Suspected Case of Olmesartan causing Acute Severe Diarrhea

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Abstract

A 41 year old patient referred from clinic due to severe acute watery diarrhea could not be resolved from conservative treatments. Patient was receiving olmesartan and atorvastatin for hypertension and hyperlipidemia. On admission, patient was treated for infectious gastrointestinal disorder was treated with antibiotic and anti-constipating medications. Physical examination and lab test were non-significant. Patient was switched from olmesartan to candesartan due to suspected adverse effect. Continuing infectious and symptomatic treatments, patient’s symptoms start to resolves. Patient was discharged two days after discontinuing olmesartan. This case represents the only case of acute diarrhea associated with olmesartan.

Introduction

Olmesartan, angiotensin II receptor blocking (ARB) agent, is frequently prescribed for
hypertension. The adverse effect of sprue-like enteropathy has been well documented to olmesartan.\textsuperscript{1} FDA has recommended healthcare professionals to look out its symptoms such as chronic diarrhea with substantial weight loss which may take months to year to appear.\textsuperscript{2} However, no case have been reported for acute severe diarrhea.

**Case Presentation**

A 41 year old male was referred from the clinic with spikes of fever, severe watery diarrhea (35 times) after having rice and pulse after having initial treatment. Patient has history of hypertension and hyperlipidemia treated with olmesartan 40mg (last eight months) and atorvastatin 20mg. Physical examination was unremarkable except for the finding of moderate dehydration. Lab results were normal. Patient was diagnosed infectious gastritis and was prescribed with antibiotics, anti-constipating medications along with fluids. On the basis of a Naranjo Adverse Drug Reaction Probability Scale\textsuperscript{6} score of 6 (probable adverse drug reaction), hence on reporting, olmesartan was switched to candesartan 16 mg. Patient improved and on discharge patient was having two bowl movement and was still suffering abdominal discomfort and tenderness. Later, stool culture also showed salmonella thyphi positive

**Discussion**

In most of the case report and research, it has been documented that olmesartan cause severe chronic diarrhea with weight loss however we have reported a suspected case of acute diarrhea caused by olmesartan\textsuperscript{3}. We acknowledge that this case have no work up for celiac disease and improvement may be observed due to other factors (antibiotic, anti-motility medications) other than suspension of olmesartan. However, sudden improvement after discontinuation of olmesartan cannot be ignored. It is difficult to diagnose a case with olmesartan induced sprue like enteropathy, due to multifactorial symptoms and absence of diagnostic tool, hence based on documented reports, it is recommended that with case appearing with watery, severe diarrhea (several bowl movement), abdominal distress and receiving olmesartan should suspected of drug induced adverse drug reaction.
Muhammad Amir did his graduation in pharmacy from Baqai Medical University, Karachi in 2004 and acquired his Masters Degree in Masters in Medicine Management from the University of Sunderland in 2006. He joined OMI as a ward pharmacist and later joined Jinnah Medical & Dental College as Assistant Professor and its hospital as Chief Clinical Pharmacist. Muhammad Amir did also MBA degree in Pharmaceutical Business Management from Bahria University, Karachi. Thereafter, he joined as Assistant Professor & Clinical Pharmacist at Ziauddin University and Hospital. He worked in Al Sharq Hospital and presently, he is working as Clinical Pharmacist at Prime Hospital, UAE.

References


