

Case report

Key words

Proton pump inhibitors • Anaphylaxis • Urticaria

Anaphylactic reaction after oral intake of lansoprazole: a case-report

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Summary

The proton pump inhibitors (PPI) are powerful drugs which have been widely used for many years in the treatment of peptic ulcer and GERD (gastro-esophageal reflux disease). PPI's have been reported to cause immunoglobulin (Ig) E hypersensitivity reactions with symptoms ranging from urticaria/ angioedema to anaphylaxis. We report a case of a 52 y.o. woman who experienced two severe reaction with glottal edema, generalized erythema, edema of the skin, swelling of lower and upper limbs and dysphagia after ingestion of lansoprazole. We classified this event as anaphylactic shock to PPI's because of the acute onset of symptoms and close temporal association with exposure to the drug.

Introduction

The proton pump inhibitors (PPI) are powerful drugs which have been widely used for many years in the treatment of peptic ulcer and GERD (gastro-esophageal reflux disease).

Since they were introduced in the clinical practice in 1980, great progress has been made in managing the gastroesophageal symptoms. Several studies have been performed to evaluate the risk of side effects during or after the treatment with PPI. They showed clinical adverse reactions are rare and they mainly involve the central nervous system and the gastrointestinal symptoms. However PPI's have been reported to cause immunoglobulin (Ig) E hypersensitivity reactions with symptoms ranging from urticaria/ angioedema to anaphylaxis, toxic epidermal necrolysis, leukocytoclastic vasculitis, and drug rash with eosinophilia.

Many reports have also demonstrated a presence of cross-reactivity among different PPI's, although the importance of this event is still not clear.

Case description

We report a case of a 52 year old. woman who received a prescription of lansoprazole from his general practitioner for GERD:

she had to take a tablet once a day for one month. This patient never took any PPI in the past.

After about 1 hour from the ingestion of one capsule, while she was driving her car, she developed a serious reaction characterized by abdominal pain, sweating, nausea, vomiting, itch and urticaria mainly on the scalp but also on her whole body. Again, after few minutes she experienced severe vision deficit, edema of the skin, shortness of breath and she got shiver all across her body. The patient came immediately to our unit where she was fully recovered from these symptoms after an immediate intravenous treatment with adrenaline, methylprednisolone and chlorpheniramine. During the hospitalization an X-Ray of the abdomen was performed with negative result.

After six months from the first adverse reaction, because of persistent symptoms of gastroesophageal reflux disease, the patient took another tablet of lansoprazole, without paying care to the previous experience.

After about 30 minutes, she experienced an even more severe reaction with glottal edema, generalized erythema, edema of the skin, swelling of lower and upper limbs and dysphagia.

Again she came immediately to our unit where she had the same treatment as the last time. Afterwards the patient was treated with an H2 receptor antagonist instead of PPI.

Three months later she came to us again for a follow up. We

found her in good conditions, and she refused to have any further examination. We classified this reaction as anaphylactic shock to PPI's because of the acute onset of symptoms and close temporal association with exposure to the drug.

Conclusions

Anaphylaxis is a severe allergic reaction which involves often more than one body system (e.g. skin, respiratory, cardiovascular, gastrointestinal). This events usually occurs within few minutes in the

presence of a trigger and it can rapidly endanger life. As a group, PPI's can cause anaphylactic reaction, but, to our knowledge, this is a quite rare event.

So far, only seven patients, with a story of anaphylaxis to PPI, have been described in literature.

Several studies have also showed a presence of cross-reactivity between different member of the group.

Since anaphylaxis is a potentially very serious reaction, more specific information are required concerning its frequency; furthermore, healthcare professionals should be aware of this when prescribing these drugs.

Selected references

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