

论著

肺泡蛋白沉积症所致磨玻璃影的CT特点及病理学基础

罗建光<sup>1</sup>, 杨东益<sup>1</sup>, 范松青<sup>2</sup>, 肖恩华<sup>1</sup>, 陈平<sup>3</sup>, 周顺科<sup>1</sup>, 李颖<sup>4</sup>

1. 中南大学湘雅二医院放射科,长沙 410011;
2. 中南大学湘雅二医院病理科,长沙 410011;
3. 中南大学湘雅二医院呼吸科,长沙 410011;
4. 湖南省劳动卫生研究所呼吸科,长沙 410007

**摘要:** 目的: 探讨肺泡蛋白沉积症所致磨玻璃影的CT特点及其病理学基础。方法: 回顾性分析2006年6月至2011年8月经病理确诊为肺泡蛋白沉积症的24例患者的CT和病理表现。结果: CT表现: 24例病灶主要呈磨玻璃影,8例可见局灶实变; 23例可见部分磨玻璃影以光滑血管样条状影为界,与周围正常肺组织分界清楚,呈地图样表现; 5例磨玻璃影间夹杂有腺泡或小叶气肿,使磨玻璃影边缘呈圆弧形; 24例见铺路石征。光学显微镜下观察: 24例肺泡内可见多少不等絮片状蛋白样物质充盈; 17例可见血管扩张、充血; 5例可见肺泡腔扩大。结论: 肺泡蛋白沉积症常引起边缘清楚的磨玻璃影,与其他肺病引起的磨玻璃影边缘模糊不同,对诊断肺泡蛋白沉积症较有特异性。

**关键词:** 肺泡蛋白沉积症 磨玻璃影 病理学

Characteristic CT findings and pathologic basis of ground glass opacity caused by pulmonary alveolar proteinosis

LUO Jianguang<sup>1</sup>, YANG Dongyi<sup>1</sup>, FAN Songqing<sup>2</sup>, XIAO Enhua<sup>1</sup>, CHEN Ping<sup>3</sup>, ZHOU Shunke<sup>1</sup>, LI Ying<sup>4</sup>

1. Department of Radiology, Second Xiangya Hospital, Central South University, Changsha 410011;
2. Department of Pathology, Second Xiangya Hospital, Central South University, Changsha 410011;
3. Department of Respiratory Disease, Second Xiangya Hospital, Central South University, Changsha 410011;
4. Department of Respiratory Disease, Hunan Labor Health Research Institute, Changsha 410007, China

**Abstract:** Objective: To explore characteristic CT findings and pathologic basis of ground glass opacity caused by pulmonary alveolar proteinosis (PAP). Methods: Retrospective analysis of CT and pathological findings of 24 patients with PAP who were pathologically diagnosed from June 2006 to August 2011. Results: Findings with CT: the lesions of the 24 patients mainly presented ground glass opacities. Local consolidations were seen in 8 patients. In 23 patients part of ground glass opacities bordered strip-shaped opacities with smooth edges, and there was a clear boundary between them and the bordering normal lung tissues, presenting a geographic appearance. Lesions in the 5 cases were mixed with alveoli or lobule aereocele, which made ground glass opacities present curved edges. Crazy paving pattern was detected in the 24 patients. Microscopically, the alveoli were seen to be filled with floccules proteinaceous material in various quantities in the 24 patients; hemangiectasis and congestion were seen in 17 patients, and enlarged alveolar cavities were seen in 5 patients. Conclusion: PAP usually causes ground glass opacities with clear edges, and different from ground glass opacities with obscure edges caused by other pulmonary diseases. They are relatively specific to the imaging diagnosis to PAP.

**Keywords:** pulmonary alveolar proteinosis ground glass opacity pathology

收稿日期 2011-08-30 修回日期 网络版发布日期

DOI: 10.3969/j.issn.1672-7347.2012.07.017

基金项目:

通讯作者: 杨东益,Email: yangdongyi2005@126.com

作者简介: 罗建光,硕士研究生,副教授,主要从事胸部影像诊断方面的研究。

作者Email: yangdongyi2005@126.com

参考文献:

1. Battista G, Sassi C, Zompatori M, et al. Ground-glass opacity: interpretation of high-resolution CT findings [J]. Radiol Med, 2003, 106(5/6): 425-442.
2. 贺文, 马大庆, 冯捷, 等. 肺磨玻璃密度高分辨率CT的诊断和鉴别诊断意义[J]. 中华放射学杂志, 2001, 95(1): 52-55. HE Wen, MA Daqing, FENG Jie, et al. The diagnostic and the differential diagnostic value of ground glass opacity on HRCT of the lung [J]. Chinese Journal of Radiology, 2001, 95(1): 52-55.
3. 宋勇, 展平. 肺部磨玻璃影的鉴别诊断和处理[J]. 中华结核和呼吸杂志, 2009, 32(11): 808-809. SONG Yong, ZHAN Ping. The differential diagnosis and process of ground glass opacity in the lung [J]. Chinese Journal of Radiology, 2009, 32(11): 808-809.
4. Inoue Y, Trapnell BC, Tazawa R, et al. Characteristics of a large cohort of patients with autoimmune pulmonary alveolar proteinosis in Japan. Am J Respir Crit Care Med, 2008, 177(7): 752-762.

扩展功能

本文信息

- Supporting info
- PDF(1385KB)
- [HTML全文]
- 参考文献[PDF]
- 参考文献

服务与反馈

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- 引用本文
- Email Alert
- 文章反馈
- 浏览反馈信息

本文关键词相关文章

- 肺泡蛋白沉积症
- 磨玻璃影
- 病理学

本文作者相关文章

- 罗建光
- 杨东益
- 范松青
- 肖恩华
- 陈平
- 周顺科
- 李颖

PubMed

- Article by LUO Jianguang
- Article by YANG Dongyi
- Article by FAN Songqing
- Article by XIAO Enhua
- Article by CHEN Ping
- Article by ZHOU Shunke
- Article by LI Ying

5. Tazawa R, Trapnell BC, Inoue Y, et al. Inhaled Rationalephocyte/macrophage-colony stimulating factor as therapy for pulmonary alveolar proteinosis [J]. Am J Respir Crit Care Med, 2010,181(12):1345-1354.
6. Frazier AA, Franks TJ, Cooke EO, et al. From the Archives of the AFIP: Pulmonary Alveolar Proteinosis [J]. Radiographics, 2008, 28(3):883-899.
7. 孟芝兰,刘鸿瑞,梁智勇,等.肺泡蛋白沉积症的病理学特点与诊断[J].中华病理学杂志,2005,34(9): 575-578.MENG Zhilan, LIU Hongrui, LIANG Zhiyong, et al. Pathologic features and diagnosis of pulmonary alveolar proteinosis[J]. Chinese Journal of Pathology, 2005, 34(9):575-578.
8. Holbert JM, Costello P, Li W, et al. CT features of pulmonary alveolar proteinosis[J]. AJR, 2001, 176(5): 1287-1294.
9. Ishii H, Trapnell BC, Tazawa R, et al. Comparative study of high resolution CT findings between autoimmune and secondary pulmonary alveolar proteinosis[J]. Chest, 2009, 136(5): 1348-1355.

本刊中的类似文章

1. 党西强<sup>1,2</sup>, 曹艳<sup>1,2</sup>, 易著文<sup>1,2</sup>, 许自川<sup>1,2</sup>, 何小解<sup>1,2</sup>, 黄丹琳<sup>1,2</sup>. 313例6岁以下小儿肾脏疾病病理特点及其与临床表现的关系[J]. 中南大学学报(医学版), 2008, 33(03): 227-232
2. 陈胜喜, 朱国勇, 罗万俊, 蒋海河, 张位星, 龙隆, 张春芳, 周汉槎, 袁明道. 二房心15例的外科治疗[J]. 中南大学学报(医学版), 2006, 31(06): 940-942
3. 彭娟, 许雪亮. 甲状腺相关眼病眼外肌组织病理及超微结构[J]. 中南大学学报(医学版), 2008, 33(09): 831-835
4. 蒋伟, 刘丽秋. 血清乙肝病毒DNA载量对乙型肝炎病毒相关性肾炎病理变化的影响[J]. 中南大学学报(医学版), 2008, 33(09): 857-860
5. 诸兰艳\*, 吴庆华, 陈平. 肺泡蛋白沉积症合并淋巴瘤一例[J]. 中南大学学报(医学版), 2004, 29(1): 120-121
6. 陈风华; 万新; 方加胜; 刘运生; 曹美鸿; . 大鼠液压冲击脑外伤模型的病理学分级研究[J]. 中南大学学报(医学版), 2000, 25(2): 194-
7. 王君宇; 霍雷; . 弥漫性轴突损伤合并局灶性脑挫伤动物模型[J]. 中南大学学报(医学版), 2000, 25(3): 233-
8. 许淑媛; . 感染相关性噬血细胞综合征误诊一例[J]. 中南大学学报(医学版), 2000, 25(3): 237-
9. 罗洪英; 王海成; 曾庆富; . 长沙地区1985例肺癌的临床病理分析[J]. 中南大学学报(医学版), 2002, 27(4): 312-
10. 方厂云; 韩为农; 冯德云; . 口腔粘膜下纤维性变微血管形态定量分析[J]. 中南大学学报(医学版), 2000, 25(1): 55-
11. 吴小川; 易著文; 何小解; 党西强; 赵维玲; . 小儿紫癜性肾炎肾脏病理定量分析[J]. 中南大学学报(医学版), 2000, 25(4): 403-
12. 郑长黎; 傅春燕; 胡康新; . 脑转移瘤MRI误诊病理学分析[J]. 中南大学学报(医学版), 2002, 27(3): 227-