

Studi In vivo aktivitas antitrombotik dari piper retrofractum, imperata cylindrica dan moringa oleifera pada mencit = In vivo study of antithrombotic activity from piper retrofractum, imperata cylindrica and moringa oleifera in mice

Arini Andriani, examiner

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20458125&lokasi=lokal>

Abstrak

ABSTRAK

Piper retrofractum, Imperata cylindrica, dan Moringa oleifera telah diuji secara in vitro dapat mengurangi agregasi platelet yang berperan penting dalam patogenesis trombosis. Penelitian ini bertujuan untuk mengevaluasi efek ekstrak Piper retrofractum, Imperata cylindrica, dan Moringa oleifera sebagai antitrombotik secara in vivo. Mencit jantan dibagi menjadi kontrol normal CMC, negatif CMC, positif aspirin, dan dosis 1, 2, 3 pada masing-masing ekstrak. Perlakuan awal yaitu pemberian masing-masing suspensi berdasarkan pengelompokan, yang dilakukan selama 7 hari. Kemudian, pengamatan dilakukan menggunakan parameter waktu perdarahan ekor mencit yang diamputasi dan data diolah secara statistik $p \leq 0.05$, serta parameter perhitungan angka harapan hidup setelah induksi trombosis oleh penyuntikan intravena kolagen-epinefrin. Hasilnya yaitu dosis 3 ekstrak Piper retrofractum 11,76 mg/20 g, ekstrak Imperata cylindrica 11,2 mg/20 g, dan ekstrak Moringa oleifera 11,2 mg/20 g memperpanjang rata-rata waktu perdarahan menjadi 17.70 2.10; 19.54 0.65; 17.11 3.07 dan meningkatkan persentase angka harapan hidup 80 ; 60 ; 60. Dapat disimpulkan bahwa ekstrak Piper retrofractum, Imperata cylindrica, dan Moringa oleifera memiliki potensi sebagai antitrombotik.

<hr>

ABSTRACT

Piper retrofractum, Imperata cylindrica and Moringa oleifera had been studied in vitro for their activity to reduce platelet aggregation which have important role in the pathogenesis of thrombosis. This study aimed to evaluate the effect of Piper retrofractum, Imperata cylindrica and Moringa oleifera extracts as antitrombotic in vivo. Male mice were divided into normal CMC, negative CMC, positive Aspirin, 1st, 2nd and 3rd for each extract. Pretreatments were given orally for 7 days and the experiment used two parameters, including bleeding time was observed on amputated mice tail and then analyzed statistically $p \leq 0.05$, and survival rate was observed on calculation of dead paralyzed mice after thrombosis induction by injecting collagen and epinephrine intravenously. The results are the 3rd dose extracts of Piper retrofractum 11,76 mg 20 g, Imperata cylindrica 11.2 mg 20 g, and Moringa oleifera 11.2 mg 20 g can prolonged the bleeding time to 17.70 2.10 19.54 0.65 17.11 3.07, then increased the survival rate to 80 60 60. The extracts of Piper retrofractum, Imperata cylindrical and Moringa oleifera has a potential activity as antithrombotic.