

Retrospective Study on Acute Kidney Injury among Cholera Patients in an Outbreak in Whitefield, Bengaluru

Girish P Vakrani

Vydehi Institute of Medical Sciences and Research Centre, India

Abstract

Introduction: Cholera is gastroenteritis caused by *Vibrio cholera*. It presents with vomiting, severe secretory diarrhoea, and dehydration. It can cause severe complications with severe electrolyte imbalances and oligoanuric acute kidney injury due to acute tubular necrosis secondary to dehydration or infection itself. However, cholera presenting with significant proteinuria and acute kidney injury has not been reported. Hence, this study was conducted.

Aims and Objective: This aim of this study was to assess clinical features, treatment, and prognosis of AKI in cholera patients; to correlate proteinuria with AKI in cholera patients; and to compare cholera patients with normal kidney function and those with AKI.

Material and Methods: It was a retrospective observational study involving patients with cholera. Information regarding cholera patients with acute kidney injury, proteinuria, and prognosis were collected.

Results: Most of the patients had significant vomiting, moderate-to-severe diarrhoea, dehydration, and hypovolemic shock. Cholera caused severe complications such as severe electrolyte imbalances including hypernatremia and hypokalaemia, acute kidney injury, and proteinuria secondary to dehydration or infection. A surprising finding noted was the lack of significant association between the onset of acute kidney injury and usual risk factors such as hypovolemic shock and dehydration. It was found that proteinuria had influenced the onset of acute kidney injury, but it did not influence recovery. As there was complete recovery in kidney function, none of the cases required kidney biopsy. There was no mortality noted.

Conclusions: This study points towards the rare occurrence of proteinuria and acute kidney injury in *Vibrio cholera* infection with spontaneous remission of kidney disease with appropriate therapy.

Biography

Girish P Vakrani has a Vydehi institute of medical sciences and research centre Department of nephrology. Girish P. Vakrani is working as Assoc.

Professor in Vydehi institute of medical sciences and research centre Department of nephrology.