

论著

## 动态增强磁共振成像对乳腺癌新辅助化疗后病理反应性的术前评价

张晓鹏, 李洁, 孙应实, 曹崑, 唐磊

北京大学临床肿瘤学院 北京肿瘤医院暨北京市肿瘤防治研究所医学影像科, 北京 100036

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**摘要** 摘要:目的 探讨动态对比增强磁共振成像(DCE-MRI)

在术前评价新辅助化疗后乳腺癌残存病变病理学反应状态的临床应用价值。方法 以45

例新辅助化疗结束后行术前DCE-MRI检查的浸润性乳腺癌患者为研究对象, 参考Miller &

Payne反应性分级方法将患者的病理学反应性分为5级, 5级为病理完全缓解(pCR), 其余为浸润癌残余, 4级和5级为组织学显著反应(MHR), 并以此作为金标准。由两位医生分别在诊断工作站盲法阅片,

判断是否为pCR及MHR。对两医生判断结果的真实性和可靠性进行评价,

用Kappa分析对观察者间进行一致性检验。结果 DCE-MRI对化疗后浸润癌残余的诊断有较高的敏感性,

两医生敏感性分别为94.7%和97.4%, 特异性分别为42.8%和57.1%, 准确性分别为86.6%和91.1%。DCE-

MRI对化疗后MHR判断, 两医生敏感性分别为95.5%和81.8%, 特异性分别为73.9%和82.6%, 准确性分别为

84.4%和82.2%。不同观察者间的一致性检验, Kappa值分别为0.728和0.778, 有较好一致性。结论 DCE-

MRI对于乳腺癌新辅助化疗后浸润癌残余的诊断有较高敏感性,

有助于化疗后术前无创性评价乳腺癌的病理反应性。

**关键词** 乳腺癌; 新辅助化疗; 动态增强; 磁共振成像; 病理学反应性

分类号

## Preoperative Evaluation of Pathologic Response in Patients with Breast Cancer by Dynamic Contrast-enhanced Magnetic Resonance Imaging

ZHANG Xiao-peng, LI Jie, SUN Ying-shi, CAO Kun, TANG Lei

Department of Radiology, Peking University School of Oncology, Beijing Cancer Hospital & Institute, Beijing 100036, China

**Abstract** ABSTRACT: Objective To investigate the clinical value of dynamic contrast-enhanced magnetic resonance imaging (DCE-MRI) in assessing pathologic responses in breast cancer treated with neoadjuvant chemotherapy. Methods Forty-five patients with pathologically confirmed breast carcinoma who finished last course of neoadjuvant chemotherapy underwent preoperative breast MRI. All the specimen slices were blindly reviewed by one pathologist. Pathologic response was assessed according Miller & Payne five-point classification, of which grade 5 defined as pathological complete response(pCR), and grade 5 or 4 defined as major histological response(MHR). DCE-MRI images were blindly reviewed by two radiologists retrospectively on workstation with Functool software. Any non-vessel enhancement in previous tumor bed in any phase of postcontrast acquisition was defined as residual disease. The diagnostic results of two radiologists were correlated to pathological gold standard. Inter-observer consistency was analyzed by Kappa statistics. Results DCE-MRI for pathological invasive (pINV) residual disease detection in two radiologists had sensitivities of 94.7% and 97.4%, specificities of 42.8% and 57.1%, and accuracy of 86.6% and 91.1%, respectively, while MHR evaluation had sensitivities of 95.5% and 81.8%, specificities of 73.9% and 82.6%, and accuracies of 84.4% and 82.2%, respectively. K values in determine pINV and MHR were 0.728 and 0.778, respectively, showing good inter-observer consistency. Conclusion DCE-MRI is sensitive in detecting residual breast cancer after neoadjuvant chemotherapy, and can be used to predict the postoperative pathologic response.

**Key words** [breast cancer](#); [neoadjuvant chemotherapy](#); [dynamic contrast-enhanced](#); [magnetic resonance imaging](#); [pathological response](#)

DOI:

通讯作者 张晓鹏 [zxp@bjcancer.org](mailto:zxp@bjcancer.org)

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