

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

- 一、請說明低強度有氧運動與高強度間歇運動對減重的成效。(10 %)
- 二、請說明運動對於高齡認知障礙者的效益與運動建議(10 %)
- 三、請說明教育部體育署依據國民體育法規定所規範國民體適能檢測之年齡及項目(如高齡者身體組成、成年人肌力…等項目之測量方式)。(30%)

- 四、請解釋運動對於壓力舒緩的生理機制。(10%)
- 五、請解釋以下專有名詞在運動或身體活動的應用(15%)
 - (1) 跨理論模式
 - (2) transportation physical activity
 - (3) active recovery after training

- 六、請大致說明以下文章題目與摘要內容(15%)，並對此項觀點進行評論(10%)共 25%

Variable prognostic value of blood pressure response to exercise

Aim

The aim of this study was to evaluate the impact of patient background including exercise capacity on the relationship between the blood pressure (BP) response to exercise and prognosis in patients visiting a cardiovascular hospital.

Methods

A total of 2134 patients who were referred to our hospital underwent symptom-limited maximal cardiopulmonary exercise testing, and were followed through medical records and mail. The BP response to exercise was defined as the difference between peak and rest systolic BP. The end point was set as cardiovascular events including cardiovascular death, acute coronary syndrome, hospitalization for heart failure, and cerebral infarction.

Results

During a median follow-up period of 3 years, 179 (8%) patients reached the end point (2.5%/year). Multivariate analysis showed that BP response was independently and negatively associated with the occurrence of the end point. This prognostic significance of BP response was consistent regardless of left ventricular ejection fraction, renal function, presence of heart failure symptoms, the presence of organic heart disease, and hypertension. However, peakVO₂ showed a significant interaction with the effects of BP response on the endpoint, suggesting that the prognostic value of BP response was limited in patients with preserved exercise capacity.

Conclusions

The role of BP response to exercise as the predictor depends on exercise capacity of each patient.