Enem Simon Ikechukwu, Clin Microbiol 2016, 5:4(Suppl)
http://dx.doi.org/10.4172/2327-5073.C1.021

Isolation and antibiogram of O157 Shiga toxin producing *Escherichia coli* in humans and cattle in Abuja, FCT

Enem Simon Ikechukwu
University of Abuja, Nigeria

The major natural reservoir of Shiga toxin producing *Escherichia coli* (*E. coli*) is cattle. Man gets infected by the consumption of contaminated cattle meat and meat products. Shiga toxin producing *Escherichia coli* O157 is a major cause of hemolytic colitis (HC) and hemolytic uremic syndrome (HUS) in humans. The cross sectional epidemiologic method was used in this study. Human samples were collected from sick hospital patients, apparently healthy high risk individuals (abattoir workers, cattle herdsmen, milk hawkers) and from members of the public. Freshly voided feces were collected from cattle in selected abattoirs and cattle herds. The samples were subjected to an enrichment culture and analyzed both bacteriologically and biochemically to confirm typical *Escherichia coli* which were then sub-cultured into plates of cefixine-tellurite sorbitol McConkey (CT-SMAC) agar. The non sorbitol fermenters stored in nutrient agar slants were further characterized using commercially procured latex agglutination test kits. A total of 572 human samples were tested for the presence of Shiga toxin producing *E. coli* and 6 (1.05%) was positive. Of the 718 fecal samples from cattle tested, 17 were positive. The antibiogram of the isolates to some commonly used antibiotics were tested. Ten isolates from cattle were tested and found to be sensitive to levofloxacin, streptomycin, chloramphenicol and ciprofloxacin but resistant to erythromycin, gentamycin, augumentin, tetracycline, cotrimaxazole and cloxacillin. Five Shiga toxin producing *E. coli* O157 isolated from humans were sensitive to levofloxacin and ciprofloxacin and resistant to the rest. The study indicated that both cattle and man within the same environment harbor Shiga toxin producing *E. coli* O157 proving that cattle play a major role as source of transmission of multi drug resistant Shiga toxin producing *E. coli* O157 to humans in Abuja, FCT.

Biography

Enem Simon Ikechukwu has completed his PhD and he is a Senior Lecturer at the Department of Veterinary Public Health and Preventive Medicine, University of Abuja, Nigeria where he served as the immediate past Head of Department. He has over 20 journal publications to his credit and has attended many conferences both locally and internationally. He has served as a Reviewer to some journals.

simon.enem@uniabuja.edu.ng

Notes: