Results: Of the 33 patients, 28 (84.8%) had negative results for the tests. One patient in group I showed inconclusive results. Four patients (12.2%) in group II had positive tests, including 3 for penicillin G and one for amoxicillin.

Conclusions: The results demonstrated that the clinical history collected by medical questionnaires is not the determining factor in confirming a patients’ reaction to penicillin, and shouldn’t be the only parameter used to exclude potential future prescriptions. In addition, the results denote that hypersensitivity to other beta-lactam antibiotics should be evaluated in a more proper way for a fuller understanding of each case.

Background: Drug rash with eosinophilia and systemic symptoms (DRESS) syndrome is one of severe adverse drug reactions. Aromatic anticonvulsants and sulfonamides are the most common causes of DRESS syndrome. However, there have been only 2 case reports of DRESS syndrome induced by antituberculous medication. This study was aimed to observe the clinical features of patients with DRESS syndrome caused by antituberculous medications.

Methods: We retrospectively revealed the clinical and laboratory data of the patients from September 2006 to August 2010 at a University Hospital. Our patients were diagnosed as DRESS syndrome if 3 criteria were present: (1) cutaneous drug eruption, (2) peripheral eosinophilia >1,500/μL, (3) systemic involvement (lymphadenopathy, hepatitis or fever).

Results: Nine patients (5 men, 4 women; mean age 50.5 years) were enrolled DRESS syndrome induced by antituberculous medications. The most common causative agent was ethambutol which was identified as the cause in 8 of 9 patients (88.9%). In the other patient, streptomycin was considered as the causative agent. Two out of 8 patients with DRESS syndrome caused by ethambutol were induced by rifampicin as well. Drug eruption developed 6-9 weeks after antituberculous drugs were first used. Skin eruptions were involved on the whole body in 8 patients and on only upper trunk in 1 patient. Diffuse maculopapular eruption was the most common type of skin lesions that was observed in 8 of 9 patients. Other types of skin eruption were identified; 4 exfoliative eruptions, 3 facial edema and 1 urticaria. The mean value of peripheral eosinophil counts was 3,354/μL, the cervical, axillary or inguinal lymphadenopathy was observed in 7 patients and fever was detected in 6 patients. Hepatitis was developed in 3 patients. All patients with DRESS syndrome recovered after corticosteroid therapy and the elimination of the culprit drugs.

Conclusions: The most common cause of DRESS syndrome induced by antituberculous medications was ethambutol in our study. Diffuse maculopapular eruption on the whole body was the most common type of eruption and lymphadenopathy was the most common involvement of internal organ in patients with DRESS syndrome caused by antituberculous drugs.

Background: It’s well known that drugs may induce complement alternative pathway’s activation. On the other hand there is evidence that anaphylaxis may occur in absence of IgE and IgG antibodies (so-called non-immune anaphylaxis). We determined the tryptase, complement and circulating immune complexes (CIC) levels to understand the nature of anaphylaxis occurred in a woman during high rate infusion of high concentrated iron.

Methods: A 46 years-old woman was admitted to our department because of mixed anemia, iron and cobalamin deficiency-related, started after a surgical intervention (bilio-pancreatic derivation) for heavy obesity occurred 7 years ago (starting Hgb = 7g/dl). Ev. hydroxycobalamin and iron infusions were planned, but during high rate (100 gtt/min) infusion of high concentrated (0.5 mg/mL) iron, the patient suffered from discomfort, sweat and drop in blood pressure (BP 60/30). Blood samples were taken to evaluate tryptase, complement and CIC levels; standard treatment of anaphylaxis was started (imm. epinephrine, inhaled O2 with steroids and beta-agonists, ev. electrolyte solution and vital parameters continuous evaluation). The shock resolution was gained in 3 hours.

Results: The level of tryptase was normal (4 mcg/mL; N.R.-Normal Range=1–20), while C3 and C4 were impaired (C3 = 65 mg/dl; N.R. = 75–165; C4 = 12 mg/dl; N.R. = 20–55). The search for CIC IgG, IgA, IgM was negative. Six months later the low rate (30 gtt/min) low concentration (0.25 mg/mL) iron infusion was well tolerated by the patient, so excluding any IgE sensitization.

Conclusions: We describe here for the first time a case of human anaphylaxis without mastocyte nor IgE involvement. The high infusion rate and hyperosmolality of hyperconcentrated drug caused complement alternative pathway’s activation. The only cell type able to release anaphylaxis mediators other than mastocytes are the basophils, having anaphylatoxins receptors. So, we conclude that drug-induced complement alternative pathway’s activation with consequent basophil’s involvement was responsible for the patient’s “non-immune” anaphylaxis.
anaphylaxis. Mainstay treatment for food dependent exercise induced anaphylaxis is recommending exercising only on an empty stomach. The consideration of food dependent exercise induced anaphylaxis in cases of unexplained anaphylaxis is important as reactions can be life threatening and clinicians should be reminded of the importance of thorough history taking.

266 First Report of Anaphylactic Shock Caused by the Ingestion of Mite-Infested Flour in Panama

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Background: To report the first case of an anaphylactic shock, almost lethal, in the Republic of Panama, produced by ingestion of pancakes contaminated by mites.

Methods: A 21 year-old male patient was evaluated due to an anaphylactic shock after the ingestion of pancakes, eggs and milk. The patient had a background of a moderate allergic rhinitis. Not asthma. Skin prick test was performed on the patient with standardized extract of mites and food items, including, flour, milk and egg. After twenty minutes the results were read and considered positive since the wheal was 2 mm larger than the control (histamine 1 mg/mL). The Total IgE was determined by the chemiluminescence method. The determination of the specific IgE for mites and food was performed by the enzyme immunoassay technique. The counting and identification of the mites in the pancake samples that were eaten by the patient were placed in a microscopic slide using a Hoyer medium and analyzed in a stereomicroscope.

Results: The skin prick test performed was considered positive for Blomia tropicalis, Dermatophagoides pteronyssinus and negative for flour, milk and egg. The total IgE was increased and the specific IgE resulted positive for Dermatophagoides pteronyssinus and Blomia tropicalis, but negative for flour, egg and milk. The microscopic examination of the pancake wheat showed 3 different species of mites: Blomia tropicalis, Blomia sp. and Dermatophagoides pteronyssinus, the first one in major proportion.

Conclusions: The anaphylactic shock of the patient was produced by the ingestion of a commercial pancake contaminated by mites to which the patient was sensitized. Flour kept in open containers becomes a fertile ground for the growth of mites in tropical climates. Allergic patients should be warned of the danger of anaphylaxis in such conditions.

REFERENCE
Sánchez-Borges M, Capriles-Hulet A, Caballero-Fonesca F; Oral mite anaphylaxis (pancake syndrome) also observed in children. Ann Allergy Asthma Immunol. 2006;96:755–756.

267 Recurrent Anaphylaxis in Cow Milk Allergy: What Is Wrong?

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Background: Food allergens are one of the most important triggers of anaphylaxis in pediatric population and all efforts must be done to avoid new episodes.

Objective: To determine some factors associated to recurrent anaphylaxis induced by cow’s milk (CM) in pediatric patients with a previous anaphylactic episodes.

Methods: This is a retrospective study based on medical records from all CM anaphylactic patients, from a Brazilian reference center for food allergy. The anaphylaxis criterion used was based on the Second symposium on the definition and management of anaphylaxis. Patients and parents had received orientation regarding prevention of new episodes, including information about hidden allergens, label reading, and synonymous terms.

Results: It was included 53 patients (33M: 20F), median age of the first episode of anaphylaxis was 6 months (range 1–87 month) and in 56. 6% the first episode occurred until the age of 6 months. Fifty episodes were observed in 22 patients during the follow up. Twelve patients presented 2 or more episodes and 2 patients presented 6 episodes. It was not possible to detect the trigger food in 17 episodes and these situations were related to ingestion of: appetizers (4), margarine (3), bread (2), pizza (2), juice with casein (1), pasta (1), cake (1), chips (1), Italian sausage (1). Two episodes were challenged by accidentally skin contact and 2 by inhalation. Among the settings of episodes, the majority occurred at home. Other places included: school, restaurants and bakery.

Conclusions: This study showed that it is very difficult to reach success only with the orientations regarding anaphylaxis prevention. It is necessary to betake of other strategies to improve the measure to avoid new episodes of anaphylaxis such as: folders, visual midia and interactive activities. Furthermore, the continuous education is essential to reinforce the knowl-edge.

268 Epidemiology of Anaphylaxis in Adults Treated in the Emergency Department, of the University Hospital of Monterrey n.l Mexico, During 2005–2010

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