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· 文献速览 ·

增强型体外反搏可减轻冠心病合并糖尿病患者冠状动脉微循环障碍: EECP-CMD 研究的初步结果

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2021年11月, 发表在*Circulation*上的一项单中心、前瞻性、随机、单盲、对照临床试验 (ChiCTR1800019060), 探索了增强型体外反搏 (EECP) 对冠心病 (CAD) 合并糖尿病患者冠状动脉微循环障碍 (CMD) 的临床疗效。该研究共纳入48例CAD合并糖尿病患者, 均接受冠状动脉造影和微循环阻力指数 (IMR) 检测, 然后随机分为EECP组 ($n=24$) 和对照组 ($n=24$)。患者均按照指南推荐的标准药物进行治疗, EECP组检测完IMR后进行EECP, 60 min/次, 5次/周, 共治疗7周, 随访12周。

研究结果显示, EECP组与对照组基线IMR比较, 差异无统计学意义 [(26.56 ± 3.70) 比 (26.91 ± 4.22), $P=0.74$], 而随访结束时EECP组IMR低于对照组 [(24.02 ± 3.15) 比 (26.78 ± 4.63), $P=0.02$]。多元线性回归分析结果显示, 内皮依赖性舒张功能 (FMD) 和脉搏波波速 (PWV) 与IMR独立相关 (FMD: $\beta=0.45$, $P=0.014$; PWV: $\beta=-0.27$, $P=0.038$)。提示EECP可通过降低IMR来减轻CAD合并糖尿病患者的CMD; 此外, EECP还减少了心绞痛的发生, 改善了运动耐力、左心室早期舒张功能。

专家点评: 迄今为止, 由于CMD的检测及随访存在困难, 尚无经过大规模随机临床试验验证的针对CMD的特定治疗策略。目前, 临床采用抗凝、抗栓、扩张冠状动脉微血管的药物及缺血后处理等相关预防措施, 以减少CMD的发生, 但部分患者治疗效果仍较差。既往研究证实, EECP能缓解心绞痛发作并改善内皮功能。该研究在通过测量IMR定量评估冠状动脉微循环的基础上, 探索了EECP对CAD合并糖尿病患者CMD的临床疗效, 进一步拓展了CMD的治疗手段。但该研究还存在一定局限性: (1) 单中心、单盲研究; (2) CAD合并糖尿病患者中CMD等特殊疾病者较少, 需要继续扩大特殊疾病亚组的样本量。