单肺移植同期行心内缺损修补术一例

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【摘要】目的 探讨同种异体单肺移植同期行心内缺损修补治疗先天性心脏病室间隔缺损并艾森曼格综合征的可行性及围手术期的处理。方法 2004 年 10 月 22 日为 1 例先天性心脏病室间隔缺损合并艾森曼格综合征的患者在全麻低温体外循环下行右侧单肺移植，同期行室间隔缺损修补术。术中体外循环时间 244 min，供肺冷缺血时间 6 h。术后使用他克莫司、霉酚酸酯和激素三联免疫抑制治疗。结果 术后 3 d 内移植肺出现中等度移植反应性肺水肿，术后 7 d 气管切开，术后 12 d 撤离呼吸机；术后 14 d 出现急性排斥 1 次，治疗后缓解。术后肺动脉压力由术前的 110/60 mm Hg 降到 53/39 mm Hg。术后 30 d 胸片及胸部 CT 显示右侧移植肺清晰；肺通气/血流灌注扫描示右侧移植肺血流占 90%；超声心动图检查示左心室内径较术前缩小 17%；室间隔缺损修补完整，无残余分流；术后活动耐力明显改善，62 d 出院。结论 对终末期左向右分流的先天性心脏病实施同种异体单肺移植的同期心内畸形矫治是可行的，良好的供肺切除和保护以及完善的术后处理是成功的关键。

【关键词】移植肺；高血压；肺性；室间隔缺损；修补手术；外科

Single lung transplantation and ventricular septal defect repair for Eisenmenger syndrome, report of one case

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【Abstract】Objective To evaluate the operative technique, perioperative management and outcome of single lung transplantation and ventricular septal defect repair for Eisenmenger syndrome. Methods A 16-years-old male patient with end-stage ventricular septal defect who received open heart exploration 12 years ago underwent right single lung transplantation and ventricular septal defect repair on Oct. 22, 2004. The operation was carried out under cardiopulmonary bypass (CPB) with beating heart. The donor lung was perfused with modified LPD solution. Tacrolimus (FK506), mycophenolate mofetil (MMF) and corticosteroid regime was used for immunosuppressive therapy. CPB time was 244 min, and donor lung ischemic time was 6 h. Results During the operation, the pulmonary arterial pressure was reduced from 110/60 mm Hg to 53/39 mm Hg after transplantation. The patient weaned from the ventilator at the 12th postoperative day. An acute rejection episode occurred on the 14th postoperative day. ICU stay was 30 days. 99m-Tc-MAA pulmonary perfusion scan demonstrated predominant right lung blood flow. UCG assessed improved heart functions, intact ventricular septum and mean pulmonary artery pressure of 45 mm Hg. The exercise tolerance was prominently improved. The patient was discharged on the 62nd day after transplantation. Conclusions Single lung transplantation and congenital heart defect repair is effective for end-stage left-to-right shunt congenital heart diseases with satisfying short-term results. Closed follow-up and surveillance are needed for long-term outcomes.

【Key words】Lung transplantation; Hypertension; pulmonary; Heart septal defects, ventricular; Revision, surgical

2004 年 10 月 22 日我们为 1 例先天性心脏病室间隔缺损合并艾森曼格综合征的患者进行了同种异体单肺移植的同期行心内缺损修补术，目前存活已超过 2 个月，心肺功能均恢复良好，生活质量明显改善。国内目前尚无肺移植同期行心内畸形矫治成功或长期存活的报道。现将此例报告如下。

资料与方法

1. 患者术前资料：患者为男性，16 岁，体重 56 kg，身高 168 cm，出生后即发现并诊断为先天性心脏病室间隔缺损。患者 4 岁时拟行室间隔缺损修补