SPRUE-LIKE ENTEROPATHY ASSOCIATED WITH OLMESARTAN

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Olmesartan is an angiotensin II receptor blocker (ARB) approved for the treatment of hypertension, alone or with other antihypertensive agents. Unlike other ARBs it is not indicated for treatment of heart failure, for preventing kidney failure in people with diabetes, or to reduce the risk of stroke in patients with high blood pressure and an enlarged heart. Despite this specific feature it is the most used ARB in Italy, according to the Italian report about the utilization of the drugs (Rapporto Osmed 2015).

Sprue-like enteropathy associated with olmesartan was first described in 2012, and a number of cases have been reported since then (Basson et al., 2012). This syndrome is characterized by chronic diarrhea with substantial weight loss and sprue-like histopathologic findings in the intestine. The signal of sprue-like enteropathy associated with olmesartan was further investigated for a possible ARB class effect using active surveillance data (FDA, 2013) suggesting a lack of a class effect. However, the limits of active surveillance should be considered when interpreting these results.

The incidence of this adverse drug reaction is not entirely clear, although it is thought to be rare. The summary of product characteristics (SPC) of Olmesartan mentions this adverse drug reaction and reports specific recommendations (drug discontinuation and gastro-enterologist advice). The histopathologic features of olmesartan-related injury have only been described in a limited number of cases, and there are no guidelines regarding the histopathologic distinction of olmesartan-associated enteropathy from other causes of sprue (eg, celiac disease, tropical sprue) (Burbure et al, 2016)

We describe a case reported to the "Sardinian Regional Center of Pharmacovigilance". A 69 year old woman who suffered from essential hypertension was treated with olmesartan/hydrocholorthiazide 40/12.5 mg daily. One month after starting therapy she developed severe aqueous diarrhea with dehydration, weight loss and acute renal failure. The patient was hospitalized and duodenal biopsy showed villous atrophy. Serologic testing for celiac disease was negative. The patient was diagnosed with sprue-like enteropathy associated with olmesartan. The suspected drug was discontinued and replaced with another antihypertensive. Complete resolution was observed after two months.

The Italian National Network of Pharmacovigilance (Rete Nazionale di Farmacovigilanza - RNF) reports 67 gastrointestinal adverse drug reactions for olmesartan and 2 for the combination olmesartan/hydrocholorthiazide. In 26 of these 69 reports the adverse drug reaction was classified as “severe”.

Since olmesartan is widely prescribed in Italy and worldwide, physicians should be aware about the risk of this complication. In presence of severe diarrhea, olmesartan should be discontinued as

this adverse effect can lead to hospitalization and serious clinical consequences. We underline the importance of pharmacovigilance in guiding drug prescription appropriateness.

Basson et al. (2016). Gut. 65, 1664-1669.

Burbure et al. (2016). Hum Pathol. 50, 127-34.

FDA Drug Safety Communication, 2013. https://www.fda.gov/Drugs/DrugSafety/ucm359477.htm