

张霆霆,王莉,李玉华,黄志军,陆建平.胰泌素刺激-磁共振胰胆管成像定量分析猫慢性胰腺炎的胰腺外分泌功能[J].中国医学影像技术,2012,28(3):416-420

胰泌素刺激-磁共振胰胆管成像定量分析猫慢性胰腺炎的胰腺外分泌功能

Quantitative analysis of pancreatic exocrine function of chronic pancreatitis in cat models with secretin-stimulated magnetic resonance cholangiopancreatography

投稿时间: 2011-07-28 最后修改时间: 2011-11-24

DOI:

中文关键词: [胰腺炎,慢性](#) [胰腺外分泌功能](#) [胰泌素](#) [胰胆管造影术,磁共振](#) [猫](#)

英文关键词: [Pancreatitis, chronic](#) [Pancreatic exocrine function](#) [Secretin](#) [Cholangiopancreatography, magnetic resonance](#) [Cats](#)

基金项目:国家自然科学基金(81070371)。

作者	单位	E-mail
张霆霆	上海交通大学医学院附属新华医院放射科, 上海 200092	
王莉	第二军医大学附属长海医院影像医学科, 上海 200433	wangli_changhai@163.com
李玉华	上海交通大学医学院附属新华医院放射科, 上海 200092	
黄志军	盐城市第一人民医院普外科, 江苏 盐城 224005	
陆建平	第二军医大学附属长海医院影像医学科, 上海 200433	

摘要点击次数: 458

全文下载次数: 126

中文摘要:

目的 探讨胰泌素刺激-磁共振胰胆管成像(S-MRCP)定量评估猫慢性胰腺炎(CP)胰腺外分泌功能的价值。方法 将32只健康成年猫分为实验组($n=24$)及对照组($n=8$);实验组剖腹行胰管不全结扎,建立CP模型,对照组仅行无菌开腹,不结扎胰管。对实验组分别于建模后3、5、7周分批行S-MRCP检查,每批次8只;对照组于缝合关腹后立即进行检查。S-MRCP检查完成后对动物胰腺进行病理学分析,根据病理结果将实验组分为3个亚组:CP-I(轻度CP)、CP-II(中度)、CP-III(重度CP)。对各组注射胰泌素前、后胃肠道液体量的增加程度(FVID)进行统计学分析。结果 实验组24只中,15只建模成功,CP-I、CP-II、CP-III亚组分别为7、5、3只。注射胰泌素5 min及15 min后实验组整体FVID低于对照组($F=9.742$ 、 13.543 , P 均 <0.05)。对照组与CP-II亚组间、对照组与CP-III亚组间及CP-I与CP-III亚组间差异均有统计学意义(P 均 <0.05);其余各组间差异虽无统计学意义(P 均 >0.05),但随着胰腺炎程度加重,FVID有逐渐下降趋势。结论 利用S-MRCP可通过测量注射胰泌素前、后胃肠道液体量的变化评价猫CP模型胰腺外分泌功能。

英文摘要:

Objective To assess the value of secretin-stimulated magnetic resonance cholangiopancreatography (S-MRCP) in quantitative analysis of pancreatic exocrine function in chronic pancreatitis (CP) cat models. **Methods** Thirty-two healthy adult cats were divided into experimental group ($n=24$) and control group ($n=8$). Incomplete ligation of pancreatic duct was performed on cats in experimental group in order to establish CP models, while cats in control group received a sham operation. S-MRCP was performed in 3, 5, and 7 weeks after ligation with 8 cats examined at each time point in experimental group. Cats in control group underwent postoperative S-MRCP immediately. After S-MRCP, cats in experimental group were classified into three subgroups according to the histological analysis of the pancreas: CP-I (slight), CP-II (moderate) and CP-III (severe). Increasing degrees of fluid volume (FVID) in gastrointestinal tract before and after injecting secretin were statistically analyzed. **Results** Fifteen CP models were established successfully in experimental group ($n=24$), including 7 in CP-I, 5 in CP-II and 3 in CP-III subgroups. FVID of experimental group was lower than that of control group at 5 and 15 minutes after secretin injection ($F=9.742$, 13.543 , both $P<0.05$). There were significant differences of FVID between control group and CP-II subgroup, as well as between control group and CP-III subgroup (both $P<0.05$). Moreover, significant difference of FVID was found between CP-I and CP-III subgroup ($P<0.05$). Although there was no significant difference between other groups (all $P>0.05$), FVID showed a downward trend with increased worsening degrees of CP. **Conclusion** S-MRCP can be used to quantify pancreatic exocrine function of cat CP models by detecting FVID changes before and after secretin injection.

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

您是第6270239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