

论著

术后肠粘连气腹造影的螺旋CT影像特征及其临床价值

蔡晓军1, 韩承新1, 叶道斌2, 贾元利1, 唐红卫3, 王伟岸3, 段亮1

武警总医院1.普通外科; 2.放射科; 3.消化内科, 北京 100039

摘要:

目的: 探讨成人术后肠粘连(postoperative peritoneal adhesion, POPA)气腹造影的螺旋CT影像(pneumoperitoneum helico CT imaging, PHCT)特征及其临床价值。方法: 术后慢性腹痛或有机械性肠梗阻反复发作的疑为术后肠粘连患者32例, 采用腹腔镜穿刺置管注气造影后CT扫描, 同时完成腹腔镜手术。对照手术所见对气腹造影影像特征进行解析判读, 判定PHCT的临床应用价值。结果: 2例(2/32, 6.25%)患者表现为正常气腹腹腔CT图像, 腹壁圆膨, 腹内脏器呈平面铺展, 其间为穹窿状的气腹空间, 腹腔镜检查未发现粘连及其他病变。30例(30/32, 93.75%)患者表现为局限性的腹壁粘连的影像特征, 腹腔内脏器局部隆起, 跨越气腹空间与腹壁贴附。粘连的脏器小肠、网膜最多见, 另有肝脏、胃壁、横结肠和子宫。同时完成腹腔镜腹内粘连松解术, 粘连的脏器组成、分布和形态的镜检结果与气腹造影影像相符。结论: PHCT检查安全、简便易行, 对腹壁粘连可达到镜像显示的效果, 能较全面地揭示腹部术后腹壁粘连的概况和特征。PHCT可作为腹腔镜的替代手段, 成为POPA临床诊断的基本方法, 对手术的实施有指导性作用。

关键词: 气腹造影 螺旋CT 术后腹壁粘连 诊断

Pneumo peritoneum helico CT imaging in post operative peritoneal adhesion

CAI Xiaojun1, HAN Chengxin1, YE Daobin2, JIA Yuanli1, TANG Hongwei3, WANG Wei'an3, DUAN Liang1

1.Department of General Surgery; 2.Department of Radiology; 3.Department of Gastroenterology, General Hospital of Chinese People's Armed Police Forces, Beijing 100039, China

Abstract:

ObjectiveTo discuss the diagnostic value of pneumoperitoneum helico CT imaging (PHCT) in cases of post operative peritoneal adhesion (POPA).MethodsWe retrospectively analyzed the PHCT scan pictures from 32 consecutive patients with chronic abdominal pain or recurrent mechanical intestinal obstruction after abdominal operation. ResultsIn a normal peritoneal cavity without adhesion, an air distended dome like space would be demonstrated with the abdominal organs arranged smoothly on the bottom of the shadow. Any additional shadow appearing in the dome space would suggest adhesion or something abnormal. Positive findings of peritoneal adhesion were found in 30 of the 32 patients (93.75%).A spot adhesion at the abdominal wall making a kinking of intestine usually showed a cuneiform bulging shadow pointed to the roof of the dome space. Organs involved in the adhesion may be single or multiple, including the liver, stomach, small intestine, colon, uterus, and omentum. In all the 32 patients, PHCT diagnosis was confirmed by the subsequent laparoscopy treatment.ConclusionPHCT imaging is valuable in making a definite diagnosis of POPA, particularly before a blind laparoscopic exploration. It is a replacement for laparoscopy but much simpler, and may offer a valuable help in dealing with the difficult cases of suspected POPA. A negative imaging is sometimes very important to an undetermined postoperative chronic abdominal pain.

Keywords: pneumoperitoneum; helico CT imaging; post operative peritoneal adhesion; diagnosis

收稿日期 2009-08-31 修回日期 网络版发布日期

DOI: 10.3969/j.issn.1672-7347.2010.

基金项目:

通讯作者: 蔡晓军

作者简介:

作者Email: wjcaixiaojun@126.com

参考文献:

[1] 蔡晓军, 郑静晨, 叶道斌, 等.气腹造影CT诊断腹部术后肠粘连1例 [J].武警医学, 2007, 18(9): 687-689. CAI Xiaojun, ZHENG Jingchen, YE Daobin, et al.CT pneumoperitoneography diagnosing postoperative abdominal adhesion in one case [J]. Medical Journal of the Chinese People's Armed Police Forces, 2007, 18(9): 687-689. [2] 蔡晓军, 叶道斌, 邱凯.CT气腹造影诊断术后局限性腹壁肠粘连 [J].中国医学影像学杂志, 2008, 16(4): 301-303. CAI Xiaojun, YE Daobin, QIU Kai.CT pneumoperitoneography in the diagnosis of postoperative abdominal adhesions [J]. Chinese Journal of Medical Imaging, 2008, 16(4): 301-303. [3] 李润泽.上腹粘连综合症 [M].临床荟萃, 1987, 2(5): 193-195. LI Runzhe. Upper abdominal adhesion syndrom [M]. Clinical Focus, 1987, 2(5): 193-195. [4] 朱江涛, 陈光强, 朱建兵, 等.CT对肠梗阻病因的诊断价值 [J].苏州医学院学报, 2007, 27(1): 145-146. ZHU Jiangtao, CHEN Guangqiang, ZHU Jianbing CT values in diagnosing the causes of bowel obstruction [J]. Suzhou University Journal of Medical Science, 2007, 27(1): 145-146.

扩展功能

本文信息

- Supporting info
- PDF(1747KB)
- [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

- 气腹造影
- 螺旋CT
- 术后腹壁粘连
- 诊断

本文作者相关文章

PubMed

[5] Mak S K, Roach S C, Sukumar S A. Small bowel obstruction: computed tomography features and pitfalls [J]. *Curr Probl Diagn Radiol*, 2006, 35(2):65-74.

[6] Gollub M J. Multidetector computed tomography enteroclysis of patients with small bowel obstruction: a volume rendered "surgical perspective" [J]. *Journal of Computer Assisted Tomography*, 2005,29(3):401-407.

[7] 刘嘉林, 余小舫, 鲍世韵, 等. 有开腹手术史患者腹腔镜术前超声判断腹腔粘连的价值 [J]. *中华消化内镜杂志*, 2006, 23(1): 19-23.

LIU Jialin, YU Xiaofang, BAO Shiyun, et al. Ultrasonic diagnosis of abdominal adhesion in patients with a previous laparotomy before laparoscopic surgery [J]. *Chinese Journal of Digestive Endoscopy*, 2006, 23(1): 19-23.

[8] Mussack T, Fischer T, Ladurner R, et al. Cine magnetic resonance imaging vs high resolution ultrasonography for detection of adhesions after laparoscopic and open incisional hernia repair: a matched pair pilot analysis [J]. *Surg Endosc*, 2005, 19(12): 1538-1543.

[9] Kothari S N, Fundell L J, Lambert P J, et al. Use of transabdominal ultrasound to identify intraabdominal adhesions prior to laparoscopy: a prospective blinded study [J]. *Am J Surg*, 2006, 192(6): 843-847.

[10] 李国杰, 周永昌, 武健. 腹腔注水成像技术在女性盆腔的初步应用 [J]. *中国超声医学杂志*, 2000, 16(7): 535-538.

LI Guojie, ZHOU Yongchang, WU Jian. A Preliminary Application of Normal Saline Instilling Abdomen Cavity in Diagnosis of Female Pelvic Lesions [J]. *Chinese Journal of Ultrasound in Medicine*, 2000, 16(7): 535-538.

[11] 蔡晓军, 韩承新, 叶道斌, 等. 微创诊疗术后肠粘连45例报告 [J]. *中华外科杂志*, 2009, 47(12): 950-951.

CAI Xiaojun, HAN Chengxin, YE Daobin, et al. Minimally invasive diagnosing and treating 45 patients with postoperative abdominal adhesions [J]. *Chinese Journal of Surgery*, 2009, 47(12): 950-951.

[12] 张巧利, 吕淑兰, 余姗姗. 腹腔粘连、慢性盆腔痛与粘连松解术 [J]. *中国妇幼健康研究*, 2006, 17(3): 224-226.

ZHANG Qiaoli, LV Shulan, YU Shanshan. Adhesions, chronic pelvic pain and adhesiolysis [J]. *Chinese Journal of Maternal and Child Health Research*, 2006, 17(3): 224-226.

[13] Peters A A, Vanden Tillaart S A. The difficult patient in gastroenterology: chronic pelvic pain, adhesions, and subocclusive episodes [J]. *Best Pract Res Clin Gastroenterol*, 2007, 21(3): 445-463.

[14] Tingstedt B, Andersson E, Isaksson K, et al. Clinical impact of abdominal adhesions: what is the magnitude of the problem? [J]. *Scand J Gastroenterol*, 2008, 43(3): 255-261.

[15] Duron J J, Silva N J, Dumontcel S T, et al. Adhesive postoperative small bowel obstruction: incidence and risk factors of recurrence after surgical treatment: a multicenter prospective study [J]. *Ann Surg*, 2006, 244(5): 750-757.

[16] Tingstedt B, Isaksson J, Andersson R. Long term follow up and cost analysis following surgery for small bowel obstruction caused by intra abdominal adhesions [J]. *Br J Surg*, 2007, 94(6): 743-748.

[17] Grant H W, Parker M C, Wilson M S, et al. Adhesions after abdominal surgery in children [J]. *J Pediatr Surg*, 2008, 43(1): 152-157.

[18] 王涛, 高晨燕. 预防腹膜粘连临床试验有效性评价的基本考虑 [J]. *中国临床药理学杂志*, 2007, 23(1): 60-62.

WANG Tao, GAO Chenyan. Consideration efficacy assessment in clinical trial of the medicinal product for prevention of peritoneal adhesions [J]. *The Chinese Journal of Clinical Pharmacology*, 2007, 23(1): 60-62.

本刊中的类似文章