

AGREGACYJNE *ESCHERICHIA COLI* – NOWA GRUPA SZCZEPÓW *E. COLI* ODPOWIEDZIALNYCH ZA BIEGUNKI

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Aggregative *Escherichia coli* (EAEC) - the new group of diarrheagenic strains *E. coli*

Abstract: Enteroaggregative *E. coli* strains (EAEC) are the most recently described category of diarrheagenic *E. coli* defined by its aggregative or "stacked-brick" pattern of adherence to cultured human epithelial cells. EAEC has been associated with persistent diarrhea among infants and small children. Most EAEC strains harbour a pAA virulence plasmid which is required for expression of aggregative adherence fimbriae AAF/I and AAF/II. That plasmid also mediates mannose resistant hemagglutinin production and bacterial clump formation. EAEC strains comprising a diverse range of serotypes that possess a variety of putative virulence factors, the heat-stable enterotoxin EAST 1, cytotoxin Pet, hemolysin, and various types of fimbriae among them. The pathogenic mechanisms of EAEC infections are not fully elucidated so clinical significance of enteroaggregative *E. coli* strains is still poorly understood.

1. Introduction. 2. Characterization of EAEC strains. 3. Virulence plasmid pAA. 3.1. Aggregative fimbriae AAF. 4. Toxins of EAEC. 4.1. Heat-labile enterotoxin of EAEC - EAST 1. 4.2. Plasmid - encoded toxin - Pet. 4.2.1. Autotransporter secreted proteins of Gram-negative bacteria. 4.3. Mucinase Pic. 4.4. Other toxins of EAEC. 5. Flagellin of aggregative *E. coli*. 6. Yersiniobactin. 7. Invasiveness of enteroaggregative strains of *E. coli*. 8. Patomechanism of infection of EAEC. 9. Summary

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Wpłynęło w listopadzie 2002 r.