

[gw22-e0101]

UNPROVOKED ACUTE PULMONARY EMBOLISM INCREASES THE RISK OF RECURRENT THROMBOEMBOLIC EVENTS AFTER ACUTE PULMONARY EMBOLISM

Wang Yong, Zhang Hongliang, Zhao Zhihui, Luo Qin, Zhao Qing, Liu Zhihong *Center for Pulmonary Vascular Diseases, Chinese Academy of Medical Sciences, Peking Union Medical College, Fuwai Hospital, Beijing, China*

10.1136/heartjnl-2011-300867.556

Objective Recurrent thromboembolic events is crucial after acute pulmonary embolism (PE). We investigated the predictive value of unprovoked PE in recurrence of thromboembolic events.

Method The patients with acute PE diagnosed by contrast-enhanced spiral computed tomography or high-probability lung scintigraphy were consecutively enrolled. The patients were grouped by presence of definite risk factors. *Group 1*: provoked PE (the patients with definite risk factors); *Group 2*: unprovoked PE (the patients without definite risk factors). Then they were followed up regularly with the primary study end point of symptomatic, objectively confirmed recurrent fatal or non-fatal VTE.

Results In all 224 patients, 21 recurrent thromboembolic events occurred. 64 patients were in group 1 with 33 females (51.6%),

average age of 59 ± 16 years and only 1 recurrent thromboembolic event. Meanwhile 160 patients were in group 2 with 93 females (58.1%), average age of 60 ± 13 years and 20 recurrent thromboembolic events. At multivariate analysis unprovoked PE was an independent predictor of recurrent VTE (HR 3.09; 95% CI 1.13 to 8.45; $p<0.05$).

Conclusions The risk of recurrent thromboembolic events is increased in unprovoked pulmonary embolism.