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二甲双胍改善2型糖尿病合并舒张性心力衰竭患者心功能的临床研究

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关键词: [二甲双胍](#); [2型糖尿病](#); [舒张性心力衰竭](#); [左室重构](#)

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摘要: 目的 研究二甲双胍对2型糖尿病合并舒张性心力衰竭患者心功能的影响。 方法 采用单中心前瞻、随机、双盲对照研究,按随机数字表法将170例2型糖尿病合并舒张性心力衰竭患者分为二甲双胍组和对照组。对照组采用常规治疗;二甲双胍组在对照组治疗的基础上给予二甲双胍1 000 mg/d联合治疗。两组患者均在治疗前、治疗后3、6、9、12个月检测6 min步行距离(6MWT),超声心动图检测二尖瓣舒张早期最大血流速度/舒张晚期最大血流速度(E/A)、舒张早期E峰的减速时间(DT)、左室质量指数(LVMI),酶联免疫吸附试验检测血清脑钠肽前体氨基末端(NT-proBNP)、生长分化因子(GDF-15)浓度。 结果 随访12个月揭盲时,共失访12例,资料完整者158例,其中二甲双胍组80例,对照组78例。与治疗前相比,两组在治疗后3个月开始6-MWT增加而NT-proBNP明显下降($P<0.05$),对照组在治疗后9个月,二甲双胍组在治疗后6个月E/A、DT有明显下降($P<0.05$);与对照组相比,二甲双胍组在治疗后6个月开始6-MWT明显增加,治疗后9个月开始E/A、DT及NT-proBNP明显降低($P<0.05$)。与治疗前相比,对照组在治疗后9个月开始LVMI、GDF-15明显降低($P<0.05$),而二甲双胍组LVMI在治疗后6个月,GDF-15在治疗后3个月开始明显降低($P<0.05$);与对照组比较,二甲双胍组在治疗后12个月开始LVMI明显降低($P<0.05$),GDF-15在治疗后6个月开始明显降低($P<0.05$)。 结论 二甲双胍可以通过增加2型糖尿病合并舒张性心力衰

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竭患者的左心室舒张早期的充盈量和改善左室重构程度而改善这类患者的心功能。

Abstract: **Objective** To investigate the effect of metformin on the heart function of patients having type 2 diabetes mellitus complicated with diastolic heart failure. **Methods** The study adopted a single-center, randomized, double-blind and prospective design, and a total of 170 patients with type 2 diabetes mellitus complicated with diastolic heart failure were randomized into an experimental group and a control group. Patients in the control group were given conventional treatment, and those in the experimental group were given metformin (1 000 mg/d) combined with conventional treatment. Six-min walk distance (6-MWT), peak early filling velocity to peak late filling velocity (E/A), E-wave deceleration time (DT), left ventricular mass index (LVMI), N-terminal pro-brain natriuretic peptide (NT-proBNP) and growth differentiation factor-15 (GDF-15) were determined at baseline and at 3, 6, 9, and 12 months of treatment. **Results** The follow-up at 12 months showed that a total of 12 cases were lost and 158 cases had complete data, including 80 cases in the experimental group and 78 cases in the control group. 6-MWT increased and NT-proBNP decreased significantly in the two groups after 3 months of treatment compared with those at baseline ($P<0.05$). E/A and DT decreased significantly ($P<0.05$) at 9 months in the control group and at 6 months in the experimental group. Compared with the control group, 6-MWT increased significantly in the experimental group after 6 months of treatment, and E/A, DT, and NT-proBNP decreased significantly after treatment for 9 months ($P<0.05$). LVMI and GDF-15 decreased significantly in the control group after 9 months of treatment compared with those at baseline, whereas LVMI and GDF-15 in the experimental group decreased markedly after treatment for 6 months and 3 months, respectively ($P<0.05$). Compared with the control group, the experimental group showed LVMI significantly decreased at 12-month follow-up ($P<0.05$) and sharp decline of GDF-15 after treatment for 6 months ($P<0.05$). **Conclusion** Metformin can improve the heart function of type 2 diabetes patients complicated with diastolic heart failure by increasing diastolic filling volume and improving left ventricular remodeling.

参考文献/REFERENCES:

苏勇, 王端, 龙军, 等. 二甲双胍改善2型糖尿病合并舒张性心力衰竭患者心功能的临床研究[J]. 第三军医大学学报, 2013, 35(17): 1862-1865.

相似文献/REFERENCES:

- [1]李亚, 李伟, 王晶, 等. 抑郁状态与2型糖尿病形成各阶段代谢指标的相关性分析[J]. 第三军医大学学报, 2012, 34(16): 1697.
- [2]陈志雄, 张军, 张刘平, 等. 胃转流术降低2型糖尿病大鼠肝脏FoxO1因子的表达[J]. 第三军医大学学报, 2012, 34(17): 1766.
Chen Zhixiong, Zhang Jun, Zhang Liuping, et al. Effect of gastric bypass on FoxO1 expression in liver of rats with type 2 diabetes[J]. J Third Mil Med Univ, 2012, 34(17): 1766.
- [3]杨静, 张朝军, 郑宏庭, 等. 胃转流手术治疗肥胖2型糖尿病短期疗效观察[J]. 第三军医大学学报, 2012, 34(21): 2222.
- [4]金晖, 鲍洁, 赵镇, 等. 米格列奈与瑞格列奈对新诊断2型糖尿病的临床疗效研究[J]. 第三军医大学学报, 2013, 35(03): 260.
Jin Hui, Bao Jie, Zhao Zhen, et al. Clinical efficacy of mitiglinide and repaglinide in treatment of patients with newly diagnosed type 2 diabetes mellitus[J]. J Third Mil Med Univ, 2013, 35(17): 260.
- [5]廖涌, 章婧, 李阳, 等. 甘精胰岛素联合门冬胰岛素在2型糖尿病围手术期的临床应用[J]. 第三军医大学学报, 2008, 30(18): 1766.
LIAO Yong, ZHANG Jing, LI Yang, et al. Insulin glargine plus insulin aspart for perioperative patients with type 2 diabetes[J]. J Third Mil Med Univ, 2008, 30(17): 1766.
- [6]刘红, 罗蕾, 高原. 2型糖尿病大鼠近球小管Na⁺, K⁺-ATPase活性变化[J]. 第三军医大学学报, 2006, 28(20): 2062.
- [7]贾贺堂, 张素华, 纪立农, 等. 北京地区早发糖尿病家系MODY5基因突变的筛查[J]. 第三军医大学学报, 2006, 28(19): 1952.
- [8]杨孟雪, 甘华, 沈清, 等. 1, 25-(OH)2D3及LPS对2型糖尿病肾病尿毒症患者单核细胞维生素D受体表达的影响[J]. 第三军医大学学报, 2011, 33(16): 1731.

Yang Mengxue, Gang Hua, Sheng Qing, et al. Effect of 1,25-(OH)₂D₃ and LPS on expression of vitamin D receptor in human monocytes incubated with sera from type 2 diabetes patients and diabetic nephropathy patients with uremia [J]. J Third Mil Med Univ, 2011, 33(17):1731.

[9] 张学亮, 冯晓丽, 徐静, 等. 曲美他嗪对2型糖尿病患者血乳酸水平的影响[J]. 第三军医大学学报, 2005, 27(24):2478.

[10] 唐晓君, 卢仙娥, 张素华, 等. LR 3 057位基因多态性与2型DM和肥胖及血脂的关系[J]. 第三军医大学学报, 2005, 27(15):1596.

[11] 卢薇, 欧亚萍, 梁英梅. 二甲双胍对2型糖尿病患者血HS-CRP、TNF- α 、ICAM-1水平的影响[J]. 第三军医大学学报, 2008, 30(18):1768.

[12] 李玉, 彭颜晖. 瑞格列奈联合二甲双胍治疗2型糖尿病疗效观察[J]. 第三军医大学学报, 2009, 31(18):1793.

[13] 张先祥, 阳皓, 杨刚毅, 等. 艾塞那肽与沙格列汀联合二甲双胍治疗2型糖尿病患者的疗效与安全性比较[J]. 第三军医大学学报, 2013, 35(14):1531.

Zhang Xianxiang, Yang Hao, Yang Gangyi, et al. Efficacy and safety of exenatide versus saxagliptin combined with metformin in patients with type 2 diabetes mellitus[J]. J Third Mil Med Univ, 2013, 35(17):1531.