

马秀华,薛鹏,吕富荣,仲继刚,陈勇,郑红伟,刘勇.MRI和¹H-MRS诊断中枢神经细胞瘤[J].中国医学影像技术,2013,29(8):1272~1275

MRI和¹H-MRS诊断中枢神经细胞瘤

MRI and proton magnetic resonance spectroscopy in diagnosis of central neurocytoma

投稿时间: 2013-01-29 最后修改时间: 2013-06-21

DOI:

中文关键词: [神经细胞瘤](#) [磁共振成像](#) [磁共振波谱](#)

英文关键词: [Neurocytoma](#) [Magnetic resonance imaging](#) [Magnetic resonance spectroscopy](#)

基金项目:

作者	单位	E-mail
马秀华	郑州人民医院医学影像科, 河南 郑州 450003	
薛鹏	郑州人民医院医学影像科, 河南 郑州 450003	
吕富荣	郑州人民医院医学影像科, 河南 郑州 450003	lfr918@sina.com
仲继刚	重庆医科大学附属第一医院放射科, 重庆 400016	
陈勇	郑州人民医院医学影像科, 河南 郑州 450003	
郑红伟	郑州人民医院医学影像科, 河南 郑州 450003	
刘勇	郑州人民医院医学影像科, 河南 郑州 450003	

摘要点击次数: 336

全文下载次数: 137

中文摘要:

目的 探讨中枢神经细胞瘤(CNC)的MRI和¹H-MRS的特征性表现及其诊断价值。方法 回顾性分析12例经手术病理证实的CNC患者的MRI资料,其中8例接受多体素¹H-MRS检查。结果 ①MRI表现:9例肿瘤位于侧脑室体部前2/3区,3例位于后1/3区;11例以实性为主,1例以囊性为主。6例瘤体内见斑片状钙化;7例见迂曲血管影;7例瘤体与受侵侧脑室壁之间牵拉呈“索条状影”。增强后8例呈不均匀轻-中度强化,2例不均匀明显强化,2例呈环状强化。②DWI及ADC值:10例肿瘤呈稍高或高信号;2例为等或稍低信号。ADC值为 $(0.76 \pm 0.11) \times 10^{-3} \text{mm}^2/\text{s}$ 。③MRS:8例均表现为胆碱峰(Cho)显著升高,N-乙酰天冬氨酸(NAA)峰显著降低,Cho/NAA升高;4例甘氨酸峰(Gly)在3.55 ppm处升高。结论 CNC具有较为特异的临床和MRI特征;MRI对于CNC的术前诊断与鉴别诊断具有重要价值;DWI及¹H-MRS可从分子水平无创观察肿瘤生化指标和组织代谢情况,有效提高CNC诊断的准确性。

英文摘要:

Objective To investigate the features and diagnostic value of MRI and ¹H-MRS for central neurocytoma (CNC). **Methods** Totally 12 patients with CNC confirmed pathologically underwent routine MRI, among them 8 underwent ¹H-MRS examination. All the data were analyzed retrospectively. **Results** ①MRI findings: The tumors of 9 cases located in the top 2/3 of the lateral ventricle body, 3 cases in the rear 1/3 of the lateral ventricle body. Tumors in 11 cases were mainly solid, tumor of 1 case was mainly cystic. Patchy calcification at the intratumoral of CNC were observed in 6 cases, tortuous vessels were detected in 7 cases, while the lateral ventricle wall was pulled by the tumor and formed cable strip shadows in 7 cases. On enhanced MRI, inhomogeneous light-moderately enhancement of CNC was observed in 8 cases, significantly uneven enhancement was found in 2 cases, while rim-like enhancement was noticed in 2 cases. ②DWI performances and ADC values: On DWI, slightly higher or high signal were observed in 10 cases, while isointense or slightly lower signal were detected in 2 cases. ADC value of CNC was $(0.76 \pm 0.11) \times 10^{-3} \text{mm}^2/\text{s}$. ③All 8 patients executed MRS showed significant higher choline (Cho) peak and reduced N-acetylaspartate (NAA) peak, while Cho/NAA increased. Increased glycine (Gly) peak in the 3.55 ppm was found in 4 cases. **Conclusion** CNC has specific onset age, location and MRI features. MRI has important value for the preoperative diagnosis and differential diagnosis of CNC. DWI and ¹H-MRS could show tumor's biochemical parameters and tissue metabolism non-invasively from the molecular level, and improve the diagnostic accuracy of CNC.

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

您是第6257922位访问者

版权所有: 《中国医学影像技术》期刊社

主管单位: 中国科学院 主办单位: 中国科学院声学研究所

地址: 北京市海淀区北四环西路21号大猷楼502室 邮政编码: 100190 电话: 010-82547901/2/3 传真: 010-82547903

京ICP备12000849号-1

本系统由北京勤云科技发展有限公司设计