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腔内三维超声与宫腔镜检查对残角子宫畸形的诊断价值

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摘要 目的:探讨腔内三维超声与宫腔镜检查对残角子宫畸形的诊断价值。**方法:**收集 2009 年 3 月~2013 年 3 月我院收治的疑似残角子宫畸形的患者,分别行腔内三维超声和宫腔镜检查,以病理诊断结果为“金标准”,比较两组检查结果的差异。**结果:**三维超声的灵敏度与宫腔镜比较,差异有统计学意义($P<0.05$),两组的特异度、准确性、阳性预测值、阴性预测值差异无统计学意义($P>0.05$);三维超声检查阳性检出率 80.65%,阴性检出率 19.35%,宫腔镜检查阳性检出率 59.68%,阴性检出率 40.32%,两组检出率差异无统计学意义($\chi^2=0.498, P>0.05$)。**结论:**腔内三维超声诊断残角子宫畸形具有无创、操作简便的特点,但是漏诊率高于宫腔镜结果。

关键词: 三维超声;宫腔镜;残角子宫畸形

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Diagnosis Value of Endoluminal three Dimensional Ultrasound and Hysteroscopy for Rudimentary Uterine Horn Deformity

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ABSTRACT Objective: To investigate the value of endoluminal three dimensional ultrasonography and hysteroscopy in diagnosis for the rudimentary horn of uterus malformation. **Methods:** Patients who were suspected of rudimentary uterine horn in our hospital from March 2009 to March 2013 were collected, and received examination of endoluminal three dimensional ultrasound and hysteroscopy, the differences of results of two groups were compared, the pathological diagnosis were utilized as "gold standard". **Results:** There was statistically significant difference in the sensitivity between endoluminal three dimensional ultrasound and hysteroscopy ($P<0.05$), but the specificity, accuracy, positive predictive value, and negative predictive value of two groups presented no statistical difference($P>0.05$). Positive detection rate of three dimensional ultrasound examination was 80.65%, and the negative rate was 19.35%. The positive detection rate of hysteroscopy was 59.68%, and the negative rate was 40.32%. There was no significant difference in positive detection rate ($\chi^2=0.498, P>0.05$). **Conclusion:** Intracavity three-dimensional ultrasound had the features of non-invasive, simple operation in the diagnosis of rudimentary uterine horn deformity, but the rate of missed diagnosis was higher than that of hysteroscopy results.

Key words: Endoluminal three-dimensional ultrasound; Hysteroscopy; Rudimentary horn of uterus malformation

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前言

残角子宫畸形(Rudimentary horn of uterus malformation)又称先天性子宫发育畸形,主要是由于一侧的副中肾管早期发育不全或者是不通引起^[1]。患者大多因为无宫腔或是有宫腔但无子宫内膜最终导致没有月经,因而对患者的生活治疗产生严重的影响^[2,3]。目前对子宫畸形的诊断的主要方法有子宫输卵管造影、宫腔镜、腔内三维超声等,其中宫腔镜可以清晰的观察到宫腔的具体形态,但是在诊断单角子宫时又有一定的局限性。而腔内三维超声能够显示子宫位置及其外形、轮廓等,并可显示与相邻组织的关系^[4],但是缺点是漏诊率相对较高。本研究采用腔内三维超声与宫腔镜分别诊断残角子宫畸形,旨在比较两

种检查方法的诊断价值。

1 资料与方法

1.1 一般资料

收集 2009 年 3 月~2013 年 3 月我院妇科收治的疑似为残角子宫畸形的患者作为本研究的试验对象。纳入标准:①根据临床症状疑似为残角子宫畸形的患者;②不合并有肝肾功能障碍者;③患者及家属知情同意,并签署知情同意书。符合纳入要求的患者共 62 例,年龄 14~38 岁,平均(26.7 ± 5.2)岁;婚姻状况:未婚 19 例,已婚 43 例;临床表现:痛经者 21 例,原发不孕者 10 例,不良孕产史者 3 例,经期延长者 3 例,无临床表现者 25 例。

1.2 方法

三维超声检查方法:采用 GEV-730、E8 彩色超声诊断器(探头频率 3.5MHz)。具体操作方法:首先采用直肠超声对未婚患者进行检查,先排空膀胱,用带有耦合剂并套有避孕套的腔

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内探头插入肛门内,对已婚患者则采用经阴道的二维超声检查,两者都观察子宫及宫腔形态,同时观察两侧的附件区形态^[9]。最后通过启动三维重建功能来采集图像,同时通过旋转 X、Y、Z 轴全面观察患者的宫腔形态。宫腔镜检查方法:仪器采用 WOLF 宫腔镜,5%的葡萄糖溶液作为检查时的膨宫液,镜鞘在 5~6cm 左右。具体操作方法:待研究对象月经完后的第 5 天左右,根据宫腔镜检查的操作方法,从宫颈管部位开始,全面的观察宫颈内各个部位以明确宫颈的形态,观察内容包括宫颈管、宫腔、输卵管的开口部位,如果患者月经紊乱则在阴道出血少的时候进行检查^[9]。以临床病理检查结果为“金标准”,计算两种检查手段的灵敏度、特异度、准确率、阳性预测值、阴性预测值并比较。

1.3 统计学处理

采用 SPSS19.0 统计软件进行数据的录入及统计学分析,计数资料的描述采用百分数,比较采用配对检验, $P<0.05$ 表示差异有统计学意义。

2 结果

2.1 宫腔镜、超声三维检测检查结果情况

经临床病理检查发现 49 例为残角子宫畸形的患者,8 例浆膜下子宫肌瘤患者,5 例盆腔包块患者。三维超声检查阳性检出率为 80.65%,阴性检出率为 19.35%,宫腔镜检查阳性检出率为 59.68%,阴性检出率为 40.32%。结果见表 1。

表 1 宫腔镜、超声三维检测检查结果

Table 1 Results of the endoluminal three dimensional ultrasound and hysteroscopy examination

三维超声诊断 Three dimensional ultrasound diagnostic	"金标准" Gold standard		合计 Total	宫腔镜诊断 Hysteroscopy diagnostic	"金标准" Gold standard		合计 Total
	阳性 Positive	阴性 Negative			阳性 Positive	阴性 Negative	
阳性 Positive	44	6	50	阳性 Positive	35	2	37
阴性 Negative	5	7	12	阴性 Negative	14	11	25
合计 Total	49	13	62	合计 Total	49	13	62

2.2 两组方法诊断指标的对比

三维超声的灵敏度与宫腔镜灵敏度比较,差异有统计学意义

($P<0.05$);两组的特异度、准确性、阳性预测值、阴性预测值差异无统计学意义($P>0.05$)。见表 2。

表 2 两组诊断结果的比较(%)

Table 2 Comparison of diagnostic results between two groups (%)

诊断方法 Diagnostic method	灵敏度 Sensitivity	特异度 Specificity	准确性 Accuracy	阳性预测值 Positive predictive value	阴性预测值 Negative predictive value
三维超声 Three dimensional ultrasound	71.43	84.62	74.19	94.59	44.00
宫腔镜 Hysteroscopy	89.80	53.85	82.26	88.00	58.33
χ^2	5.289	2.889	1.184	1.108	0.667
P	0.022	0.089	0.277	0.293	0.414

2.3 两组诊断结果的比较

三维超声的诊断结果与宫腔镜结果经配对检验,差异无统

计学意义($\chi^2=0.498, P>0.05$)。见表 3。

表 3 两组诊断结果的比较

Table 3 Comparison of diagnostic results between two groups

宫腔镜 Hysteroscopy	三维超声 Three dimensional ultrasound		合计 Total
	阳性 Positive	阴性 Negative	
阳性 Positive	35	15	50
阴性 Negative	2	10	12
合计 Total	37	25	62

注:两组诊断结果的比较 $\chi^2=0.498, P>0.05$ 。

Note: Comparison of diagnostic results between two groups $\chi^2=0.498, P>0.05$.

3 讨论

目前女性患者中子宫畸形的发生率约为 1:1000,其中较常见的是残角子宫畸形,约占发病人数的 5%^[7]。残角子宫畸形

形成过程:胚胎发育的过程中,两对副中肾管在会合的过程中发生障碍,同时有一侧发育不良,最终导致了残角子宫畸形的形成。一般来说单角子宫不与残角子宫相连,因而造成残角子宫内常常发育不良,严重者经期血很少甚至无血,临床表

现有痛经,不孕以及盆腔包块等^[89]。目前临床诊断残角子宫畸形主要通过二维超声进行,但是大多在发现的时候都已有明显的临床症状且处于较严重的时期,因而对治疗也会造成巨大困难。同时在进行二维超声时,虽然可以观察到宫底部横切面对内膜的宽径,但是对单角子宫的诊断却存在很大的局限性^[90]。宫腔镜检查由于可以完整的观察到宫腔内形态,因此临床上用得也较多^[11,12],但是缺点是宫腔镜只能对宫腔的内部进行观察,而对宫腔外部却是不可视的,很难与其他宫腔异常子宫畸形鉴别开来^[13],并且很难区别开来单角子宫。有研究表明三维超声在诊断单角子宫方面有重要作用,通过三维超声可以观察到发育侧宫腔呈单角“柱状”或者“半月状”,而不是正常的子宫“倒三角形”^[14,15]。但是研究表明三维超声虽然大大提高了对单角子宫的检出率但是漏诊率却较高^[16]。究竟哪种检查手段才是临床最值都推广的,目前相关的研究却还有限^[17]。本研究拟采用宫腔镜和三维超声分别对疑似为残角子宫畸形的患者进行鉴别诊断,并以病理诊断结果为“金标准”,以比较两种方法的准确性。

结果显示,三维超声诊断残角子宫畸形的灵敏度为71.43%,漏诊率为28.57%,而宫腔镜的灵敏度为89.80%,漏诊率为10.20%,三维超声的漏诊率明显高于宫腔镜。可能是因为三维超声虽然能够观察到子宫内外的全部形态,而且对无临床症状的妊娠子宫中晚期中难以发现的单角子宫也有较好的诊断能力,但是在检查过程中因为诊断较粗,因而漏诊率较高,宫腔镜能全面观察子宫腔,因而宫腔镜的漏诊率较低,但是三维超声是无创的,操作起来也很方便,这与有关研究结果一致^[18]。研究结果还显示,特异度、准确性、阳性预测值、阴性预测值两种诊断手段差异无统计学意义,这与有关研究结果一致^[19]。研究结果还表明,三维超声检查阳性检出率80.65%,阴性检出率19.35%,宫腔镜检查阳性检出率59.68%,阴性检出率40.32%,两组诊断结果的差异无统计学意义,说明两种诊断手段最终的诊断结果没有差别,只是三维超声是一种操作简单,创伤性不大,但是漏诊率较大的检查方法,因此可以作为术前筛查及随访的重要手段^[20]。

综上所述,三维超声在鉴别诊断残角子宫畸形时,具有无创、操作方便的特点,但是其漏诊率大于宫腔镜,可以作为术前筛查的重要手段,且两种检查手段的诊断结果也无差异。

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