

# **CHARACTERISTICS OF VIRULENCE SIGNS OF ENTEROINVASIVE *ESCHERICHIA COLI* (EIEC) ISOLATED IN CSFR AND BULGARIA IN 1988–1990**

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## **SUMMARY**

During 1988–1990 a total of 345 virulent and avirulent strains of enteroinvasive *E. coli* (EIEC) were isolated from human faeces in microbiological laboratories in Prague and Sofia. This group of strains belonged to a total of 11 serotypes. The most frequently encountered serotypes in both laboratories were: O124, O164 and O28ac. From patients 205 strains were obtained and from healthy subjects 140 strains of EIEC. In all strains the following signs of virulence were investigated: biochemical properties, serotypes, Serény's test, test on HeLa cells, sensitivity to colicine J<sub>5</sub> and the plasmid profile. The presence of high molecular plasmid 140 MDa correlated closely with positive results of the above mentioned tests. Plasmid 140 MDa was more frequently present in *E. coli* strains isolated from faeces of patients (in 76.09 %) than in strains from healthy subjects (in 23 %). The strains circulating in the healthy population were in the majority avirulent.

*Key words:* enteroinvasive *Escherichia coli*, virulence signs, plasmid profile

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