

ABSTRAK

Pengaruh Pemberian Ekstrak Etanol Daun Pegagan (*Centella Asiatica*) Terhadap Disfungsi Endotel Pada Tikus Wistar Jantan Obesitas

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Disfungsi Endotel merupakan proses awal terjadinya berbagai masalah kardiovaskular seperti penyakit jantung dan lain-lain. Pencegahan masalah kardiovaskular harus menjadi fokus tambahan pada pengobatan Disfungsi Endotel. Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak etanol daun Pegagan (*Centella asiatica*) terhadap profil EKG dan kadar NO serum pada hewan model obesitas. Metode penelitian dilakukan terhadap tikus Wistar jantan yang diinduksi pakan tinggi lemak dan karbohidrat selama 60 hari, Fenofibrate 18 mg/kg, ekstrak Pegagan dosis 50, 100 & 200 mg/kg. pengukuran profil EKG di ukur secara non-invasive. Kadar NO serum diukur dengan metode Griess. Hasil menunjukan ekstrak pegagan dosis 50, 100 dan 200 mg/kg BB berkhasiat untuk risiko kardiovaskular seperti heart rate, kekakuan arteri (PWV), dan sudut QRST jantung. Ekstrak pegagan dosis 50, 100 dan 200 mg/kg BB dapat meningkatkan kadar NO serum. Kesimpulannya ekstrak pegagan dosis 200 mg/kg BB lebih efektif karena dosis ini memiliki efek yang baik sebagai antiobesitas dan kenaikan kadar NO serum.

Kata Kunci: Disfungsi Endotel, *Centella asiatica*, Kekakuan arteri, Sudut QRS-T, Nitrit Oksida

ABSTRACT

The Effect Of Ethanol Extract Of Centella Asiatica (Centella Asiatica) On Endotelal Dysfunction In Obesity Male Wistar Rats

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Endothelial dysfunction is the initial process of various cardiovascular problems such as heart disease and others. Prevention of cardiovascular problems should be an additional focus in the treatment of Endothelial Dysfunction. This study aims to determine the effect of the ethanolic extract of Pegagan (Centella asiatica) leaves on the ECG profile and serum NO levels in obese animal models. The research method was carried out on male Wistar rats induced by a diet high in fat and carbohydrates for 60 days, Fenofibrate 18 mg/kg, Pegagan extract doses of 50, 100 & 200 mg/kg. ECG profile measurements are measured non-invasively. Serum NO levels were measured by the Griess method. The results showed that gotu kola extract at doses of 50, 100 and 200 mg/kg BW was efficacious for cardiovascular risks such as heart rate, arterial stiffness (PWV), and heart QRST angle. Gotu kola extract at doses of 50, 100 and 200 mg/kg BW can increase serum NO levels. In conclusion, gotu kola extract at a dose of 200 mg/kg BW was more effective because this dose had a good effect on anti-obesity and increased serum NO levels.

Keywords: Endothelial dysfunction, *Centella asiatica*, Arterial stiffness, QRS-T angle, Nitrite oxide.