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心脏移植后 1年内外周内皮依赖的血管舒张功能的评估

吴胜军 李伟栋摘译自 Rogg E, Cuppoletti A, Masotti M, et al. Assessment of peripheral endothelial-dependent vasodilatation within the first year after heart transplantation. J Heart Lung Transplant, 2009, 28: 299-304.

心脏移植物血管病(CAV)是心脏移植后受者死亡的首要原因。有研究发现冠状血管内皮失功能(endothelial dysfunction, ED)现象是 CAV的早期表现,在非移植受者中也发现了外周血管 ED现象与冠脉血管失功现象之间有密切的相关性。因此,评价外周血管 ED情况可能有助于判断早期 CAV发生的风险。西班牙的研究者对 40例心脏移植受者的前臂内皮依赖的血管反应性进行评估,分别在移植后 1、6、12个月通过高分辨率肱动脉超声测量血流介导的血管舒张性(flow-mediated vasodilatation, FMD),并在移植后 1、12个月通过冠状动脉血管造影,移植后 1年通过血管内超声检查来确定是否存在心脏 CAV。结果发现,术后 1个月的 FMD均值是 1.9% ±2.6%,6个月时到增加到 3.3% ±3.2%($P<0.005$),1年时上升到 5.1% ±3.4%($P<0.0001$)。有 33例(82%)患者 FMD在术后 1个月严重受损,27例(67%)在术后 6个月时显示损伤严重,到术后 1年时减少到 19例(47%)。通过血管内超声发现,术后 1年时 19例确诊 CAV。不存在外周 ED现象的患者在术后 1个月时的血管内膜增厚超过 0.5 mm的概率比存在 ED现象的患者明显减少(20% 比 75%,$P<0.01$)。由此可见,心脏移植受者术后不久外周 FMD损伤比较常见,而术后 1年也有近 50%的受者存在这种损伤。对于那些不存在外周 ED现象的患者在术后 1个月发生 CAV的概率较低。