

The Effect of Extracts of *Andrographis paniculata* Aerial Parts on Rat Thoracic Aorta

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ABSTRACT

Andrographis paniculata (AP), (Burf.) Nees. of Acanthaceae, has been used for centuries in Asia to treat GI tract and upper respiratory tract infections, fever, herpes, sore throat, and a variety of other chronic and infectious diseases. AP has cardio protective property and is familiarly known as "King of Bitters". The present study was aimed to investigate the vasorelaxant effect of different solvent extracts of AP on rat thoracic aorta. Petroleum ether, chloroform, and methanol extracts of AP are used in this study. Experiments are performed on male Sprague-Dawley (SD) rats for possible vasorelaxing activity of AP. Cumulative dose response curves are recorded by using isometric force displacement transducer Model FT-03 and it is connected to Grass Polygraph Model 79D. Additionally, HPLC study of chloroform extract of AP is conducted and compared with commercially available standard andrographolide. Petroleum ether and chloroform extract of AP is first suspended in 1% (v/v) DMSO then volume made up with Krebs solution. The average of responses to each concentration of the agonist is plotted on the ordinate the logarithm of the concentration of the agonist on the abscissa. Among all these extracts of AP, chloroform extract 80 and 160 g/mL is found to be the highly significant ($P < 0.001$) vasorelaxant effect on norepinephrine induced contraction on rat thoracic aortic ring preparations.

KEYWORDS

Andrographis paniculata . norepinephrine . rat aorta . vasorelaxant

REFERENCES

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