

- [5] The Ministry of Science and Technology of the People's Republic of China. Guidance Suggestions for the Care and Use of Laboratory Animals. 2006-09-30.
中华人民共和国科学技术部. 关于善待实验动物的指导性意见. 2006-09-30.
- [6] Hammon JW Jr. Myocardial protection in the immature heart. Ann Thorac Surg. 1995;60(3):839-842.
- [7] Benardeau A, Hatem SN, Rucker-Martin C, et al. Primary culture of human atrial myocytes is associated with the appearance of structural and functional characteristics of immature myocardium. J Mol Cell Cardiol. 1997;29(5):1307-1320.
- [8] Darling CE, Solari PB, Smith CS, et al. 'Postconditioning' the human heart: Multiple balloon inflations during primary angioplasty may confer cardioprotection. 2007.
- [9] Sun ZD, Yang CY. Lingnan Xinxueguanbing Zazhi. 2001;7(3): 205-207.
孙忠东, 杨辰垣. 双下肢缺血预处理对未成熟心肌保护作用的研究 [J]. 岭南心血管病杂志, 2001, 7(3):205-207.
- [10] Santiago-Delpin EA. Lower limb ischemia reperfusion injury as a cause of systemic inflammatory response. World J Surg. 2004; 28(4):431, 431-432.
- [11] Kur F, Beiras-Fernandez A, Meiser B, et al. Clinical heart transplantation with extended preservation time (>5 hours): experience with University of Wisconsin solution. Transplant Proc. 2009;41(6):2247-2249.
- [12] Mesaros S, Grunfeld S, Mesarosova A, et al. New strategy for prolonging the preservation time of hearts for transplantation Physiol Res. 1997;46(4):251-255.
- [13] Li CM, Zhang XH, Ma XJ, et al. Limb ischemic postconditioning protects myocardium from ischemia-reperfusion injury. Scand Cardiovasc J. 2006;40(5):312-317.
- [14] Jahania MS, Sanchez JA, Narayan P, et al. Heart preservation for transplantation: principles and strategies. Ann Thorac Surg. 1999; 68(5):1983-1987.
- [15] Zang WF. Jixu Yixue Jiaoyu. 2007;21(11): 10-11.
臧旺福. 心脏移植新进展[J]. 继续医学教育, 2007, 21(11): 10-11.
- [16] Szokoly M, Nemeth N, Hamar J, et al. Early systemic effects of hind limb ischemia-reperfusion on hemodynamics and acid-base balance in the rat. Microsurgery. 2006;26(8):585-589.
- [17] Ozturk K, Ozyurt H, Somay A, et al. The effects of nitric oxide donor molsidomine on skeletal muscle damage in a rat hind limb model of ischemia-reperfusion. Eur Surg Res. 2009;42(2):71-77.
- [18] Heidbreder M, Naumann A, Tempel K, et al. Remote vs. ischaemic preconditioning: the differential role of mitogen-activated protein kinase pathways. Cardiovasc Res. 2008;78(1):108-115.
- [19] Kang J, Albadawi H, Patel V I, et al. Apolipoprotein E-/- mice have delayed skeletal muscle healing after hind limb ischemia-reperfusion. J Vasc Surg. 2008;48(3):701-708.
- [20] Dearani JA, Razzouk AJ, Gundry SR, et al. Pediatric cardiac retransplantation: intermediate-term results. Ann Thorac Surg. 2001;71(1):66-70.
- [21] Venugopal V, Hausenloy DJ, Ludman A, et al. Remote ischaemic preconditioning reduces myocardial injury in patients undergoing cardiac surgery with cold-blood cardioplegia: a randomised controlled trial. Heart. 2009;95(19):1567-1571.
- [22] Hausenloy DJ, Mwamure PK, Venugopal V, et al. Effect of remote ischaemic preconditioning on myocardial injury in patients undergoing coronary artery bypass graft surgery: a randomised controlled trial. Lancet. 2007;370(9587):575-579.
- [23] Iliodromitis EK, Kyrzopoulos S, Paraskevaidis IA, et al. Increased C reactive protein and cardiac enzyme levels after coronary stent implantation. Is there protection by remote ischaemic preconditioning? Heart. 2006;92(12):1821-1826.

来自本文课题的更多信息——

基金资助: 广西科学基金项目(桂科基 0236068)“供体心脏不停跳和停跳保存方法对心肌保护的对比研究”。

利益冲突: 课题未涉及任何厂家及相关雇主或其他经济组织直接或间接的经济或利益的赞助。

课题的创新点: 有学者对肠系膜及左肾动脉行缺血预处理, 观察到对心肌缺血再灌注有保护作用, 从而提出远隔器官预处理概念, 即在心脏以外的器官施行缺血预处理, 同样能达到缺血预适应效果。肢体缺血预处理即属于远隔器官预处理。观察其对心肌的保护作用既符合伦理, 且方法简单, 容易实施。

提供临床借鉴的价值: 实验结果提示, 肢体缺血预处理对未成熟心脏有明显的保护作用, 在未成熟供体心脏离体前进行缺血预处理可以提高供体心脏的保存效果, 降低心肌水肿。离体前肌钙蛋白 I 含量无变化说明肢体缺血预处理对心肌没有损伤, 是一种安全的保护措施。

CRTER 杂志“器官移植”栏目关于“心肺移植”的组稿内容(本刊学术部)

- | | | |
|-----------------|-------------------|--------------------|
| ○ 心肺移植免疫学 | ○ 心脏移植术后管理 | ○ 肺移植术后处理 |
| ○ 供者心肺的选择、切取及保护 | ○ 心脏移植排斥反应和免疫抑制治疗 | ○ 肺移植排斥反应和免疫抑制治疗 |
| ○ 移植手术的麻醉 | ○ 心脏移植的并发症 | ○ 肺移植的并发症 |
| ○ 移植手术体外循环管理 | ○ 心脏和其他多器官联合移植 | ○ 小儿肺移植 |
| ○ 心肺移植的远期随访 | ○ 临床异种心脏移植 | 心肺联合移植 |
| ○ 心肺移植的社会问题 | ○ 小儿心脏移植 | ○ 心肺联合移植受者的选择与术前管理 |
| 心脏移植 | 肺移植 | ○ 心肺联合移植技术 |
| ○ 心脏移植受者的选择与治疗 | ○ 肺移植受者的选择 | ○ 心肺联合移植术后管理 |
| ○ 心脏移植技术 | ○ 肺移植的种类和手术技巧 | ○ 心肺联合移植的排斥反应和免疫治疗 |
| | | ○ 心肺联合移植的并发症及处理 |