

## Evaluation of the Plant Extract (Hirtacin) in a Rabbit Model of Shigellosis

Qazi Khaleda Rahman<sup>1</sup>, Chowdhury Rafiqul Ahsan<sup>1</sup>, Kamaluddin Ahmed<sup>1</sup>, and GH Rabbani<sup>2</sup>

**Objective:** Evaluate the efficacy of the plant extract hirtacin in a rabbit model of shigellosis.

**Methodology:** Cecal-ligated rabbits were inoculated with *Shigella flexneri* 2a, and after 24 hours, three groups of rabbits were treated with hirtacin, ciprofloxacin, and placebo respectively for five days.

**Results:** The plant extract hirtacin and ciprofloxacin significantly reduced myeloperoxidase (MPO) level in plasma which serves as a marker of inflammation, while the MPO level was still high in the placebo group after five days of treatment. Also the clinical features of both the drug-treated groups showed complete remission from dysentery, while dysenteric symptoms still persisted in the placebo group after five days.

**Conclusion:** It is concluded that the plant extract hirtacin has a potent therapeutic activity in shigellosis.

<sup>1</sup>Department of Microbiology, University of Dhaka, Dhaka 1000, Bangladesh

<sup>2</sup>International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), GPO Box 128, Dhaka 1000, Bangladesh

