中文題目: 恙蟲病、斑疹傷寒及 Q 熱在老年人的臨床特徵: 凝血脢原時間的延長是 老年族群發生嚴重併發症的預測因子

英文題目: Characteristics of scrub typhus, murine typhus, and Q fever among elderly patients: prolonged prothrombin time as a predictor for severity

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**Background:** The clinical manifestations of scrub typhus, murine typhus and acute Q fever in the elderly are not clear.

**Method:** We conducted a retrospective study to identify the characteristics of the elderly aged  $\geq 65$  years with a comparison group aged 18 - 64 years among patients with scrub typhus, murine typhus, or acute Q fever who were serologically confirmed at three hospitals in Taiwan during 2002-2011.

**Results:** Among 441 cases, including 187 cases of scrub typhus, 166 acute Q fever, and 88 murine typhus, 68 (15.4%) cases were elderly patients. The elderly had a higher severe complication rate (10.3% vs. 3.5%, p=0.022), but did not have a significantly higher mortality rate (1.47% vs. 0.54%, p=0.396). Compared with those without severe complications, we found the elderly (p=0.022), dyspnea (p=0.006), less relative bradycardia (p=0.004), less febrile illness (p=0.004), prolonged prothrombin time (PT) (p=0.002), higher levels of initial C-reactive protein (p=0.039), blood leukocyte counts (p=0.01), and lower platelet counts (p=0.012) are significantly associated with severe complications. Only prolonged prothrombin time was associated with severe complications in multivariate analysis (p=0.018, CI 95% 0.01-0.66). Among clinical symptoms and laboratory data, multivariate analysis

revealed chills was less frequently occurred in the elderly (p=0.012, 95% confidence interval [CI]: 1.33-9.99).

**Conclusion:** The elderly cases with scrub typhus, murine typhus, or acute Q fever would be more likely to have severe complications, for which prothrombin time prolongation is an important predictor for severe complications.