

Bacteremia Caused by Nontoxigenic *Vibrio cholerae* in an Immunocompromised Patient in Istanbul, Turkey

Authors : Fatma Koksall Çakırlar, Sinem Ozdemir, Selcan Akyol, Revaziye Gulesen, Murat Gunaydin, Nevriye Gonullu, Belkis Levent, Nuri Kiraz

Abstract : *Vibrio cholerae* O1 and O139 are the causative agent of epidemic or pandemic cholera. *V. cholerae* O1 is generally accepted as a non-invasive enterotoxigenic organism causing gastroenteritis of various severities. Non-O1 *V. cholerae* can cause small outbreaks of diarrhea due to consumption of contaminated food and water. Particularly, the patients with achlorhydria have a risk for vibrio infections. There are numerous case reports of bacteremia caused by vibrio in patients with predisposing conditions like cirrhosis, nephrotic syndrome, diabetes, hematologic malignancy, gastrectomy, and AIDS. We described in this study the first case of nontoxigenic, non-O1/non-O139 *V. cholerae* isolated from the blood culture of a 77-year-old female patient with hypertension, diabetes, coronary artery disease, gout and about 9 years ago migrated breast cancer history. The patient with complaints of shortness of breath, fever and malaise admitted to our emergency clinic were evaluated. There was no diarrhea or abdominal symptoms in the patient. No growth in her urine culture, but blood culture (BACTEC 9120 system, Becton Dickinson, USA) was positive for non-O1/non-O139 *V. cholerae* that was identified by conventional methods and Phoenix automated system (BD Diagnostic Systems, Sparks, MD). It does not secrete the cholera toxin. The agglutination test was negative with polyvalent O1 antisera and O139 antiserum. Empirically ceftriaxone was administered to the patient and she was discharged with improvement in general condition. In this study we report bacteremia by non-O1/non-O139 *V. cholerae* that is rare in the worldwide and first in Turkey.

Keywords : bacteremia, blood culture, immunocompromised patient, Non-O1 vibrio cholerae

Conference Title : ICSR 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020