Anaphylactic Reaction to Lansoprazole: Case Report

Lansoprazol'e Karşı Gelişen Anaflaktik Reaksiyon

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ABSTRACT Anaphylaxis is a serious systemic allergic reaction to allergens. A 57-year-old woman applied to emergency unit with facial redness and difficulty in breathing after she swallowed a 30 mg lansoprazole capsule 15 minutes ago. She was agitated and had dyspnea. The patient was treated and followed up in the emergency unit. Anaphylaxis was primarily diagnosed by the clinical history and acutely treated in emergency unit. There are no reliable and practical laboratory tests to diagnose anaphylaxis. Proton pump inhibitors, which are widely used for the treatment of peptic ulcer, are associated with a low incidence of adverse reactions. There are three reported cases of lansoprazole anaphylaxis occurred during challenge tests. Anaphylactic reactions to proton pump inhibitors are rare but they should be kept in mind.

Key Words: Anaphylaxis; proton pump inhibitors; lansoprazole

ÖZET Anaflaksi, vücudun maruz kaldığı allerjenlere karşı gelişen ciddi bir sistemik allerjik reaksiyondur. Elli yedi yaşında bayan hasta 15 dakika önce oral olarak 30 mg lansoprazol kapsül alma sonrası gelişen yüzde kızarıklık ve nefes alamama şikayeti ile acil servise başvurdu. Hastanın dispnesi ve ajitasyonu vardı. Hasta acil serviste takip ve tedavi edildi. Anaflaksi klinik olarak tanı konulan ve acil serviste hızlı bir şekilde tedavi edilen bir klinik tablodur. Anaflaksi tanısında kullanılabilecek güvenilir ve pratik laboratuar testleri bulunmamaktadır. Proton pompa inhibitörleri peptik ülser tedavisinde yaygın olarak kullanılmaktadır ve düşük yan etki profiline sahiptir. Literatürde provakasyon testleri sırasında gelişen üç adet lansoprazol anaflaksisi olgusu bildirilmiştir. Proton pompa inhibitörlerine karşı gelişen anaflaktik reaksiyonlar ender olmasına rağmen akılda tutulmalıdır.

Anahtar Kelimeler: Anaflaksi; proton pompa inhibitörleri; lansoprazol

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Anaphylaxis is a serious systemic allergic reaction to allergens and this reaction commences acutely and may be fatal.[1] It is a poorly understood, under recognized and under treated disease.[1,2] In this report we present a patient who experienced anaphylactic reaction 15 minutes following oral intake of lansoprazole 30 mg capsule.

CASE REPORT

A 57-year-old woman applied to emergency unit with facial redness and difficulty of breathing after she swallowed a 30 mg lansoprazole capsule 15 minutes ago. She was agitated and had dyspnea. Her blood pressure was measured as 220/120 mmHg. Rate of breathing was 30/minute, and pulse rate was 88/minute with an oxygen saturation of 96%. On dermatologic examination there were conjunctival hyperemia, slight eyelid edema and

erythema involving face, neck and upper anterior trunk. She was diagnosed to have an anaphylactic reaction to lansoprazole. She was treated with slow intravenous injections of 100 mg pheniramine-maleat and 250 mg methylprednosolone immediately. Nasal oxygen was given at a rate of 6 lt/minutes. As she complained of pressure and burning sensation in her epigastric area, intravenous 100 mg ranitidine HCl and 10 mg metochloropramide were administered. As dyspnea got worse, subcutaneous 1 mL adrenaline 1:1000 was administered and injection was repeated with 20 minutes interval for three times. Additionally 2.5 mg salbutamole-sulphate was administered with nebulizer. She was followed up in the emergency unit for seven hours with intravenous pheniramine-maleat infusions and salbutamole-sulphate nebulizer administration. At the end of seven hours of follow-up and disappearance of laryngeal edema she was discharged with prescribed oral antihistaminics.

Past medical history revealed that the patient had duodenal ulcer, chronic pharyngitis, hypertension and diabetes mellitus. She was using telmisartan+hydrochlorothiazide for hypertension and glimepiride for diabetes mellitus. The patient had a history of milder similar allergic reaction to lansoprazole three years ago and applied to an emergency unit for treatment. She used rabeprazole without any allergic reaction before and the reaction was against lansoprazole. She had no family history of atopy.

DISCUSSION

Anaphylaxis is primarily diagnosed by the clinical history and acutely treated in the emergency unit.[1] There are no reliable and practical laboratory tests to diagnose anaphylaxis.[1] Skin test sensitivity predicts the frequency of the reaction but does not predict the reaction severity.[2] Challenge tests are risky, time consuming, costly and must be done with caution.[1] We did not perform a challenge test with lansoprazole in our patient because there was a clear temporal relationship between lansoprazole use and anaphylaxis. We did not want to take any risk of harm to our patient.

Proton pump inhibitors, which are widely used for the treatment of peptic ulcer, are associated with a low incidence of adverse reactions.[3] Cases of anaphylactic reactions to proton pump inhibitors have been reported rarely.[4-6] Demirkan et al described one patient with lansoprazole anaphylaxis.[4] The patient had relevant history and developed anaphylaxis 20 minutes after oral 7.5 mg lansoprazole provocation test, and epidermal tests with lansoprazole were positive. There was no cross reactivity to other proton pump inhibitors in this report.[4] Gonzáles et al described a patient with urticarial reaction to oral omeprazole and anaphylactic reaction 30 minutes following oral intake of 15 mg lansoprazole challenge.[5] They have concluded that cross reactivity between proton pump inhibitors do exist.[5] Natsch et al described a case with anaphylaxis related to oral omeprazole use and lansoprazole challenge suggesting cross reactivity between the two proton pump inhibitors.[6] But our patient used rabeprazole with no allergic reactions before and later had lansoprazole anaphylaxis.

We describe a patient with clinical anaphylactic reaction to lansoprazole with no cross reaction to rabeprazole. There are three cases of lansoprazole anaphlaxis occurred during the challenge tests in the literature. In conclusion, anaphylactic reactions to proton pump inhibitors are rare but they should be kept in mind.

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