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弹性成像定量分析对自身免疫性肝病的诊断价值

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摘要 目的:自身免疫性肝病的发病机理至今尚未明确,与多种疾病之间存在着联系,临床诊断具有一定的难度。本研究利用超声弹性成像技术定量分析自身免疫性肝病的病理特征,探讨该技术的诊断价值,为自身免疫性疾病的治疗提供诊断依据。**方法:**选取我院 2011 年 3 月-2013 年 6 月收治的自身免疫性肝病患者 182 例,随机分为观察组和对照组。观察组 98 例患者采用弹性成像定量分析的方法进行诊断,对照组 84 例则采用常规病理学诊断。观察并比较两组患者的诊断准确率及诊断耗时。**结果:**观察组检出 94 例,诊断率为 95.92%;对照组检出 81 例,诊断率为 96.43%,两组诊断准确率比较无明显差异($P>0.05$)。观察组平均诊断耗时为 5.6 h;对照组平均诊断耗时为 11.6 h,观察组诊断时间比对照组短,差异具有统计学意义($P<0.05$)。**结论:**弹性成像定量分析对自身免疫性肝病的诊断准确率与病理活检诊断具有较好的一致性,且诊断耗时短、患者依从性好,值得在临床中进一步推广应用以辅助病理诊断,避免误诊或漏诊现象发生。

关键词:自身免疫性肝病;弹性定量分析;病理学检查;诊断价值

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Diagnostic Values of Quantitative Elasticity Imaging on the Autoimmune Hepatic Diseases

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ABSTRACT Objective: It is difficult to make sure of the pathogenesis of the autoimmune liver diseases which is associated with several factors. This article aims to exploring the diagnostic values of quantitative elasticity imaging on the autoimmune liver diseases by analyzing the pathological characteristics of AILD so as to provide a reference for clinical treatment. **Methods:** 182 patients with the autoimmune liver disease who were treated in our hospital from March 2011 to June 2013 were selected and randomly divided into the observation group and the control group. Ninety-eight cases in the observation group were inspected by the quantitative elasticity imaging, while another eighty-four cases in the control group were diagnosed by the pathology. Then the accuracy and time of diagnosis were recorded and compared between two groups. **Results:** The accuracy of the diagnosis was 95.92% in the observation group which was similar to the 96.43% in the control group with no significant difference($P>0.05$). The average time for the diagnosis was 5.6 hours in the observation group which was shorter than 11.6 hours in the control group with statistically significant difference ($P<0.05$). **Conclusions:** It is indicated that the quantitative elasticity imaging should be well promoted and make contribution to the pathological diagnosis of autoimmune liver disease with the advantages of high consistency in accuracy and shorter time.

Key words: Autoimmune liver disease; Elastic analysis; Pathology; Diagnosis values

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前言

自身免疫性肝病(Autoimmune liver disease, AILD)是指机体对自身抗原发生免疫反应使得致炎因子持续存在于肝脏组织中而导致肝功能受损的慢性疾病,临床上比较常见的有自身免疫性肝炎(AIH)、原发性硬化性胆管炎(PSC)、原发性胆汁性肝硬化(PBC)及 PBC-PSC“重叠综合征”等^[1-3]。自身免疫性肝病的患病率呈逐年升高趋势,逐渐引起医学界的重视,但目前对于 AILD 的发病机制尚未明确,其发病与诸多因素有关,临床上对其进行准确的诊断具有一定的局限性^[4]。近年来,随着超声

成像技术在临床诊断中的广泛应用,能够生动的显示病变部位与周围正常组织间的弹性系数,以此来判断病变组织的弹性大小,从而鉴别病变的性质。目前已有许多肝脏疾病通过弹性成像技术定量分析而获得明确的临床诊断,为治疗指明了方向^[5-7]。为深入了解超声弹性成像技术的优势,本研究采用弹性成像定量分析对自身免疫性疾病患者进行检查,探讨该技术的诊断价值,为临床治疗提供诊断依据。

1 资料与方法

1.1 一般资料

选取我院 2011 年 3 月-2013 年 6 月收治的自身免疫性肝病患者 182 例,随机分为两组。观察组 98 例,包括男 46 例,女

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52例;年龄分布在21-74岁,平均年龄为(56.63±1.52)岁;病程为6-24个月,平均病程为(12.88±2.16)个月;其中,自身免疫性肝炎(AIH)43例,研发性硬化性胆管炎(PSC)29例,原发性胆汁性肝硬化(PBC)26例。对照组84例,包括男39例,女45例;年龄分布在19-72岁,平均年龄为(54.71±2.17)岁;病程为7个月-10年,平均病程为(11.74±2.39)个月;其中,自身免疫性肝炎

(AIH)41例,研发性硬化性胆管炎(PSC)23例,原发性胆汁性肝硬化(PBC)20例。所选患者均符合AILD的临床诊断标准,排除心肾等功能异常者^[8]。两组患者年龄、病程等一般资料无显著差异,具有可比性。见表1。

1.2 诊断方法

对照患者采用常规病理学检查,主要包括患者体征、血

表1 两组患者的临床资料

Table 1 Clinical data of patients in the two groups

Group	Case	Gender(case)		Age(year)	Disease course(month)	Disease types(case)		
		Male	Female			AIH	PSC	PBC
Observation	98	46	52	56.63±1.52	12.88±2.16	43	29	26
Control	84	39	45	54.71±2.17	11.74±2.39	41	23	20

Note: compared between two groups, $P>0.05$.

清生化检测、病毒性肝炎标记物筛查、CT影像学及B超检查等^[9]。观察组患者采用弹性成像定量分析检查,并根据图像的特点分析疾病的类型^[10]。

1.3 观察指标

观察并记录两组患者的诊断时间及诊断的准确率。

1.4 统计学方法

采用SPSS 16.0软件进行统计分析,计量资料以均数表示,组间数据比较采用t检验,以 $P<0.05$ 为差异具有统计学意义。

2 结果

如表1所示,观察组共98例患者,94例得到确诊,诊断准确率为95.92%;诊断时间为4-6小时,平均用时为5.6小时。对照组共84例患者,81例得到确诊,诊断准确率为96.43%;诊断时间为10-12小时,平均用时为11.6小时。两组患者的诊断准确率均较高,无显著性差异($P>0.05$);观察组患者的诊断时间明显比对照组短,差异具有统计学意义($P<0.05$)。

表1 两组诊断准确率及时间的比较(n/%)

Table 1 Comparison of the accuracy and time of diagnosis between two groups

Group	Case	Confirmed	Accuracy(%)	Time(h)
Observation	98	94	95.92%	5.6
Control	84	81	96.43%	11.6
P			>0.05	<0.05

Note: compared between two groups, $P<0.05$.

3 讨论

近年来,随着医疗技术的进步和临床诊断水平的提高,对自身免疫性疾病的诊断率不断提高,但从另一方面也说明了该类疾病的发病率越来越高^[11]。自身免疫性肝病主要包括^[12-15]:①自身免疫性肝炎(AIH):肝细胞实质性损害显著,血清中肝细胞炎症指标明显升高;②原发性胆汁性肝硬化(PBC):胆管病变严重,同时淤胆指标明显升高;③原发性硬化性胆管炎(PSC);④AIH、PBC、PSC三种疾病中任意两者之间相重叠的“重叠综合征”,主要临床表现为发热、黄疸、皮炎及关节炎等,同时可见高 γ -球蛋白血症,血沉速度加快,血中的自身抗体呈阳性^[15]。目前对于自身免疫性肝病的发病机理尚未明确,可能与多种疾病有一定的关联,临床诊断和治疗存在一定的难度,而且该病一旦发作病情较为严重,早期症状不显著,不易判断,很可能造成误诊或漏诊,延误最佳的治疗时机而使病情恶化,甚至威胁患者生命。

目前,弹性成像定量分析技术被广泛用于临床诊断自身免疫性肝病,并取得了一定的效果,该技术能够有效的缩短诊断

时间,避免误诊或漏诊的发生^[16]。弹性成像定量分析技术利用生物力学的成像原理对病变组织的硬度或弹性进行检查^[17]。由于不同组织的弹性系数不同,受到外力压迫时组织发生变形的程度也不同,组织受压前后回声信号移动幅度的变化就不同,因此将其转化为实时彩色图像就具有特异性,主要表现为:①弹性系数小、受压之后移动幅度变化较大的组织,图像显示出红色;②弹性系数大、受压之后移动幅度变化较小的组织,图像显示出蓝色;③弹性系数中等、受压之后移动幅度变化在两者之间的组织,图像显示绿色。可生动地显示并定位出病变情况^[18,19]。有关资料显示,弹性成像定量分析在临床上应用以来,在乳腺、前列腺及肝脏等疾病的诊断中起到了重要的作用^[20]。弹性成像定量分析技术具有简便快速、无创无痛、可重复使用等优点,并且在肝硬化、肝纤维化等的无创诊断、疗效检测和预后评估方面均表现了重要的应用价值。

本研究显示,采用弹性成像定量分析来诊断,准确率为95.92%,平均诊断时间5.6h;采用常规病理学诊断,准确率为98.81%,平均诊断时间11.6h。结果说明,采用弹性成像定量分析来诊断自身免疫性肝病准确率与病理检查具有较高的一致

性,并能够有效缩短检查时间,可减少患者承受的痛苦,可用于临床中以辅助病理诊断,值得进一步推广。

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