复发率时以2a为随访终点. χ^2 检验结果表明,鸦胆子油乳组的无肿瘤复发率(87.3%)和1a无病率明显高于丝裂霉素组(69.2%)和卡介苗组(70.1%, $P < 0.05$);而复发率则明显低于丝裂霉素组和卡介苗组(19.0% vs 37.1%, 36.5%, $P < 0.05$).

由于不同药物组的肿瘤病理分级的构成比例不同,将3个治疗组不同病理分级的膀胱移行细胞癌例数相加组成标准构成,以率的标准法计算出标准复发率分别为鸦胆子油乳组14.0%,丝裂霉素组36.9%,卡介苗组37.6%. 比较其膀胱移行细胞癌的标准复发率结果,鸦胆子油乳组的标准复发率低于其余各组($P < 0.05$).

2.2 副作用 鸦胆子组:63例中发生副作用19例(30.2%),3例出现中度发热,7例发生恶心、呕吐,9例有不同程度的膀胱刺激症状;卡介苗组:62例中发生副作用38例(61.3%),其中6例发生高热39℃以上,其中结核性尿道炎、附睾结核、膀胱大出血各1例,其余各例均有不同程度的膀胱刺激症状;丝裂霉素组:104例中发生副作用51例(49.0%),其中白细胞减少18例,下腹痛或(和)膀胱刺激症状者33例. 鸦胆子组明显低于其他各组($P < 0.05$).

3 讨论

膀胱癌在保留膀胱手术后的复发率一般为60%~70%^[1]. 膀胱灌注化疗药物因其具有操作简单、疗效好的特点成为目前预防膀胱癌术后复发的主要手段. 目前灌注的常用药物有卡介苗、丝裂霉素等,均有明显的抑制肿瘤复发的作用,我院近5a的

膀胱癌患者的术后灌注情况进行回顾,对卡介苗、丝裂霉素、鸦胆子油乳3种药物的疗效进行比较,为进一步的临床工作提供理论指导. 鸦胆子系苦木科(Simaroubaceae)植物 *Brucea javanica* (L) Merr 的成熟果实,为传统杀虫剂. 实验研究证实^[2,3],鸦胆子抗肿瘤的有效成分为鸦胆子甙A, B, C,对膀胱癌细胞生长有明显的抑制作用,可直接破坏膀胱癌细胞膜、线粒体膜、内质网膜及核膜等膜性系统,使膀胱癌细胞变性、坏死;并可阻止癌细胞由G0/G1期向S期进展,抑制DNA合成,诱导癌细胞凋亡^[4-6];鸦胆子油乳膀胱灌注对亚硝酸胺诱导的小鼠膀胱癌早期病变有明显的抑制作用.

本组63例患者,经1~6a随访,51例无肿瘤复发,占81.0%,1a无病率87.3%(55/63). 鸦胆子油乳组的无肿瘤复发率和1a无病率明显高于丝裂霉素组和卡介苗组($P < 0.05$);而复发率则明显低于丝裂霉素组和卡介苗组($P < 0.05$). 且副作用小而轻微($P < 0.05$). 因此,我们认为鸦胆子油乳为腔内灌注预防膀胱肿瘤复发的理想药物,优于传统药物丝裂霉素和卡介苗,值得临床推广应用.

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