Supplementary

Appendix 1. Urine parameters that detect renal function

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Treatment groups | | | | |
| Parameters | NT | HESS150 | HESS300 | CPT | LN |
| Protein : creatinine ratio |  |  |  |  |  |
| Wk2 | 0.37±0.1 | 0.34±0.2 | 0.34±0.2 | 0.43±0.2 | 0.35±0.2 |
| Wk3 | 0.27±0.2 | 0.88±0.7 | 0.33±0.4 | 0.59±0.3 | 0.67±0.4 |
| Wk4 | 0.36±0.2 | 0.86±0.3 | 0.30±0.1 | 0.4±0.1 | 1.22±0.6 |
| Urea (mg/dl) |  |  |  |  |  |
| Wk1 | 1681±232 | 1396±265 | 1611±126 | 1846±57 | 1876±131 |
| Wk2 | 1466±117 | 1603±162 | 1384±173 | 1459±182 | 1842±361 |
| Wk3 | 1683±410 | 1224±104 | 1909±303 | 1350±172 | 1257±310 |
| Wk4 | 1540±281 | 1103±76 | 1832±213 | 1362±266 | 1016±203 |
| Calcium(mg/dl) |  |  |  |  |  |
| Wk1 | 16.83±2 | 16.46±2 | 16.64±1 | 17.79±1 | 16.84±2 |
| Wk2 | 16.59±2 | 14.12±1 | 15.12±1 | 22.17±2 | 17.56±2 |
| Wk3 | 15.33±2 | 19.54±2 | 16.01±3 | 18.73±1 | 18.21±2 |
| Wk4 | 15.96±1 | 23.81±1 | 20.95±4 | 19.87±2 | 19.01±2 |

Values are expressed as mean±SEM. n = 6; NT - normotensive control; LN - L-NAME control; CPT - captopril; HESS150 and HESS300 - hydroethanolic extract of S. serratuloides at 150 and 300 mg/kg respectively.

Appendix 2. Serum parameters that detect kidney function

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parameters | NT | HESS150 | HESS300 | CPPT | LN |
| Serum potassium (mmol/l) | 4.69±0.3 | 4.17±0.4 | 4.78±0.2 | 6.58±0.7 | 4.43±0.5 |
| Serum Calcium (mg/dl) | 8.07±0.5 | 8.86±0.5 | 9.90±0.3 | 9.39±0.5 | 9.72±0.2 |
| BUN (mg/dl) | 14.35±1 | 17.18±1 | 18.92±2 | 17.28±2 | 22.29±3 |
| Serum Creatinine (mg/dl) | 0.50±0.1 | 0.64±0.1 | 0.52±0.04 | 0.60±0.1 | 0.72±0.1 |
| Creatinine clearance (ml/min) | 1.27±0.2 | 1.14±0.4 | 1.19±0.1 | 0.99±0.1 | 0.72±0.2 |
| GFR | 5.69±1 | 5.03±2 | 5.39±1 | 4.6±1 | 3.26±1 |

Values are expressed as mean±SEM. n = 6; NT - normotensive control; LN - L-NAME control; CPT - captopril; HESS150 and HESS300 - hydroethanolic extract of S. serratuloides at 150 and 300 mg/kg respectively. \* p< 0.05 compared to L-NAME (LN) control group; #p<0.05 compared to normotensive control group.

Appendix 3. ANOVA table for Renin and Ang II concentration in serum

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | Degree of freedom | F value | P value |
| Renin | 28 | 0.4294 | 0.7859 |
| Ang II | 27 | 14.182 | <0.0001 |

Appendix 4. Total antioxidant capacity in serum, heart and kidney

|  |  |  |  |
| --- | --- | --- | --- |
| Sample | Degree of freedom | F value | P value |
| Serum | 25 | 7.913 | 0.0005 |
| Heart | 28 | 3.240 | 0.0293 |
| Kidney | 23 | 1.803 | 0.1700 |

Appendix 5. Malondialdehyde concentration in serum, heart and kidney tissues

|  |  |  |  |
| --- | --- | --- | --- |
| Sample | Degree of freedom | F value | P value |
| Serum | 26 | 5.143 | 0.0044 |
| Heart | 24 | 0.6460 | 0.6361 |
| Kidney | 28 | 7.798 | 0.0004 |