Serotyping and Phage Typing of Vibrio cholerae Isolated at Tertiary Care Hospital, Ahmedabad, Gujarat

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ABSTRACT
Introduction: Cholera continues to be a growing concern in most developing countries. Cholera is an acute diarrheal disease endemic in India. Yet there are few reliable population-based estimates of laboratory-confirmed cholera in endemic areas around the world. The aim of this hospital-based study was to isolate and serogrouping of Vibrio cholerae in patients with diarrhea at tertiary care hospital, Ahmedabad during January 2021 to July 2022. **Material & Methods**: A retrospective study involving cases of acute watery diarrhea was done during January 2021 to July 2022. All stool samples from suspected cases were tested for Vibrio cholerae by standard microbiological procedures. Out of total 1294 stool samples Vibrio cholerae were isolated in 179 samples and sent to the NICED (National Institute of Cholera and Enteric Diseases) for serotyping and phage typing. **Results**: In present study rate of isolates of V. cholerae was 13.83 % (179 out of 1294 cases). V. cholerae O1 serotype Ogawa (78.77%) belonging to phage type 27 (54.74%) was the most common in the cases of acute diarrhea in present study. **Conclusion:** The present study identified serotype Ogawa and phage type 27 as the most dominant type and was found continuous in circulation throughout the study period. Phage typing is still an internationally recognized method of choice for characterizing circulating strains. This knowledge will be helpful to design a novel strategy to manage future cholera outbreaks.
Keywords: Cholera, Vibrio cholerae, Serotyping, Phage typing