

**P47 Effects of Tetrandrine and Fangchinoline on Human Platelet Aggregation,
Thromboxane B₂ Formation and Blood coagulation.**

Yong-He Zhang *, Hack-Seang Kim, Yeo-Pyo Yun and Hyung-Kyu Lee

College of Pharmacy, Chungbuk National University, Cheongju, Korea and Korea
Research Institute of Bioscience & Biotechnology, Taejon 305-600, Korea

In the previous report, tetrandrine (TET) and fangchinoline (FAN) showed antithrombotic and antiplatelet aggregation activities. The present study was undertaken to investigate the effects of tetrandrine and fangchinoline on human platelet aggregation, formation of thromboxane B₂ and coagulation of platelet poor plasma. TET and FAN inhibited platelet activating factor (PAF) induced human platelet aggregation, but didn't inhibit the specific binding of PAF to its receptor. Meanwhile, TET and FAN also inhibited PAF, thrombin and arachidonic acid induced thromboxane B₂ formation in human washed platelets. In addition, neither TET nor FAN showed any anticoagulation activities in the measurement of the activated partial thromboplastin time (APTT), prothrombin time (PT) and thrombin time (TT) using human platelet poor plasma. These results suggest that antithrombotic effects of TET and FAN in mice may be mainly related to the antiplatelet aggregation activities, and the antiplatelet aggregation effects may be related to the intracellular messenger system such as TXA₂ formation etc., but not to the binding of PAF to PAF-receptor on the platelet membrane directly.