Molecular Typing of Salmonella Species Isolated from Stool Samples

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ABSTRACT This study aimed at comparing the biochemical characterization of *Salmonella* spp with the molecular typing method. A total of 57 stool samples were collected from three different health institutions in Nigeria over a period of 3 months. Twenty (35%) *Salmonella* species consisting of 14 (70%) S. *Typhi* and 6 (30%) *S.Choleraesuis* were identified using standard methods. The isolates were then typed using randomly amplified polymorphic DNA polymerase chain reaction (RAPD-PCR) and the entero-bacteriaceae repetitive intergenic consensus PCR (ERIC-PCR). The ERIC-PCR differentiated the *S.Typhi* into 14 different sub-types with four of them (2s and 6s) and (7s and 11s) belonging to the same sub-types. The *S.Choleraesuis* showed no band with the ERIC-PCR while the RAPD-PCR differentiated the isolates into nine sub-types and the remaining isolates showed no visible band. The ERIC-PCR was shown to be more a discriminatory and type-able tool for *Salmonella Typhi* isolates.