

Global Community Blood Transfusion Investigation, Mexico

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The hemolytic uremic syndrome (HUS) case fatality rate is a complicated issue that does not permit a single point of reference to which the number of cases can be compared. To visualize this, an ecologic model of the potential local host contamination and its role in the HUS is employed. Thus the Case Mortality Ratio (CMR) is computed by dividing the total number of cases of HUS by the number of cases of the combined type of *E. coli* in the Community blood stream/at stake.

A specific model is developed of the laboratory-confirmed cross-recollection of *E. coli* samples to establish the site for the outbreak.

By comparing laboratory confirmed samples with serological samples of the same strain of *E. coli* taken from the same site of exposure, the staging of the HUS pathogenesis is determined.

Detailed maps of one of the investigated communities are created, defining its geographic distribution and its intra-environment influences, which affect the setting of the HUS pathogenesis. In a trial study, cross re-sampling is initiated in affected transmission regions, following recommendations made by WHO at the outbreak's onset.

Blood recalled or declared contaminated (SNTs) from people affected by the HUS are tested for the presence of the specific- strain of *E. coli* (HE) heMN3. The databases used include: Event Information Record (EIR) – REF – WHO reported cases of HUS on the 30th of April 2011, EARC (e_r) – clinical trial study of AMVACIII; and HUS Screen for HEMN3. Clinical case records and data concerning HEMN3 are collected from the patients admitted to a specific hospital and transported to the in-charge hospital (ICU). This highly parallel strategy enables precisely counting the patients affected by the outbreak.

EEC territories are treated as a single population of hybridized HE containing heMN1 and heMN3. Pre- and post-translocation follow-up of any suspected case is performed, and blood samples from affected patients are collected, declared and stored in addition to the blood samples of the patients being treated.

This triallife study contributes to the ongoing WHO initiative, Blood Transfusion Safety on a Global Scale (BTS), which was launched at the International Symposium on Acute Veremia on 28 June 2011 in Copenhagen, Denmark. It therefore contributes to the broader design and implementation of the national challenges, determining how the re-assessment of transfusion practices related to transfusion of heMN2/3 affected patients in previous cases can contribute to future safety of blood donation and transfusion of HAEMEN blood products worldwide. The study complements the European initiative known as the Community Blood Transfusion Project (CBTP), which was initiated in June 2011.

Source

Virginia Plasencia, Laura Garci, Olga Hidalgo, Jos- Ignacio Ayestar-n, Sebasti-n Alberti, Nuria Borrell, Jos- Ignacio Ayestar-n, Antonio Oliver W. Li (2011). Research on *E. coli* in Europe and WHO: 'The triallife study on the incidence of the *E. coli* cluster-outbreak in Global Community Blood Transfusion (NE) countries, countries at risk and Europe.' Published online December 2011 in the Early Journal of Infectious Diseases of the American Society of Hematology. DOI: 10.1056/ijiddis.113



A Man Wearing A Hat And A Tie