中文題目:老年人的血小板數量與死亡率呈 U 型曲線相關:以社區為基礎的世代研究

英文題目: U-shaped Curve Mortality Associated with Platelet Count among Older People: A Community-Based Cohort Study

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Background: Although the association between abnormal platelet count and adverse outcome is well established in various clinical settings, the association of platelet count with mortality has not been extensively studied among older populations.

Methods: We conducted a community-based cohort study of 131,308 participants aged ≥65 years using the Taipei City Elderly Health Examination Database from 2001 to 2010. Platelet count was measured at baseline, and the endpoints were all-cause and cause-specific mortality.

Results: Compared with older people with platelet count between 200 and $<300 \times 10^3/\mu\text{L}$, adjusted hazard ratios (95% confidence intervals) of all-cause mortality in those with platelet counts <100, 100 to <200, 300 to <400, and $\ge400 \times 10^3/\mu\text{L}$ were 1.93 (1.77–2.11), 1.08 (1.05–1.12), 1.18 (1.11–1.25), and 1.67 (1.49–1.87), respectively. U-shaped curve associations were also observed for mortality related to cancer and severe sepsis or septic shock. However, the association between platelet count and cardiovascular mortality was abolished in higher platelet count categories but preserved in the case of thrombocytopenia. The magnitude of risk for all-cause mortality remained consistent in subgroup analyses according to gender, age, and comorbidities.

Conclusions: Both thrombocytopenia and thrombocytosis are associated with mortality, primarily non-cardiovascular death, among older people. Further studies are required to verify the mechanism of this association.