

技术与方法

Carto merge技术指导永久性心房颤动射频消融

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摘要

摘要: 目的 探讨Carto merge技术指导永久性心房颤动射频消融的作用和优势。方法 用Carto merge技术指导射频消融治疗永久性心房颤动15例。术中用Carto导管标测和构建左心房和肺静脉的电解剖图, 然后与术前心脏核磁共振造影的三维图像进行数据整合形成二者的复合图形 (Carto merge)。首先在Carto merge的指导下行双侧上下肺静脉环线消融, 直到Lasso标测证实所有肺静脉均达到电隔离效果, 如心房颤动不终止, 依次进一步消融左房顶部线、二尖瓣峡部线及三尖瓣峡部线, 如上述部位消融后心房颤动仍未终止, 即行同步直流电复律恢复窦性心律。结果 15例患者中2例在消融过程中心房颤动自行终止, 13例均经直流电复律。3例患者分别于术后24h、1和5周时复发持续性心房颤动。其余患者经1~10个月随访, 均维持窦性心律。近期手术成功率为80%。结论 Carto merge技术可有效地指导永久性房颤的射频消融, 结合单Lasso标测, 可简化操作, 提高消融手术的成功率。

关键词 [射频消融](#) [心房颤动](#) [Carto标测](#)

分类号

Radiofrequency Catheter Ablation of Permanent Atrial Fibrillation under Guidance of Carto Merge Technique

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Abstract ABSTRACT: Objective To investigate the effectiveness and advantages of the Carto merge technique in guiding radiofrequency catheter ablation (RFCA) of permanent atrial fibrillation (AF). Methods A total of 15 patients with permanent AF underwent RFCA under guidance of the Carto merge technique. The virtual electroanatomical map of the left atrium (LA) and pulmonary veins (PVs) were reconstructed with Carto system during the procedure. Then the electroanatomical map was integrated with 3-D images of cardiac magnetic resonance angiography to form Carto merge map. Circumferential pulmonary vein ablation was performed first until complete PVs electric isolation confirmed by lasso catheter. If AF was not terminated, lesion lines on roof of LA, mitral isthmus, and tricuspid isthmus were produced. Finally direct current (DC) cardioversion were given if sinus rhythm did not return. Results AF were terminated spontaneously during RFCA in 2 patients, and by DC cardioversion in the remaining 13 patients. Persistent AF recurred on 24 hours, first week, and 5th week, respectively in three patients. The remaining 12 patients were all free of AF during follow-up (1-10 months). The success rate was 80% in the study. Conclusions Carto merge technique can effectively guide RFCA of permanent AF. When combined with single Lasso mapping, it can simplify the mapping and enhance the success rate of RFCA of permanent AF.

Key words [radiofrequency catheter ablation](#) [atrial fibrillation](#) [Carto mapping](#)

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