

超声引导介入治疗卵巢子宫内膜异位囊肿的疗效评估

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【摘要】目的:分析超声引导介入治疗卵巢子宫内膜异位囊肿的疗效。**方法:**选取2014年3月至2016年3月在湘雅二医院就诊的临床诊断为子宫内膜异位囊肿的143例患者,随机分为对照组和试验组。对照组71例,采用腹腔镜囊肿剔除术;试验组72例,采用超声介入穿刺治疗,用穿刺针抽空囊肿内的液体,然后生理盐水冲洗囊腔,根据囊肿大小注入无水乙醇,无水乙醇用量约为抽出囊腔内液体的70%,无水乙醇留置囊腔内10 min后抽出。治疗后6个月随访,了解患者症状改善、妊娠及复发情况,检测血清中黄体生成素、卵泡雌激素及超声检查窦状卵泡数的变化情况,评估两种方式对卵巢功能的影响。**结果:**对照组手术时间显著高于试验组[(60.24±5.33) min vs (42.13±3.17) min, $P<0.05$];试验组经过治疗,囊肿全部消失,对照组行腹腔镜手术后剔除囊肿65例,有6例患者合并有子宫肌瘤转开腹手术。对照组治疗后卵泡雌激素高于试验组[(19.54±3.62) U/L vs (15.27±3.36) U/L, $P<0.05$];试验组治愈率显著高于对照组(94% vs 66%, $P<0.05$);对照组复发率显著高于试验组(25% vs 9%, $P<0.05$)。**结论:**介入性超声治疗卵巢子宫内膜异位囊肿治愈率高,可有效减少复发,对卵巢损伤小,不影响生育功能,是一种操作简单安全有效的治疗方式。

【关键词】卵巢子宫内膜异位囊肿;介入性超声治疗;腹腔镜囊肿剔除术

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Efficacy evaluation of ultrasound-guided interventional therapy for ovarian endometriotic cysts

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Abstract: Objective To evaluate the clinical effect of ultrasound-guided interventional therapy for ovarian endometriotic cysts. **Methods** A total of 143 patients with clinically diagnosed ovarian endometriotic cysts treated in the Second Xiangya Hospital of Central South University between March 2014 and March 2016 were randomly divided into control group and experimental group. The 71 patients in control group were treated with laparoscopic cystectomy, while the 72 patients in experimental group received ultrasound interventional puncture. In experimental group, the fluid in the capsule cavity was aspirated with a puncture needle, and the capsule cavity was rinsed with normal saline. After rinsing, the ethanol was injected according to the cyst size. The amount of anhydrous ethanol was about 70% of the cavity fluid, and after 10 minutes of indwelling, the aspiration of anhydrous ethanol was performed. Six months after treatment, patients were followed-up for understanding the symptoms improvement, pregnancy and recurrence. The levels of luteinizing hormone and follicle estrogen in the serum, and the number of antecedullary follicles detected by ultrasound were measured to assess the effects of both modalities on ovarian functions. **Results** The operation time in control group was significantly higher than that in experimental group [(60.24±5.33) min vs (42.13±3.17) min, $P<0.05$]. After the treatment, cysts were disappeared in experimental group. In control group, cysts were removed in 65 cases after receiving laparoscopic surgery, and laparotomy were performed for 6 patients with uterine fibroids. The follicular estrogen in control group was higher than that in experimental group [(19.54±3.62) U/L vs (15.27±3.36) U/L, $P<0.05$]. The cure rate of experimental group was 94%, significantly higher than 66% in control group ($P<0.05$). The recurrence rate of control and experimental groups were 25% and 9%, with significant differences ($P<0.05$). **Conclusion** Interventional ultrasound therapy is a simple and safe and effective treatment for ovarian endometriosis cysts for it achieves a high cure rate, effectively reduces the recurrence rate, and causes less ovarian damages, without affecting the reproductive function.

Keywords: ovarian endometriotic cysts; interventional ultrasound therapy; laparoscopic cystectomy

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前言

介入超声技术作为现代超声医学的一个分支,是在超声基础上为进一步满足临床诊断和治疗需要而发展起来的一门新技术。它是在实时超声动态监视下,直接经皮穿刺将穿刺针或导管准确置入病灶、囊肿或管道结构中,以达到诊断或治疗的目的。介入性超声所涉及的领域相当广泛,如肝、肾囊肿的硬化治疗等^[1-5]。本研究将143例卵巢子宫内膜异位囊肿患者随机分为对照组和试验组,分别采用腹腔镜手术和超声引导下穿刺注入无水乙醇的治疗方法,观察两组的临床效果,现报告如下。

1 资料与方法

1.1 研究对象

随机选取2014年3月~2016年3月在本院就诊的临床诊断为子宫内膜异位囊肿的143例患者;年龄22~45岁,平均年龄 (32.15 ± 2.31) 岁;143例患者中月经量少或量多的34例,盆腔炎52例,肛门坠痛27例,不孕11例,月经前不规则出血19例。所有患者均为单侧囊肿,囊肿直径均 >4.5 cm。

1.2 纳入及排除标准

纳入标准:(1)出现痛经、月经不调、不孕等症状;(2)年龄在22岁以上;(3)囊肿直径 >4.5 cm;(4)对酒精不过敏;(5)患者或家属同意接受治疗。

排除标准:(1)其它原因导致的不孕;(2)年龄大于50岁;(3)已经绝经的女性;(4)不能如期完成治疗。

1.3 分组及治疗方法

随机将143例患者分为对照组和试验组。对照组71例,采用腹腔镜囊肿剔除术,在全麻状态下进行手术,23例患者行开腹手术,48例行腹腔镜手术。试验组72例患者,采用超声介入治疗。在患者月经干净后5~7 d进行治疗,治疗前做血常规检查,根据囊肿大小及部位选择穿刺点。穿刺前外阴、阴道消毒,经腹壁穿刺者要局部麻醉,铺常规无菌巾。在彩超引导下用穿刺针通过导向器迅速进针,使针尖进入囊肿中心部位,将针芯拔出,抽空囊肿内的液体,并记录液体量。然后用生理盐水冲洗囊肿,冲洗干净后将生理盐水抽出。根据囊肿大小注入无水乙醇,无水乙醇用量约为抽出囊肿内液体的70%^[4]。无水乙醇留置囊肿内10 min后抽出。整个穿刺过程在超声监视下完成,确保囊肿内液体变为澄清,达到最佳疗效(图1)。两组患者治疗前后均抽取静脉血5 mL,以转速2 000 r/min离心10 min,分离血清,存放在 -70 °C的冰柜中。



图1 手术穿刺治疗前后囊肿变化情况
Fig.1 Cyst changes before and after surgical puncture

1.4 观察指标

观察囊肿大小、囊肿消失情况、治疗后残留囊肿有无增大;检测治疗前和治疗后血清中黄体生成素(LH)、卵泡雌激素(FSH)及做超声检查窦状卵泡数(FO)的改变情况;手术6个月后随访1次,随访时做妇科常规和彩超检查,了解患者的症状改善及复发情况。

1.5 疗效评价

囊肿完全消失,痛经、盆腔疼痛有较大减轻即为治愈。治疗后症状有所缓解但随访时又再次出现或发现新的囊肿即为复发^[5]。

1.6 统计学处理

应用SPSS 19.0统计软件对数据进行统计学分析,计量资料采用均数 \pm 标准差表示,各组间均数比较采用两样本 t 检验,率的比较采用 χ^2 检验, $P<0.05$ 表示差异有统计学意义。

2 结果

2.1 两组患者临床资料对比情况

两组患者在年龄、体质量指数、囊肿直径等方面差异不显著,均无统计学意义($P>0.05$),见表1。

2.2 两种治疗方式手术时间、囊肿消除情况

对照组手术时间显著高于试验组 $[(60.24 \pm 5.33)$ min vs (42.13 ± 3.17) min, $P<0.05$];试验组经过治疗,

表1 两组患者一般资料
Tab.1 General clinical information in two groups of patients

Group	Age(years)	Diameter _{cyst} /cm	Body mass index/kg·m ⁻²
Control (n=71)	32.02±2.15	5.49±3.21	21.77±2.04
Experimental (n=72)	31.76±2.07	5.64±3.34	22.13±2.15
<i>t</i> / χ^2 value	4.22	5.46	3.52
<i>P</i> value	0.73	0.81	0.64

囊肿全部消失,对照组行腹腔镜手术后剔除囊肿 65 例,有 6 例患者合并有子宫肌瘤转开腹手术。

2.3 治疗前后两组患者血清中 LH、FSH 及做超声检查 F0 的改变情况

两组患者治疗前后 LH 变化不大,差异无统计学

意义($P>0.05$);试验组患者窦状卵泡数在治疗前后无明显变化,差异无统计学意义($P>0.05$),对照组治疗后窦状卵泡数减少,与试验组相比差异有统计学意义($P<0.05$);对照组治疗后 FSH 水平有所提高,有统计学意义($P<0.05$)。详见表 2。

表2 两组患者治疗前后血清中 LH、FSH 及 F0 的改变情况
Tab.2 Changes of serum LH, FSH and F0 in the two groups before and after treatment

Group	LH/U·L ⁻¹		FSH/U·L ⁻¹		F0	
	Before	6 months after treatment	Before	6 months after treatment	Before	6 months after treatment
Control	31.22±2.33	30.76±1.62	17.01±5.15	19.54±3.62	≤5	≤3
Experimental	33.14±2.58	32.28±1.54	16.92±6.46	15.27±3.36	≤5	≤5
<i>t</i> / χ^2 value	3.62	3.77	3.46	3.71	4.12	5.63
<i>P</i> value	0.85	0.78	0.62	0.04	0.74	0.02

LH: Luteinizing hormone; FSH: Follicular estrogen; F0: Number of antral follicles

2.4 两组患者治疗 6 个月后随访情况

试验组治愈率为 94% (68/72), 高于对照组的 66% (47/71), 差异有统计学意义 ($P<0.05$)。试验组复发率 (9%) 低于对照组 (25%), 差异同样有统计学

意义 ($P<0.05$)。试验组患者经过治疗后妊娠率明显提高 (33% vs 8%, $P<0.05$)。治疗 6 个月后囊肿变化情况见图 2。

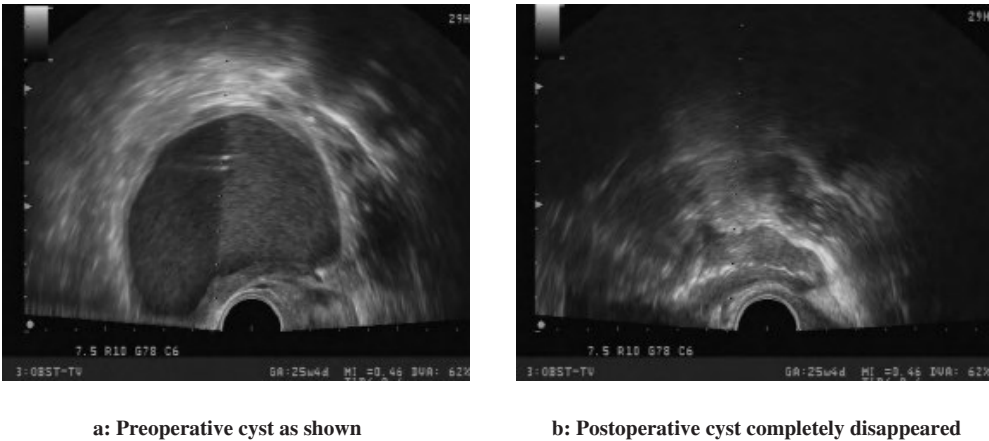


图2 手术后囊肿变化情况
Fig.2 Postoperative cyst changes

3 讨论

子宫内膜异位囊肿是常见的妇科疾病,主要病发人群是20~45岁的育龄妇女,可引起疼痛及不孕,该病具有浸润性,可形成广泛、严重的粘连,还易复发^[6]。较常见的临床病理类型是卵巢型子宫内膜异位症,可形成囊肿,即为卵巢型子宫内膜异位囊肿。该病药物治疗疗效慢,副作用较大,需长期坚持服药,患者不易坚持。在临床上多选择手术治疗,但手术治疗创伤大,无法确保不损伤其它器官,还易于复发^[7-9]。近年来,介入性超声治疗因其不需开腹手术,简单、损伤少,对妊娠影响小的优势被广泛使用^[10]。

本研究通过对照组和试验组采取不同的方式治疗卵巢型子宫内膜异位囊肿,结果显示对照组采用腹腔镜手术进行治疗,手术操作时间明显高于试验组;试验组通过超声引导穿刺治疗,治疗后囊肿完全消失。由此可得,超声引导穿刺治疗所需时间短,操作简单,见效快,患者痛苦少^[11-12]。治疗6个月后进行随访,试验组治愈率明显高于对照组,对照组复发率为25%,试验组复发率为9%,差异有统计学意义。穿刺治疗时注入无水乙醇,无水乙醇可使细胞壁脱水,使囊肿内的液体慢慢减少直至完全没有,囊肿内的纤维组织增生使囊腔封闭,从而达到囊肿缩小直至消失。根据囊肿的直径和囊液的稠度确定注入无水乙醇的次数,也可反复抽取,提高治愈率,减少复发^[13-16]。对照组经过腹腔镜手术治疗后,卵泡数减少,血清中FSH也高于试验组,说明手术治疗子宫内膜异位囊肿会影响患者的卵巢功能,减少排卵,提高不孕率。试验组经过治疗后妊娠率高于对照组,差异亦有统计学意义。由结果可知,介入性超声治疗治愈率高,不易复发,对卵巢损伤小,不影响生育。两种治疗方式各有优劣,腹腔镜手术在临床上更适合治疗多房或直径较大的囊肿,还可以对不孕患者同时行输卵管检查,分离粘连,提高妊娠率,但手术后复发再行腹腔镜手术对患者的损伤较大,这时就可以选择超声介入治疗,减少患者痛苦。对于复发性囊肿选择超声介入治疗是最佳治疗方式。

综上所述,超声引导介入治疗卵巢型子宫内膜异位囊肿治愈率高,可有效减少复发,对卵巢损伤小,不影响生育功能,是一种操作简单、安全有效的治疗方式,值得临床推广。

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