

结合MR增强扫描测量肿瘤表观扩散系数值对大肝癌TACE的疗效评价

王化, 邹强, 刘佩芳, 叶兆祥

天津医科大学附属肿瘤医院放射科, 天津市肿瘤防治重点实验室 (天津市300060)

Evaluation of the Therapeutic Effect of Transcatheter Arterial Chemoembolization in Massive Hepatocellular Carcinoma Using ADC Value Measurements Combined with Contrast-enhanced MR Imaging

Hua WANG, Qiang ZOU, Peifang LIU, Zhaoxiang YE

Department of Radiology, Tianjin Medical University Cancer Institute and Hospital, Tianjin Key Laboratory of Cancer Prevention and Therapy, Tianjin 300060, China

摘要

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摘要 结合MR增强扫描, 探讨表观扩散系数(ADC)值测量在大肝癌经导管动脉化疗栓塞(TACE)疗效评价中的作用。方法: 收集TACE治疗前及TACE后4~6周接受常规MRI、扩散加权成像($b=500, 0 \text{ s/mm}^2$)及动态增强成像检查的大肝癌患者32例, 比较TACE前后各病灶ADC值, 并比较TACE治疗后肿瘤强化区和无强化区及与TACE前ADC值的差异。结果: TACE后整个病灶的ADC值 $[(1.39 \pm 0.18) \times 10^{-3} \text{ mm}^2/\text{s}]$ 较TACE前 $[(1.23 \pm 0.19) \times 10^{-3} \text{ mm}^2/\text{s}]$ 升高($P=0.016$)。TACE后肿瘤无强化区的ADC值 $[(1.80 \pm 0.32) \times 10^{-3} \text{ mm}^2/\text{s}]$ 明显高于肿瘤强化区的ADC值 $[(1.15 \pm 0.30) \times 10^{-3} \text{ mm}^2/\text{s}]$ ($P<0.001$), 肿瘤强化区的ADC值明显低于TACE前的ADC值($P=0.048$), 肿瘤无强化区的ADC值明显高于TACE前的ADC值($P<0.001$)。结论: ADC值有助于判断肿瘤活性, 分别测量肿瘤强化区和无强化区的ADC值能更准确地评估大肝癌对TACE的治疗反应。

关键词: 肝肿瘤 栓塞 治疗性 磁共振成像

Abstract. The therapeutic effect of transcatheter arterial chemoembolization (TACE) in massive hepatocellular carcinoma (HCC) using apparent diffusion coefficient (ADC) value measurements combined with gadolinium-enhanced magnetic resonance imaging (MRI) was evaluated. Methods: Routine, diffusion-weighted ($b = 500, 0 \text{ s/mm}^2$), and dynamic contrast-enhanced MRI were performed before and 4 wk to 6 wk after TACE in 32 patients with massive HCC. The ADC values in the whole tumor were measured and compared pre- and post-treatment. The ADC values in the enhanced and unenhanced tumor portions were also measured after treatment. The obtained values as well as the ADC values before treatment in the enhanced and unenhanced portions were also compared. Results: The tumor ADC values significantly increased from $(1.23 \pm 0.19) \times 10^{-3} \text{ mm}^2/\text{s}$ before TACE to $(1.39 \pm 0.18) \times 10^{-3} \text{ mm}^2/\text{s}$ after TACE ($P = 0.016$). The ADC values in the unenhanced tumor portion [$(1.80 \pm 0.32) \times 10^{-3} \text{ mm}^2/\text{s}$] were significantly greater than those in enhanced portion [$(1.15 \pm 0.30) \times 10^{-3} \text{ mm}^2/\text{s}$] after TACE ($P < 0.001$). The ADC values in the enhanced tumor portion were significantly lower than those before TACE ($P = 0.048$). The ADC values in the unenhanced tumor portion were significantly higher than those before TACE ($P < 0.001$). Conclusion: The ADC value may be beneficial in assessing tumor viability. Measuring the ADC value of the enhanced and unenhanced portions of a tumor may be more accurate in evaluating the therapeutic response of massive HCC to TACE.

Key words: Liver neoplasms embolization therapeutic magnetic resonance imaging

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通讯作者: 叶兆祥 E-mail: yezhaoxiang@163.com

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- [1] 王春平,陆荫英,高旭东,王 鑫,白文林,曲建慧,曾 珍,张敏娜,常秀娟.索拉非尼治疗进展期肝细胞癌的疗效及预后因素分析[J].中国肿瘤临床,2012,39(9): 587-592.
- [2] 周 凡,罗志强,黄明文,邵江华,邬林泉,邹书兵,胡 娟.完全腹腔镜与开腹解剖性肝切除治疗左叶肝细胞癌的病例配对研究[J].中国肿瘤临床,2012,39(4): 230-233.
- [3] 袁 强,王毅军,经 翔,丁建民,杜 智.微波消融治疗肝脏恶性肿瘤的临床价值[J].中国肿瘤临床,2012,39(15): 1104-1106.
- [4] 曾治民,廖 琴,蔡 靖,刘安文.磁共振扩散加权成像及ADC值测量对非小细胞肺癌肺门纵隔淋巴结的鉴别诊断价值[J].中国肿瘤临床,2012,39(10): 706-710.
- [5] 肖渤海,王立侠,刘伯杨.与胆管相通的肝内胆管囊腺瘤1例[J].中国肿瘤临床,2011,38(7): 419-419 .
- [6] 吴 峥,邓雪英,苏 勇,古模发,曾睿芳,谢传森,张 赠,郑 列.186例下咽癌颈淋巴结转移规律影像学分析[J].中国肿瘤临床,2011,38(20): 1279-1282.
- [7] 段巨涛,孔 棟,柴友龙.经肝动脉栓塞化疗联合微波刀治疗中晚期肝癌的临床疗效分析[J].中国肿瘤临床,2011,38(20): 1283-1286.
- [8] 李占军,游云华,梁 军,汪跃平,张华伟,李春阳.顺铂-碘化油混悬乳液舌动脉栓塞化疗29例晚期舌鳞癌的疗效评价[J].中国肿瘤临床,2011,38(11): 668-671.

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地址: 天津市河西区体院北环湖西路肿瘤医院内 300060

电话/传真: (022)23527053 E-mail: cjc@cjco.cn cjcotj@sina.com 津ICP备1200315号