In vitro evaluation of Cuscuta reflexa Roxb. forthrombolytic, antioxidant, membrane stabilizing andantimicrobial activities

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ABSTRACT

The key purpose of this experiment was to evaluate the thrombo-lytic, antioxidant, membrane stabilizing and antimicrobial poten-tials of crude ethanol extracts (CEE) of whole plant, organic andaqueous soluble fractions (OF & AQSF). CEE showed the highest(44.63%) clot lysis activity compared to streptokinase (64.35%). InDPPH study, petroleum ether soluble fraction (PSF) has exhibitedIC50 of 18.83lg/mL while the standard ascorbic acid was 2.48mg/mL. AQSF profoundly inhibited the lysis of erythrocytes (66.20%)which was insignificantly different ($p>0.05$) to acetylsalicylic acid(71.98%), the reference. However, AQSF showed a significantlystronger level of protection against heat-induced hemolysis(64.80%) as compared with the acetylsalicylic acid (78.90%). CEE,OF and AQSF have displayed reasonable growth of inhibition oftested bacteria compared to negative control and standard drug(77.50mg of GAE/g).

KEYWORDS: Cuscutare flexa; thrombolytic; antioxidant; membrane stabilizing; anti-microbial activity

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