## [ID-P#051] 20-minute whole blood clotting time versus international normalized ratio used in early determining antivenom therapy in green pit viper bites

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**Objective**: This study aimed to evaluate the sensitivity and specificity of the 20-minute whole blood clotting time (20WBCT) and international normalized ratio (INR) for identifying hypofibrinogenemia specifically in green pit viper bites in an urban tertiary care setting.

**Methods**: This is a retrospective analysis of medical record of patients presented with green pit viper bites at Siriraj Hospital during January to December 2022. Diagnostic accuracy were assessed with sensitivity, specificity, and their confidence intervals (95%CI). Hypofibrinogenemia (fibrinogen < 100 mg/ dL) was the reference outcome. Receiver Operating Characteristic (ROC) curve analysis and area under the ROC (AuROC) were performed. Optimal cut-off was selected with highest Youden index.

**Results**: The mean age of patients was 52.26 years (95%CI 48.80-55.72). The median time between being bitten and hospital presentation was 35 minutes (interquatile range 25-85). Among 119 patients, there were 8 patients (6.72%) who had abnormal blood tests (7 with hypofibrinogenemia and 1 with unclotted 20WBCT) without clinical bleeding. All of these 8 patients received antivenom therapy. The 20WBCT revealed a sensitivity of 12.50% (2.10-52.60) and a specificity of 98.21% (94.90-99.60) in detecting hypofibrinogenemia. INR's optimal cut-off point of >1.03 showed 100% sensitivity (48.00-100.00) and 76.15% specificity (67.90-83.19), with an AuROC of 0.950 (0.898-0.980). AuROC of 20WBCT was 0.554 (0.477-0.628).

**Conclusion**: This study revealed that 20WBCT has good specificity for hypofibrinogenemia secondary to green pit viper bites.