刘 洵,Brodie DA,冯 晟,周 凤,Bundred PE.高血压、高胆固醇和吸烟对心肌梗死后患者运动负荷能力的影响[J].中国康复医学杂志,2011,(5):433~437

高血压、高胆固醇和吸烟对心肌梗死后患者运动负荷能力的影响 点此下载全文

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基金项目：教育部留学回国人员科研启动基金[（2004）527]

DOI：

摘要：

摘要目的：定性并定量地分析高血压、高胆固醇和吸烟对心肌梗死后（PMI）患者运动时心脏负荷能力的影响。方法：46例未服用β-阻断剂的PMI患者根据其冠心病危险指数（Dundee rank，DR）（由血压、血胆固醇数值和吸烟状况得出）被分成三组：DR＜60(1组，14例)、6070（3组，17例），然后在跑台上进行递增负荷实验（改良Bruce方案）。运动中每3min记录一次主观用力感觉和血压，每30s测量一次摄氧量（VO2）和心率，由VO2计算得出代谢当量（METs），并连续监测12导心电图。结果：运动时间、METs与DR之间存在高度正相关（P<0.01）。最大运动能力为7.5METs（运动“低危层”）时DR的对应数值为70。在心脏康复早期只有部分患者（39.1%）可达到低危层的METs值。结论：DR与METs之间的高度相关意味着患者运动中的危险层次可以通过血压、血液胆固醇和吸烟状况被预测出来，这将有助于康复专业人员利用METs值为患者设定适宜的运动水平。

关键词：冠心病危险指数 心肌梗死 代谢当量

Influence of hypertension, hypercholesterol and smoking on exercise load capacity of post myocardial infarction patients Download Fulltext

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Fund Project:

Abstract:

Abstract Objective: To analyze both qualitatively and quantitatively the influence of hypertension, hypercholesterol and smoking on heart load capacity of post myocardial infarction (PMI) patients during exercise. Method: According to coronary heart disease risk factors（Dundee rank, DR） (obtained from status of blood pressure and blood cholesterol(BC), and smoking) forty-six male non-blockade recent PMI patients were subdivided into 3groups: DR<60 (Group 1, n=14), DR between 60 and 70 (Group 2, n=15) and DR>70 (Group 3, n=17). The subjects all performed a graded progressively exercise test (modified Bruce protocol) on a motorized treadmill, in the meantime ratings of perceived exertion(RPE) and blood pressure were recorded every three min oxygen uptake (VO2) and heart rate were measured every 30. Metabolic equivalent (METs) were derived from VO2. The 12-lead electrocardiogram was recorded continuously. Result: A high positive correlation existed between exercise time, METs and DR (P<0.01). When the maximum exercise capacity was 7.5METs （which is regarded as “low risk” of exercise） the equivalent of DR was 70 units. Only a part of heart disease patients (39.1%) could and take “low risk” METs in early stage of cardiac rehabilitation. Conclusion: The high correlation between DR and METs means that high risk versus low risk can be predicted from blood pressure, blood cholesterol and smoking status. This will guide rehabilitation professionals to set appropriate exercise levels based on METs.

Keywords:coronary risk factors myocardial infarction metabolic equivalent

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