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: 0124, 0164 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 colicin J9 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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