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B 超与病理检查在卵巢肿瘤诊断中临床应用比较

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摘要 目的:比较 B 超与病理检查在卵巢肿瘤诊断中临床应用。**方法:**选择 2009 年 -2013 年经手术后病理证实的卵巢肿瘤患者 60 例,所有患者均经 B 超与病理学检查,①以病理学检查结果为金标准分析 B 超诊断卵巢肿瘤的准确性、特异性和敏感性;②分析良恶性肿瘤声像图特征。**结果:**①60 例患者经术后病理学检查,恶性肿瘤 24 例,良性肿瘤 36 例,B 超诊断卵巢肿瘤敏感性为 87.5%,特异度为 94.44%,准确性为 91.67%,与病理检查比较差异,无统计学意义($P < 0.05$);②36 例良性肿瘤囊性回声 23 例,混合性回声 5 例,实性回声 8 例,包膜回声完整 31 例,后方回声增强 28 例,后方回声衰减 3 例,无腹水病例 24 例,恶性肿瘤囊性回声 1 例,混合性回声 18 例,实性回声 5 例,包膜回声完整 4 例,后方回声增强 2 例,后方回声衰减 16 例,腹水病例 12 例,良恶性肿瘤比较差异有统计学意义($P < 0.05$)。**结论:**B 超对卵巢肿瘤诊断具有较高的特异性、敏感性和准确性,良恶性卵巢肿瘤在 B 超声像图上有典型表现。

关键词:B 超;病理检查;卵巢肿瘤;临床应用

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Comparison of Clinical Application of Type-B Ultrasound and Pathologic Examination in Diagnosis of Ovarian Tumors

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ABSTRACT Objective: To compare the clinical application of type-B ultrasound and pathologic examination in diagnosis of ovarian tumors. **Methods:** 60 cases of patients with ovarian cancer who were pathologically confirmed after surgery from 2009 to 2013 were selected, all patients were confirmed via pathological examination and B ultrasound. ① The pathological findings were used as the gold standard to analyze the accuracy, specificity and sensitivity of B ultrasound in diagnosis of endometrial cancer; ② Sonographic features were analyzed in benign and malignant cases. **Results:** ① 60 cases of patients who were confirmed via postoperative pathological examination consisted of 24 cases of malignant tumor and 36 cases of benign tumor. The sensitivity, specificity and accuracy of the diagnosis of ovarian cancer via the type-B ultrasound were 87.5%, 94.44% and 91.67%, and there was no statistically significant difference ($P < 0.05$) compared with pathological examination; ② 23 cases of the 36 cases of benign tumor were cystic echo, 5 cases were mixed echo, 8 cases were solid echo, 31 cases were echo envelope intact, 28 cases were posterior acoustic enhancement, 3 cases were posterior echo attenuation, no cases were with ascites, 1 case of the 24 cases of malignant tumor were cystic echo, 18 cases were mixed echo, 5 cases were solid echo, 4 cases were echo envelope intact, 2 cases were posterior acoustic enhancement, 16 cases were posterior echo attenuation, and 12 patients were with ascites. The difference between the benign and malignant tumors was statistically significant ($P < 0.05$). **Conclusion:** Type-B ultrasound presents high specificity, sensitivity and accuracy in the diagnosis of ovarian tumors, the benign and malignant ovarian tumors present typical features in type-B ultrasound image.

Key words: B ultrasound; pathology; Ovarian cancer; Clinical applications

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前言

卵巢肿瘤是妇科临床高发肿瘤之一,发病率高达 4.3%-23.9%,恶性肿瘤约占 10%^[1],由于肿瘤部位较深,早期症状和体征一般不明显,不易引起重视,相当部分患者在体检时应用 B 超

检出,超声检查可以直接反映卵巢肿瘤的大小、形态和血流状态等,对良恶性诊断有一定的帮助^[2-3],为了进一步比较 B 超与病理检查在卵巢肿瘤诊断中临床应用,明确 B 超的应用价值,我们针对 2009 年 -2013 年卵巢肿瘤患者超声声像图进行分析,现报告如下:

1 资料与方法

1.1 一般资料

选择 2009 年 1 月 -2013 年 12 月我院收治的 60 例卵巢肿瘤患者,年龄 26-67 岁,平均年龄(41.5±4.6)岁,其中已婚 56

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例,未婚 4 例,有生育史者 36 例,宫内放置节育环者 19 例,输卵管结扎者 13 例,体检时检出 18 例,以腹部包块就诊者 19 例,急性腹痛就诊者 6 例,月经异常就诊者 5 例,下腹部隐痛不适就诊者 2 例,所有患者均为单侧肿瘤,其中左侧 24 例,右侧 36 例,卵巢肿瘤直径 2-6 cm,平均 4.3 cm,均经手术切除肿瘤,术前做 B 超检查,术后做病理检查。

1.2 设备与方法

应用飞利浦 HD11XE 及 GE Voluson730pror 超声诊断仪,扇形探头,频率为 3.5-5MHz。适量饮水后,待患者膀胱充盈达中度以上,嘱患者取仰卧位,多角度、多层面探查下腹部,观察子宫及两侧附件区解剖结构,发现肿块后,保留声像图,记录肿块大小、位置、边界、边缘形态、肿块内部的回声、多普勒血流、包膜回声、后方效应、衰减以及腹水等情况,根据以上指标对肿瘤进行定性。患者术后均将切除的肿块送病理室检查,对比分

析超声检查与病理检查结果。

1.3 统计学方法

研究所得数据应用医学统计软件 SPSS17.0 进行统计,计数资料比较应用 χ^2 检验,一致性检验使用 Kappa 系数。如 $P < 0.05$ 则表示有统计学意义。

2 结果

2.1 B 超与病理检查结果

60 例患者经术后病理学检查,恶性肿瘤 24 例,包括粘液腺癌 18 例,浆液腺癌 6 例;良性肿瘤 36 例,浆液囊肿 19 例,粘液腺瘤 12 例,畸胎瘤 2 例,内胚窦瘤 3 例。B 超检查诊断恶性肿瘤 23 例,漏诊 3 例,误诊 2 例,敏感性为 87.5%,特异性为 94.44%,准确性为 91.67%,与病理检查结果一致 ($Kappa=0.825$, $P=0.000$),详见表 1。

表 1 B 超与病理检查结果
Table 1 Results of type-B ultrasound and pathology

B 超检查 B ultrasound	病理检查 Pathological examination		合计 Total
	恶性肿瘤 Malignant tumor	良性肿瘤 Benign tumor	
恶性肿瘤 Malignant tumor	21	2	23
良性肿瘤 Benign tumor	3	34	37
合计 Total	24	36	60

2.2 B 超检查卵巢肿瘤良恶性表现特征

36 例良性肿瘤囊性回声为 23 例,混合性回声 5 例,实性回声 8 例,包膜回声完整 31 例,后方回声增强 28 例,后方回声衰减 3 例,无腹水病例,24 例恶性肿瘤囊性回声为 1 例,混合

性回声 18 例,实性回声 5 例,包膜回声完整 4 例,后方回声增强 2 例,后方回声衰减 16 例,腹水病例 12 例,良恶性肿瘤比较肿瘤实质回声、包膜回声、后方回声、腹水占有率差异,有统计学意义 ($P < 0.05$),详见表 2。

表 2 B 超检查良、恶性卵巢肿瘤表现特征
Table 2 Features of benign and malignant ovarian tumors by type-B ultrasound

肿瘤性质 Tumor quality	n	肿瘤实质 Tumor essence			包膜回声完 整	后方回声增 强	后方回声衰 减	腹水 Ascites
		囊性 Cystic	混合性 Mixed	实性 Solid	Echo envelope integrity	Posterior acoustic enhancement	Posterior echo attenuation	
良性肿瘤 Benign tumors	36	23(63.89)	5(13.89)	8(22.22)	31(86.11)	28(77.78)	3(8.33)	0
恶性肿瘤 Malignant tumors	24	1(4.17)	18(75.00)	5(20.83)	4(16.67)	2(8.34)	16(66.67)	12(50.00)
χ^2		21.401	22.750	2.372	28.572	27.778	22.644	19.484
P		<0.001	<0.001	0.124	<0.001	<0.001	<0.001	<0.001

3 讨论

多年来,B 超一直是检查卵巢占位性病变的首选检查方式,该检查无创、可重复性强,可多方位观察病灶^[4],大量的研究及报道指出,通过 B 超观察卵巢肿瘤形态特征,分析肿瘤内部

回声、包膜、后方声影可以帮助临床明确诊断卵巢肿瘤的性质,为临床制定治疗方案提供可靠的影像学依据^[5-8]。

本研究通过对 60 例患者卵巢肿块大小、位置、边界、边缘形态、肿块内部的回声、多普勒血流、包膜回声、后方效应、衰减以及腹水等情况的观察,确诊诊断恶性肿瘤 23 例,漏诊 3 例,

误诊 2 例, 敏感性为 87.5%, 特异度为 94.44%, 准确性为 91.67%, 与病理学检查无统计学意义, 充分证实 B 超在卵巢肿瘤诊断中具有较高的实用价值。

在对良性和恶性肿瘤 B 超声像图表现进行分析时, 注意到良性肿瘤以囊性回声多见, 占到 63.89%, 混合回声和实性回声分别为 13.89%、22.22%, 恶性肿瘤以混合性回声多见, 占到 75%, 而囊性回声与实性回声各为 4.17%、20.83%, 充分说明超声一旦发现混合性回声团块, 要高度警惕恶性肿瘤的可能, 实性肿块在恶性肿瘤中构成比偏低。良性肿瘤包膜完整患者占到 86.11%, 而恶性肿瘤仅为 12.18%, 众多报道认为, 肿瘤包膜完整度与肿瘤生长方式有明显关联, 恶性肿瘤呈浸润生长, 一般无包膜形成^[9-12], 部分患者 B 超检查可看到类包膜回声, 一般为假包膜, 这是导致误诊或漏诊的重要因素之一^[13-16]。另外, 良恶性肿瘤后方回声强度具有差异, 良性肿瘤后方多增强, 恶性肿瘤后方回声相对减低, 据分析, 与肿瘤实质构成有关联, 良性肿瘤液性成分较多, 声反射较低, 而恶性肿瘤实性成分较多, 声反射较强, 导致后方声影强弱不同^[17, 18]。同时, B 超对腹水具有极高的敏感性, 卵巢恶性肿瘤侵犯腹膜的概率较高, 极易发生腹水^[19, 20], 也是我们区分良恶性肿瘤的鉴别点。

总之, B 超经过多年的不断发展, 不论是设备的先进性还是检查技术的熟练度, 都有了质的飞跃, 在诊断卵巢肿瘤方面具有较高的特异性、敏感性和准确性, 良恶性卵巢肿瘤在 B 超声像图上具有典型表现, 但是我们需要注意的是, 部分恶性卵巢肿瘤是由良性转化而来, 两者在 B 超声像图上差异不大, 难以鉴别, 另外, 部分良性肿瘤存在恶性肿瘤的部分特征, 需要仔细辨别。

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