Clarithromycin Induced Psychosis

Sir,

Delirium is defined as a clinical state characterised by an acute fluctuating change in mental status with inattention and altered levels of consciousness. Delirium in the older person is a common manifestation of sepsis, electrolyte imbalance, intracranial pathology, urinary retention, fecal impaction, myocardial pathology or drug related. In this letter, we would like to share a report of an acute episode of delirium in a 94 year old man most likely induced by Clarithromycin which is a component of triple therapy for Helicobacter pylori (H. pylori) eradication.

This gentleman presented with a two hour history of sudden onset of agitation and confusion without a background history of any psychiatric illness or substance abuse. He was independent in all activities of daily living. His confusion started on Day six of triple therapy which was commenced on a prior admission ten days earlier for a two week history of epigastric discomfort. This treatment was based on guidelines set by the Working Party Report of the Malaysian Society of Gastroenterology and Hepatology which recommended that all peptic ulcers infected with H. pylori whether active or in remission and complicated ulcers should be treated with a seven day course of combination therapy. Oesophago-gastroduodenoscopic (OGDS) examination revealed atrophic gastritis with a positive urease test. Apart from triple therapy, he was on Felodipine for Hypertension. Physical examination revealed he was not orientated to time, place or person but there was no evidence of hemiparesis or hemiplegia. Biochemical and hematological parameters were normal. Several antipsychotic medications were tried and physical restraints used. Approximately 24 hours after discontinuing triple therapy, his orientation and cognitive function normalised.

Medline literature search revealed seven reported cases of Clarithromycin induced psychosis. We attributed his confusion to Clarithromycin. He may be the oldest person to manifest Clarithromycin induced confusion. This may also be the first reported case in Malaysia. From the above and other reported cases, we were able to postulate that delirium is a potential adverse effect of Clarithromycin. Therefore we wish to alert physicians to the potential Central nervous system side effects of Clarithromycin use in the older person especially in the treatment of H. pylori infection since most of the triple therapies for H. pylori eradication are Clarithromycin based. It is thus debatable if physicians should treat H. pylori infection in the very elderly who present with dyspeptic symptoms and are urease positive in the absence of an active ulcer.