



Contents lists available at ScienceDirect

Journal of Acute Disease

journal homepage: www.jadweb.org

Document heading doi: 10.1016/S2221-6189(14)60035-4

Acute anaphylactic reaction to expired chlorpheniramine injection

Beuy Joob*, Viroj Wiwanitkit

¹Sanitation 1 Medical Academic Center, Bangkok Thailand²Visiting Professor, Hainan Medical University, China; visiting professor, Faculty of Medicine, University of Nis, Serbia; adjunct professor, Joseph Ayobabalola University, Nigeria; Wiwanitkit House, Bangkhae, Bangkok Thailand

ARTICLE INFO

Article history:

Received 8 August 2013

Received in revised form 15 September 2013

Accepted 24 September 2013

Available online 20 June 2014

Keywords:

Chlorpheniramine

Injection

Expired

Anaphylaxis

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 reliving 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

*Corresponding author: Beuy Joob, Sanitation 1 Medical Academic Center, Bangkok Thailand.

E-mail: beuyjoob@hotmail.com

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

- [1] Schuller DE, Turkewitz D. Adverse effects of antihistamines. *Postgrad Med* 1986; **79**(2):75–86.
- [2] Monte AA, Chuang R, Bodmer M. Dextromethorphan, chlorphenamine and serotonin toxicity: case report and systematic literature review. *Br J Clin Pharmacol* 2010; **70**(6): 794–798.
- [3] Fischer J, Knaudt B, Caroli UM, Biedermann T. Factory packed and expired – about emergency insect sting kits. *J Dtsch Dermatol Ges* 2008; **6**(9): 729–733.

About Index Copernicus International

Index Copernicus International is an international, specialized platform for promoting scientific achievements, as well as supporting national and international collaboration between scientists, publishers of scientific journals and scientific entities. We invite you to familiarization the specific sections of the Index Copernicus International:

IC Journal Master List, IC Publishers Panel, IC Publishing, IC Scientist, IC Institutions.

IC Journal Master List – contains currently over 13 000 journals from all over the world, including 1 200 journals from Poland. The journals registered in this database underwent rigorous, multidimensional parameterization, proving high quality. The Ministry of Science and Higher Education acknowledged the IC Journal Master List by placing it on the list of scored databases, for being indexed in IC JML journals get additional points in the Ministry’s evaluation process. Indexation in the IC Journal Master List database not only means additional points in the Ministry’s evaluation but also gives you international promotion and prestige.

IC Publishers Panel – enables the process of publishing scientific journals. With the aid of IC Publishers Panel editors can effectively manage the editorial process by facilitated acquisition and selection of articles to journals and editing. Publishers can take advantage of the support of an electronic publishing process and improve the development strategy. Moreover, the module allows you to run a website and management the database of journal articles, authors, reviewers and subscribers.

IC Publishing – through it publishers have more time and the whole publishing process is carried out by specialists Index Copernicus. The high quality of service guarantees many years of experience in the publishing journals and a team of experienced professionals. IC editors will attends the editing of articles, the development of translation, proof and DTP. Subsequently, the total goes to print and distribute to designated addresses. As a result of the scientific entities can completely focus on their studies, leaving the process of publishing experts . It is an ideal solution for smaller scientific entities. Publishers who choose to provide us with the publishing process benefit from the knowledge of our experts on the Evaluation Journals and promotion.

IC Scientists – is a global portal for scientific cooperation. It is intended for scientists from around the world representing industries SMT (Science, Technology, Medicine). Through it IC Scientists, scientists from around the world and different fields of science have the opportunity to present their port folio including the publication of scientific papers and submitting them judged by other users. Users of the platform IC Scientists, scientists do not just look to the whole world their achievements, but also to establish cooperation with partners in related fields. They could apply to participate in research projects or to establish scientific cooperation. For each profile, automatically generates the list of information about potential collaborators to carry out research, new publications in the field and the available grants, organized meetings and conferences.

IC Institutions – is the perfect tool for scientific entities, research institutes, universities and other entities conducting research to management research and research and development works. IC Institutions allows you to manage research projects in real time, including by providing on–line access to information about their projects, including the current data analysis and statistics. The module has also implemented a feature to generate detailed periodic reports on the activities for the purpose of controlling institutions, awarding grants or internal purposes.