Acute anaphylactic reaction to expired chlorpheniramine injection

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ABSTRACT

Chlorpheniramine is a widely used drug for management of allergic reaction. The serious adverse reaction to this drug is extremely rare. In this report, the authors present a case of acute anaphylactic reaction to expired chlorpheniramine injection.

1. Introduction

Chlorpheniramine is a widely used drug for management of allergic reaction. The serious adverse reaction to this drug is extremely rare. In this report, the authors present a case of acute anaphylactic reaction to expired chlorpheniramine injection.

2. Case report

The index case is a 19 years old female present to the physician at a primary health unit for the complaint of itching skin lesion. This patient was diagnosed to have allergic dermatitis. Due to the severe itching, the patient was prescribed for the chlorpheniramine injection for relieving of the dermatological symptom. However, 10 min after the injection, the patient felt difficulty in respiration and developed swelling eyelid. The dropping of blood pressure can be seen. This patient was sent to the nearby emergency room of a hospital and further hospitalized in intensive care unit. The diagnosis is anaphylaxis. The patient was treated by steroid therapy and got full recovery within 1 d.

The rooted cause analysis for the anaphylactic reaction in this case was assessed. The patient did not receive any other drug except for chlorpheniramine. The patient had ever intook the chlorpheniramine for many time. Nevertheless, the examination of the left ampule and stock of the drug revealed that the chlorpheniramine was expired. The in charge nurse and pharmacist did not observe this before.

3. Discussion

This is a good case study on the quality of medical care in a developing country. The careless practice of nurse and pharmacist can be seen. In fact, before any injection due to the order of the physician, the nurse has to check for the patient identification as well as drug identification. The drug identification must cover correct drug, correct dosage and not expired shelf life.

The side effect of chlorpheniramine can be seen[1]. However, the report of anaphylaxis is extremely rare. Sometimes, the toxicity of chlorpheniramine can be observed. Monte et al. quoted an interesting principle that "chlorphenamine is a serotonergic medication and..."
combinations of chlorphenamine and dextromethorphan may be dangerous in overdose due to an increased risk of serotonin toxicity[2].” In the present case, it is believed that the expiration might induce some change of drug and this can be the starting point of generation of anaphylaxis in this patient. Of interest, the problem of using expired drug without reading the note on expired date by the patient is common[3], however, this should not be occurred in the health care setting by the medical personnel.

Conflict of interest statement

We declare that we have no conflict of interest.

References