

旋转数字减影血管造影与磁共振血管造影在动脉瘤诊断中的应用对比

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Title: Clinical comparison of rotational digital subtraction angiography and magnetic resonance angiography in the diagnosis of arterial aneurysm

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关键词: 临床观察; 颅内动脉瘤; 不同直径; MRA; 3D R-DSA

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摘要: 目的: 探析旋转数字减影血管造影 (rotational digital subtraction angiography, R-DSA) 与磁共振血管造影 (magnetic resonance angiography, MRA) 在动脉瘤诊断中的应用。方法: 临床收集我院2010年至2015年收治的可疑颅内动脉瘤待查患者110例, 所有患者均进行R-DSA与MRA检查, 所有患者均签署知情同意书。诊断结果以介入或手术结果为“金标准”, 比较MRA、R-DSA检查方法用于不同直径颅内动脉瘤的诊断率和准确度。结果: 本组110例患者病灶情况均为单发, 3D R-DSA、3D MRA两种检查方法的诊断符合率差异对比无统计学意义 ($P>0.05$); 3D R-DSA法检测动脉瘤瘤体颈宽、纵径等指标显著高于3D MRA, 差异有统计学意义 ($P<0.05$); 3D MRA、3D R-DSA检测瘤颈 >2.8 mm组动脉瘤差异有统计学意义 ($P<0.05$), 检测瘤颈 ≤ 2.8 mm组动脉瘤与总体检出结果之间差异显著 ($P<0.05$)。结论: 颅内动脉瘤应用MRA检查具有快速、无创、准确率高优越性, 对颅内动脉瘤的诊断具有重要的应用价值。

Abstract: Objective: To compare the application of rotational digital subtraction angiography (R-DSA) and magnetic resonance angiography (MRA) in arterial aneurysm. Methods: 110 suspected intracranial aneurysm patients undergoing the R-DSA and MRA and signing the informed consents from 2010 to 2015 were selected. According to intervention therapy or operation results, the diagnosis results were compared. Results: All the patients were confirmed with single tumors. The diagnosis accordance rate based on 3D R-DSA and 3D MRA was not significantly different ($P>0.05$). The detection rate on the transverse and vertical diameters based on 3D R-DSA was better than 3D MRA ($P<0.05$). The diagnosis rate of arterial aneurysm (>2.8 mm) based on two examinations was significantly different ($P<0.05$). The overall diagnosis rate of arterial aneurysm (≤ 2.8 mm) based on two examinations was significantly different ($P<0.05$). Conclusion: The MRA is featured as lower costs, speediness, non-invasive surgery and higher detection accuracy.

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