

***Escherichia coli* O157:H7 Infection and Hemolytic Uremic syndrome among Iraqi Diarrheal Children**

Naael Hussein Ali, MSc*

Objectives: The first cases of *E.coli* O157: H7 infection in Iraq are reported in order to determine their association with Hemolytic Uremic syndrome (HUS).

Design:

Methods: Blood, urine, and stool samples were collected from 687 hospitalized children with diarrhoea in Basrah, Iraq. The causative agents (Bacteria and parasites) for diarrhoea were identified, especially *E.coli* O157: H7 which was subjected to serotyping by fluorescent technique. Direct smear; Ritchie formalin–ether–sedimentation concentration and modified Ziehl-Neelsen staining techniques were used to identify the parasitic infections in stool samples. General urine analysis and complete blood picture were studied as well.

Results: Eighteen (2.6%) children were found to-be infected with *E.coli* O157: H7, half of them (50%) developed HUS. The infection rate was higher among infant boys residing in rural areas. The duration of illness ranged from 2-14 days, with mild clinical presentation and was distinguished from other bloody diarrheal infections by the lack of fever. Receiving antimicrobial therapy has no meaningful effect in reducing the complication of HUS.

Conclusion: The present study provided useful information on the seasonal occurrence, age at risk, pattern of feeding among children <2 year of age and highlighting the importance of one of emerging infectious agents in Iraq.