

中文題目：血液中血小板濃度與骨密度在女性有關聯性

英文題目：Circulating platelet concentration associated with bone mineral density in women

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Background: Platelets and bone metabolism are found to be interconnected. However, inconsistent findings about the relationship between platelet counts and bone mineral density were demonstrated in current evidences. Our study aimed to investigate the association between platelet counts and osteoporosis in Chinese women.

Methods: A total of 818 female adults who attended a health checkup program were enrolled into this cross-sectional study. Bone mineral density (BMD) of lumbar spine and bilateral hip were measured by dual-energy X-ray absorptiometry. The level of blood cell counts was collected.

Results: Subjects with osteoporosis had the lowest WBC ($P = 0.040$) and platelet counts ($P < 0.001$). Circulating platelet concentration was positively correlated with the BMD of lumbar spine ($r = 0.195$, $P < 0.001$), left hip ($r = 0.145$, $P < 0.001$) and right hip ($r = 0.149$, $P < 0.001$). The cut-off point for the platelet concentration to differentiate osteoporosis from normal and osteopenia was $260 \times 10^9/L$. A high platelet concentration was independently associated with reduction in osteoporosis risk after adjusting for other covariates.

Conclusion: The circulating platelet concentration was positively associated with BMD in Chinese women.