Evaluation of Thrombolytic Activity of Zingiber cassumunar Roxb. and Thai Herbal Prasaplai Formula

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Abstract : The propose of this study was to investigate in vitro thrombolytic activity of Zingiber cassumunar Roxb. and Prasaplai, a Thai herbal formulation of Z. cassumunar Roxb. Herbs were extracted with boiling water and concentrated by lyophilization. To observe their thrombolytic potential, an in vitro clot lysis method was applied where streptokinase and sterile distilled water were used as positive and negative controls, respectively. Crude aqueous extracts from Z. cassumunar Roxb. and Prasaplai formula showed significant thrombolytic activity by clot lysis of 17.90% and 25.21%, respectively, compared to the negative control water (5.16%) while the standard streptokinase revealed 64.78% clot lysis. These findings suggest that Z. cassumunar Roxb. exhibits moderate thrombolytic activity and cloud play an important role in the thrombolytic properties of Prasaplai formula. However, further study should be done to observe in vivo clot dissolving potential and to isolate active component(s) of these extracts.

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