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Case Report

First Report on Infant Acute Urticaria after Mother's Parenteral Use of Meglumine Antimoniate (Glucantime): A Case Report

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Abstract

Pentavalent antimonials are still the first drug of choice for the treatment of cutaneous leishmaniasis (CL). Like other treatments, they can cause adverse reactions including musculoskeletal pain; gastrointestinal disturbances, and mild to moderate headaches. In this paper, we report the first case of an infant who developed acute urticaria after her mother's parenteral use of meglumine antimoniate (glucantime).

Keywords: Cutaneous leishmaniasis, Meglumine antimoniate (Glucantime), Adverse reactions

Introduction

Cutaneous leishmaniasis (CL) is a major public health problem in many countries. However, there are many topical and systematic treatments for CL. At present, pentavalent antimonials are still the first drug of choice for the treatment of CL (1). Systemic administration of pentavalent antimonials has been associated with such adverse reactions as musculoskeletal pain, gastrointestinal disturbances, and mild to moderate headaches. "Electrocardiographic QT interval prolongation and a mild to moderate increase in liver and pancreatic enzymes are other adverse effects of pentavalent antimonials" (2,3). Nonetheless, acute urticaria in infants has never been reported to be associated with maternal use.

Here we report a case of an infant presenting with acute urticaria after her mother's parenteral use of meglumine antimoniate (glucantime) for the first time.

Case Report

In November 2015, a 34-yr-old breast-feeding woman from Gonbad City of Iran presented with a lesion on the anterior region of her abdomen that lasted about 60 days. The lesion first appeared as a small red papule and then progressed to an ulcer. The slowly enlarging lesion had raised borders and was slightly erythematous and crusty. It was a firm, non-tender, well-defined lesion, which measured 4 cm × 3 cm in diameter. The systemic and topical antibiotics and steroids failed to treat the condition. A slit-skin smear from the edge of the ulcer with Giemsa stain showed Leishman bodies within the macrophages, which confirmed the diagnosis of cutaneous leishmaniasis.

The patient was treated with a weekly cryotherapy regimen and intralesional injections of glucantime. The patient was discontented with no sign of improvement with the prescribed medications

and interventions after three wk. As a result, the treatment was changed to glucantime at a dose of 20 mg/kg-body weight intramuscularly for two wk. For our patient weighing 95 kg, we prescribed 3 vials per day for 14 d (according to the National Guidelines for Leishmaniasis Surveillance in Iran -2012). A day after the start of systemic therapy, the patient brought her fifteen-month-old breast-feed infant with urticaria and malaise but without eosinophilia (1cells/mm3). With an elevated liver enzyme SGOT level (46 IU/L, normal range is up to 31 IU/L); the infant's vital signs were normal. The physical examination results were normal except for urticaria, which was dominant on the abdomen, back and thighs (Fig. 1). Both the mother and the infant had no history of exposure to any alternative causes other than glucantime. The mother was advised to discontinue breastfeeding for two week and the infant to receive a single dose of antihistamine (2.5 mg Cetirizine per oral). The symptoms resolved within 24 h, during which the urticaria disappeared and malaise was alleviated. With slow but definite improvement of the lesion, the mother reported mild myalgia and arthralgia but otherwise tolerated the glucantime well.

Discussion

Two pentavalent antimonial drugs, sodium stibogluconate (Pentostam) and glucantime, have been the drugs of choice for the treatment of cutaneous leishmaniasis for over 50 yr. "In spite of their wide use for half a century, relatively little is known about their chemical structures and mechanism of actions " (4) and, up until now, new side effects have been reported as a result of their use.

In our case, the occurrence of adverse drug reaction and its successful management after discontinuing the drug points to the unwanted effects of glucantime as non-pharmacological causes were not found to have generated the reaction.

We could not find any report of acute urticaria in infants associated with the mother's parenteral use of glucantime.

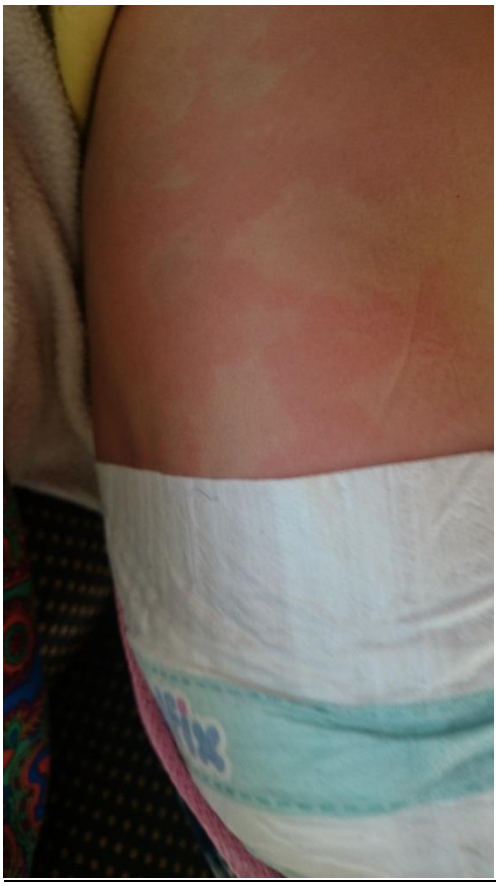

Fig. 1: Urticaria, obvious on the abdomen, back and thighs of the patient (Original)

This included a search on LactMed (a TOXNET database) which led to no records being found (5). Hence, this is the first reported case of urticaria in infants due to the mother's parenteral use of glucantime. It is recommended that mothers discontinue breastfeeding and avoid taking glucantime in systemic doses because of adverse effects on their infants.

Ethical considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission,

redundancy, etc.) have been completely observed by the authors.

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