

### Case Report

## PANTOPRAZOLE INDUCED ACUTE HYPERSENSITIVITY REACTION: A CASE REPORT

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### ABSTRACT

This is a case of acute hypersensitivity reaction due to Pantoprazole which was used for treatment of gastritis. Patient was all right after treatment.

**Key Words:** Hypersensitivity reaction, Gastritis, Pantoprazole

### INTRODUCTION

Proton pump inhibitors (PPI) are the drugs which inhibit  $H^+ K^+ ATPase$  enzyme involved in gastric acid secretion. These are the most widely used drugs for peptic ulcer and related disorders because of their outstanding efficacy and safety. Pantoprazole is one of the PPI used both orally & parenterally as a gastric acid suppressant (Goodman, 2011). But though labeled as safe, any drug can produce acute hypersensitivity reaction as observed in present case.

### CASES

A 35 years old male was having gastritis for which he took tablet Pantoprazole 40 mg. After 30-40 min, he started developing urticarial rash all over the body with intense itching sensation, conjunctival insufflations and redness over palms and soles. The rash was diffuse and appeared as swelling over the visible part of the body. Within few minutes of appearance of rash, he fell down. He was admitted for the same in a nearby private hospital and treated with antihistaminics, steroids and  $H_2$  blockers. The recovery was complete and patient was discharged on second day. The physician diagnosed the condition as an acute drug induced hypersensitivity reaction. The patient did not give any history of the delayed consequence of hypersensitivity within the next few days. Patient had history of similar type of reaction but of less severe grade with drugs, amoxicillin and cotrimoxazole.

Few months later, the patient consumed the same dose of Pantoprazole and immediately started feeling uneasy. He had some sort of constriction in chest, palpitation and sweating. Within a minute, he developed a small red colored itchy lesion on volar aspect of right hand. As he was aware of the previous episode, he immediately induced vomiting by stimulating the posterior pharyngeal wall. The vomitus contained partially disintegrated tablet along with food particles. After this, patient started feeling well. He immediately had a tab cetirizine 10 mg which subsided redness and itching within an hour. The patient consulted a physician on next day for the same. ECG and other relevant investigations were done but were within normal limits.

### DISCUSSION

Pantoprazole is a commonly prescribed and over the counter PPI. PPI group of drugs are highly efficacious and safer drugs used in disease conditions like peptic ulcer, gastro-esophageal reflux disease, Z. E. syndrome etc. Though safer they can produce adverse drug reactions in the form of diarrhea, headache and abdominal pain. On long term use, they inhibit absorption of Vitamin  $B_{12}$ , decrease  $Ca^{++}$  absorption, increase susceptibility to infections by Shigella, Salmonella and may increase the risk of gastric neoplasia (Rang et al., 2012). Very rarely PPI have been found to produce acute hypersensitivity reactions (Natsch et al., 2000) as observed in above case, where the drug was taken by oral route.

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Parenteral administration of Pantoprazole is also likely to produce more severe type of acute hypersensitivity reaction which may endanger the life of patient (Goodman, 2011).

In above case the reaction occurred on first time exposure to Pantoprazole was Type I hypersensitivity reaction. The second time exposure to the same drug produced similar and immediate reaction which could be of more severe type if patient would not have induced vomiting. The manifestations of reaction evolved rapidly after challenge and probably would have been of more severe form involving vital organs. But patient's timely decision of inducing vomiting terminated the bad consequences of drug reaction. In this case, Naranjo's algorithm (Naranjo *et al.*, 1981) was used to determine a plausible reaction due to Pantoprazole. Based on the total score of +7, the patient was categorized as 'probable' adverse reaction due to Pantoprazole administration.

### **CONCLUSION**

Though labeled as safe, many drugs can unpredictably induce adverse drug reactions warning us their cautious use.

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