A-44: A study on the antidiarrhoeal effect of an Ayurvedic drug - 'Navaratna Kalka'

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This study was undertaken to evaluate the antidiarrhoeal effect of a commonly used Ayurvedic drug - 'Navaratna Kalka' in castor oil induced rats. The control group was given 5.6 ml/kg body weight of castor ail while the other groups received either, one of the five doses of test drug -'Navaratna Kalka' (178.6, 357.2, 535.8, 714.4 and 893.0 mg/kg body weight), or Loperamide-positive control (0.286, 0.570, 0.860, 1.140 and 1.430 mg/kg body weight) orally in a single dose. Frequency of defecation and consistency of faeces were recorded upto 8h and toxic symptoms were observed upto 2h. Charcoal meal test was performed to elucidate the effect of 'Navaratna Kalka' on the intestinal motility.

'Navaratna Kalka' at the doses of 714.4, 893.0 mg/kg body weight as well as Loperamide at the doses of 1.14, 1.43 mg/kg body weight could significantly ($p<0.05$) protect the rats from castor oil induced (5.6ml/kg) diarrhoea. Further,

'Navaratna Kalka' showed a dose dependent response upto 714.4 mg/kg body weight dose. The lowest and the highest doses of 'Navaratna Kalka' and Loperamide significantly reduced the gastro- intestinal transit by 50.3 ± 3.25%, 45.3 ± 2.06% and 33.3 ± 2.7%, 47.7 ± 3.9% respectively. When the lowest doses of 'Navaratna Kalka' and Loperamide were compared, the reduction in intestinal movements of 'Navaratna Kalka' was highly significant ($p<0.01$). 'Navaratna Kalka' did not elicit marked toxic effects and its ED_{50} is 285.8 mg/kg body weight. Thus the results demonstrate that 'Navaratna Kalka' has an antidiarrhoeal action at the above doses.