Brief Psychosis Associated With Triple Therapy For Peptic Ulcer
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Citation

Abstract
We report the case of a 45 year old lady who presented with delusional beliefs following commencement of triple therapy (Clarithromycin, Amoxicillin, and Lansoprazole) for peptic ulcer. We present the available clinical evidence linking Clarithromycin to episodes of acute psychosis.

INTRODUCTION
Psychiatric side effects of medications are well documented. Although dopamine agonists and steroids have been linked with precipitation of psychosis, association of psychosis with other prescription drugs has not been reported very often.

CASE REPORT
A 45 year old Caucasian lady was referred to the female psychiatric admission ward four days after commencement of triple therapy for suspected peptic ulcer by her family practitioner. Within two days of starting medication she felt elated. During this period she went out shopping and spent money excessively. This was followed by a period of depressed mood with insomnia. She developed a delusion that her face would turn into that of a devil. She also referred to depersonalisation experiences (subjective sense of being strange or unfamiliar) on the day prior to admission.

Current social circumstances revealed significant stressors. She had been separated for many years following an abusive marriage and was now living with three of her four children. Her eldest daughter was pregnant and another daughter had allegedly been sexually assaulted recently. Furthermore she was suffering from fibromyalgia and rheumatoid arthritis.

A review of her past psychiatric history showed the first contact with mental health services was 21 years previously when she was diagnosed as having postnatal depression. Five years later she was admitted for benzodiazepine withdrawal. We could not find any documented history of psychosis. On her current admission she denied any benzodiazepine or alcohol abuse. A urine drug screen was performed which came back as negative. Physical examination at the time of admission revealed no abnormality.

She was admitted for observation. She was not commenced on any psychotropic medication. Since her mental state had deteriorated soon after commencement of triple therapy, it was discontinued. Following the discontinuation she made a speedy recovery and was discharged two days after admission. Follow-up of the patient at one and two months after discharge showed that she had remained euthymic and free of psychotic symptoms.

DISCUSSION
Considering this lady's presentation and past psychiatric history, an alcohol/benzodiazepine withdrawal state or an affective disorder were considered initially as differential diagnoses. However, a careful analysis of her medical history raised the possibility of an iatrogenic condition. In patients admitted to psychiatric units possible mental health manifestations of their comorbid physical conditions and drug treatments are sometimes ignored.

A search for relevant literature showed one published case report of psychosis induced by triple therapy. As in this case the patient presented with manic symptomatology although the onset was delayed for three days. There have been a couple of documented cases of amoxicillin-induced psychosis. We found a few published reports linking Clarithromycin to psychosis either directly or due to interaction with other medications.
Some authors have suggested the term antibiomania. Over the last number of years a correlation between depression and inflammation has been suggested. One possible explanation might be that antibiotics decrease the inflammation reducing the depressive symptoms leading to a possible switch to mania.

Triple therapy is a very effective form of treatment with H. pylori eradication rates of up to 90% but in view of the risk of psychosis careful consideration should be given to the indication. Guidelines for the management of Helicobacter pylori infection produced by the American College of Gastroenterology suggest a less aggressive approach for non ulcer dyspepsia. According to the guidelines, patients may be tested on a case by case basis followed by an offer of treatment to patients with positive results.

Serological test is the most cost effective test although a urea breath test is the best nonendoscopic test for documenting H. pylori infection. The guidelines caution that patients should be counseled that such a test does establish a causal link between the H. pylori infection and the symptoms. It further cites the potential risks of the treatment.

**CONCLUSION**

Before triple therapy is administered to a patient review of past psychiatric history is advisable. In case of a patient presenting with psychiatric symptoms after commencement of such therapy distinction between side effects of medication and relapse of mental illness can be problematic.

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