超声造影实时动态观察猪结肠前哨淋巴结

Real-time imaging of the sentinel lymph nodes with CEUS in swine's colon

投稿时间：　2012-07-14　最后修改时间：　2012-09-20

作者	单位	E-mail
李学茹	宁夏医科大学,宁夏 银川 750004	
王文	宁夏医科大学总医院超声科,宁夏 银川 750004	wwen6@hotmail.com
杨银学	宁夏医科大学总医院肛肠外科,宁夏 银川 750004	
杨光飞	宁夏医科大学,宁夏 银川 750004	

中文摘要：

　　目的　探讨CEUS显像猪结肠前哨淋巴结(SLN)的可行性。方法　分别于10头猪的乙状结肠浆膜下和黏膜下先后注射不同剂量SonoVue,以CEUS实时动态观察淋巴管和SLN增强情况;在相同部位注射1%亚甲蓝,对比观察CEUS对SLN的检出率和准确率。结果　黏膜下注射0.5 ml和1.0 ml SonoVue后能够获得清晰的结肠SLN和传入淋巴管图像;CEUS可见SLN内部结构和造影剂在其内的实时流动。与注射0.5 ml SonoVue相比,注射1.0 ml SonoVue后淋巴管增强时间、SLN增强时间及SLN达峰时间明显缩短(P均<0.05),而SLN增强持续时间的差异无统计学意义(P>0.05)。CEUS对黏膜下SLN的检出率为100%,准确率为95.65%(22/23),与蓝染料法的差异无统计学意义(P>0.05)。结论　CEUS对猪结肠SLN有较好的显像效果,有可能成为检测SLN的一种新型有效方法,具有潜在的临床应用价值。

英文摘要：

　　Objective To observe the feasibility of CEUS in detecting sentinel lymphatic node (SLN) of the colon in swine. **Methods** SonoVue of different doses were injected into the serosa layer and sub-mucosal layers of the colon of 10 swines successively. CEUS was performed to observe changes of lymph vessels and SLN in real time. Then 1% Evans was injected at the same sites. The SLN detection rate and accuracy rate of CEUS were compared to those of conventional dye-guided method. **Results** The images of the afferent lymph vessel and SLN of the colon were clear after injecting 0.5 ml and 1.0 ml SonoVue. The internal structure of SLN and the flow of SonoVue microbubbles could be observed with CEUS. Compared with those of injecting 0.5 ml SonoVue, the enhanced time of lymphatic and SLN as well as the enhanced peak time of SLN were obviously reduced after injecting 1.0 ml SonoVue (all P<0.05). SLN maintenance time between them had no statistical difference (P>0.05).The SLN detection rate was 100% and accuracy rate was 95.65% (22/23) of CEUS, and compared with those of blue dye method, no statistical difference was found (P>0.05). **Conclusion** The good imaging of SLN in swine's colon can be obtained with CEUS. CEUS may be used as a new effective detecting method of SLN and has potential clinical application value.

查看全文　查看/发表评论　下载PDF阅读器