

## Summary

### **Electrocardiographic Findings in Pulmonary Thromboembolism —Comparison with Lung Perfusion Scan and Echocardiographic Findings—**

Norimichi KOITABASHI, Takuji TOYAMA, Hiroshi HOSHIZAKI,  
Shigeru OSHIMA and Koichi TANIGUCHI

*Division of Cardiology, Gunma Prefectural Cardiovascular Center*

This study investigated the usefulness of electrocardiography (ECG) in pulmonary thromboembolism (PTE), compared with lung perfusion scan and echocardiographic findings on evaluation of the severity. We checked ECG findings associated with PTE at hospital admission, with the seven abnormal findings described by Sreeram N, et al. On Lung perfusion scan, severity of perfusion defect was assessed total defect score (TDS), calculated as the sum of the scores for all 18 segment of lung. On echocardiography, severity of right ventricular overload was assessed. The

number of the seven ECG abnormal findings and TDS were larger in patients with the right ventricular overload ( $p < 0.01$ ). The number of the ECG findings was positively correlated with TDS ( $r = 0.75$ ). The number of abnormal ECG findings in PTE is associated with the severity evaluated by lung perfusion scan and echocardiography.

**Key words:** Lung perfusion scan, Pulmonary thromboembolism, Electrocardiography, Echocardiography.