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RESEARCH PAPER

Determination of virulence factors of *Escherichia coli* isolated from urinary tract infection patients

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Correspondence to : ANIL CHATURVEDI Sam Higginbottom Institute of Agriculture Technology and Sciences, ALLAHABAD (U.P.) INDIA Email: anilchaturvedi15@gmail.com **ABSTRACT**: Urinary tract infections are one of the most common bacterial infections in human. On the present study urine sample of suspected UTI patients were included. Total 23 samples were found to be positive for bacterial infection in which predominant species was *Escherichia coli* 13 (56.52%) and 10 (43.48%) were found to be other bacterial species *i.e. Proteus* spp. 4 (17.3%), *Citrobacter* spp. 3 (13%), *Klebsiella* spp. 1 (4.3%), *Enterobacter* spp. 1 (4.3%), and *Staphylococcus aureus* 1 (4.3%). The isolates identified as *Escherichia coli* were screened for virulence factors namely cell surface hydrophobicity, haemolysin and gelatinase production by recommended methods. Among 13 *E. coli* 8 (61.54%) were showing cell surface hydrophobicity, 10 (76.92%) were haemolysin positive and nil result for gelatinase production was observed. The study reveals hydrophobicity and α - haemolysin production in *E. coli* strains which are important virulence factors in the pathogenesis.

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Escherichia coli, Urinary tract infection, Hydrophobicity, Virulence factor, Haemolysis.

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