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Preliminary investigation of the phytochemical properties of aqueous and ethanolic crude extracts of *Hunteria umbellata K.* (Schum) seeds and its antihypertensive effects on salt induced hypertension in Wistar Rats

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Hunteria umbellata seeds are used ethnomedicinally to treat obesity, pain, swellings, anaemia and as immune booster. However there has been no scientific proof of its uses in the managements of hypertension ethnomedicinally, hence the aim of this study, therefore, was to investigate the preliminary phytochemical properties of aqueous and ethanolic crude extracts of *Hunteria umbellata* seeds and its physiological effects on salt induced hypertension in experimental animals. The phytochemical studies were carried out according to the methods of Association of Official Analytical Chemist (A.O.A.C). Twenty-five (25) female adult Wistar rats were administered with 8% of NaCl (salt) for 2 weeks and shared into five groups of five animals in each group. Group I was normal control, Group II was treated with 8% of NaCl, while Group III was treated with 8% of NaCl and 40 mg propranolol. Group IV was treated with 8% of NaCl and aqueous extract (500 mg/kg) of *Hunteria umbellate* and Group V was treated with 8% of NaCl and ethanolic extract (500 mg/kg) of *Hunteria umbellata*. The results of the quantitative phytochemical components of aqueous and ethanolic extracts revealed the presence of oxalate, phytate, tannins, flavonoids, saponins, alkaloids, phenols, cyanogenic glycoside and anthraquinones. The blood pressures of the animals were taken before and after salt treatments at a weekly interval. The administration of the standard drug (propranolol) caused a reduction in high systolic blood pressure of the hypertensive experimental animals from 162.00 mmHg to 134.00 mmHg, while the diastolic pressure was recorded to fall from 103.00 mmHg to 73.67 mmHg. The administration of aqueous extract of *H. umbellata* seeds caused a reduction of the systolic blood pressure of the hypertensive experimental animals from 159.20 mmHg to 136.25 mmHg, while the diastolic blood pressure was recorded to fall from 103.80 mmHg to 80.25 mmHg. The administration of ethanolic extract of *H. umbellata* seeds caused a reduction in systolic blood of the hypertensive experimental animals from 160.20 mmHg to 133.00 mmHg, while the diastolic pressure was recorded to drop from 102.20 mmHg to 76.75 mmHg. The results of this study showed that the systolic and diastolic blood pressure of the animals treated with the ethanolic extract and propranolol were reduced compared to control ($p<0.05$). The histological results of both aqueous and ethanolic extracts of *H. umbellata* seeds revealed appreciable recovery of the degenerating tissues. Medicinal plants have become a great source of medicine for the treatments and managements of hypertension and researches on the medicinal values of *H. umbellata* seeds and its therapeutic effects to health sector should be encouraged.

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