Outbreak of Escherichia coli and diabetes mellitus

Sir,

The present global public health issue on the outbreak of *Escherichia coli* is the world's focus. The infection started in Germany and spread widely in Europe.^[1] The pathogenic *E. coli* infection can cause severe diarrhea as well as other more serious presentations. In some severe cases, infected with *E. coli*, O157: H7, renal complications such as hemolytic uremic (HUS) syndrome can be expected.

HUS is known for its relationship with diabetes mellitus. Due to pancreatic injury,^[2] the increased incidence of insulin-dependent diabetes mellitus in pediatric patients infected with O157: H7 *E. coli* is reported.^[1,3] It usually accompanies renal failure, which is a complication of HUS.^[1-5] Suri *et al.* mentioned that "Survivors with diarrhea-associated HUS have a significantly increased incidence of diabetes due to complete insulin deficiency, which may recur several years after the initial infection."^[1] As a conclusion, Suri *et al.* proposed following up for diabetes among the affected patients during acute illness and in long term after severe infection.^[4]

In addition to the copresentation with HUS, *E. coli* is also reported for its relationship to development of peritonitis in diabetic patients. In an animal model study, it is proved that endothelin-1 played important role in development of peritonitis, and increased plasma endothelin-1 concentrations was common in *E. coli* septic peritonitis.^[6]

In conclusion, a certain relationship between diabetes mellitus and *E. coli* infection is evidenced. In the present *E. coli* outbreak, the importance of diabetes mellitus, as a possible comorbidity, should not be forgotten.

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