In vitro evaluation of Cuscuta reflexa Roxb. for thrombolytic, antioxidant, membrane stabilizing and antimicrobial activities

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ABSTRACT

The key purpose of this experiment was to evaluate the thrombo-lytic, antioxidant, membrane stabilizing and antimicrobial potential of crude ethanol extracts (CEE) of whole plant, organic and aqueous soluble fractions (OF & AQSF). CEE showed the highest (44.63%) clot lysis activity compared to streptokinase (64.35%). In DPPH study, petroleum ether soluble fraction (PSF) has exhibited IC50 of 18.83 lg/mL while the standard ascorbic acid was 2.48 mg/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 significantly stronger 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 of tested bacteria compared to negative control and standard drug (77.50 mg of GAE/g).

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

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