

Difference of Biological Markers Expression between Myocardial Infarction Model Rats with *Qi* Stagnation and Blood Stasis Type and *Qi* Deficiency and Blood Stasis Type

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ABSTRACT Objective To study the biological features of animal model of myocardial infarction with *qi* deficiency and blood stasis syndrome and *qi* stagnation and blood stasis syndrome. **Methods** A total of 36 male Wistar rats were randomly divided into 4 groups: normal group (n = 6), myocardial infarction model group (n = 10), *qi* deficiency and blood stasis syndrome (n = 10) and *qi* stagnation and blood stasis syndrome (n = 10). The models of myocardial infarction was made by ligating the anterior descending branches of the left coronary artery. On this basis, the models of myocardial infarction with *qi* deficiency and blood stasis syndrome were established by hunger, fatigue, cold and dampness, and the models of myocardial infarction with *qi* stagnation and blood stasis syndrome were established by circadian disorders, scintillation and clipper stimulation combined with ice water. The general condition, pathologic staining of myocardium tissues of rats were observed. The platelet aggregation rate, and the levels of GMP-140, CGRP and NE were detected. **Results** The rats in *qi* deficiency and blood stasis syndrome group were burnout and lethargy, few of activities. *Qi* stagnation and blood stasis syndrome group was more excited and irritated, and had more activities. GMP-140, NE of 3 model groups were all higher than that of normal group. CGRP of 3 model groups were all lower than that of normal group, with statistical significance ($P < 0.01$). GMP-140 of *qi* deficiency and blood stasis group and *qi* stagnation and blood group were higher than myocardial infarction model group. CGRP of *qi* deficiency and blood stasis group was lower than *qi* stagnation and blood group and myocardial infarction model group. NE of *qi* stagnation and blood group was higher than that of others ($P < 0.01$). Infarction region of 3 model groups was pale after NBT staining. **Conclusion** *qi* deficiency and blood stasis syndrome and *qi* stagnation and blood stasis syndrome models established by multifactor combined methods, are combined with myocardial infarction to establish integration of disease and syndrome animal model. Biological markers are difference of between myocardial infarction of *qi* deficiency and blood stasis syndrome and *qi* stagnation and blood.

Keywords myocardial infarction; *qi* deficiency and blood stasis; *qi* stagnation and blood stasis; integration of disease and syndrome; animal model

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