

were negative. Provocation tests with the culprit vaccine were negative, either.

Conclusion: Although adverse reactions after administration of the vaccine are commonly reported in the general population, actual HRs to vaccines are rare. Patients with suspected allergic reactions should be referred to allergy clinics to prevent unnecessary avoidance of vaccination which is a major preventive health service.

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Specific treatment of Stevens-Johnson syndrome and toxic epidermal necrolysis in children

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Background: Research aim - analyze of effectiveness the specific treatment of Stevens-Johnson syndrome and toxic epidermal necrolysis in children.

Method: The total number of pediatric patients with Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) was seven. The group included five patients with SJS and two patients with TEN and the age range was from 10 months to 15 years. Three patients were females and four were males. All cases were classified according to the clinical criteria of Bastuji-Garin et al. (1993). Several drugs are suspected to be the causative agent of SJS and TEN: anti-infective sulfonamides (2), amoxicillin (1), paracetamol (1), valproic acid (1), cytostatics (2). The onset is usually triggered by viral infections of the upper respiratory tract and by medication (4).

Results: Five patients (three with SJS and two with TEN) treated with intravenous immunoglobulin (IVIG) and systemic corticosteroid (pulsed therapy with methylprednisolone). Total dose IVIG ranged from 1.0 to 3.0 g/kg in divided doses for two to three days. Time from diagnosis to treatment initiation of IVIG was from 1 to 3 days. Two patients with SJS treated with methylprednisolone (pulsed therapy). In four patients ranged time to objective response after treatment initiation with IVIG from 24 to 48 h. One patient received further with prednisolone per os (1 mg/kg/d). Time to objective response after treatment initiation with pulsed therapy with methylprednisolone ranged from 2 to 4 days. No patient died.

Conclusion: Specific treatment of children with Stevens-Johnson syndrome and toxic epidermal necrolysis are effective.

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Insulin allergy in a diabetic child

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Background: Insulin allergy has been uncommon since the introduction of human recombinant insulin preparations; the prevalence is 2.4%. Insulin injection could elicit immediate reactions, which are usually induced by an IgE-mediated mechanism, within the first hour after drug administration. In the present study we describe the case of a child who experienced immediate urticaria after long-lasting insulin injection.

Case report : A 9-year-old girl affected by type I diabetes mellitus referred a history of three episodes of urticaria thirty minutes after insulin subcutaneous injection. During the first week of insulin therapy, she developed generalized immediate urticaria twice after long-lasting Insulin Glargine first and then once after Insulin Degludec administration. Symptoms resolved within a few hours after treatment with oral antihistamine. She tolerated rapid Insulin Lispro. Her personal allergological history was negative. Skin prick tests with Degludec, Glargine and Detemir were performed, showing negative results. Intradermal 1:100000-diluted tests were immediately positive for both Degludec and Glargine (mean diameters 6.5 mm and 10 mm, respectively) but not for Detemir. Histamine (10 mg/ml) and saline solution were used as positive and negative controls. In light of these findings, Detemir was administered without any reaction.

Discussion: Our results show that Detemir is tolerated by patients with clinical hypersensitivity reactions to Degludec and Glargine. Although reactions could be attributable to additives allergy, such as zinc or metacresol, this was excluded since all three preparations contain the same components. So, insulin itself acted as offending allergen. Detemir differs from Degludec and Glargine in a few aminoacids. Therefore, it is possible that the conformational rather than the linear epitope may be responsible of the reaction. It is remarkable to comment about the results of skin prick test. Glargine and Degludec were negative with this test, even though intradermal tests were positive. This result could suggest to integrate intradermal tests in the diagnostic flowchart for insulin allergy. Summarizing, insulin allergy should always be suspected in patients with immediate symptoms after drug injection. As allergologic work-up, prick by prick test and intradermal test to insulin

preparations should be performed. In case of negative results of cutaneous tests, insulin analogues may be administered.

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Exfoliative dermatitis due to amoxicillin and clavulanic acid in a child

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Background: Exfoliative dermatitis (ED) is an inflammatory disorder characterized by body surface involvement with erythema and scaling. ED, first described by Hebra, may occur as a reaction to drugs, including penicillin. It is not always possible to demonstrate the pathogenic mechanism that underlies such a skin drug reaction. The lymphocyte transformation test (LTT) is used to assess the T cell role in non immediate drug hypersensitivity. We reported a case of a 9 year-old caucasian girl referred to the Allergy Unit of Anna Meyer Children's Hospital for suspected amoxicillin and clavulanic acid (AMX/CLV) hypersensitivity. From her past medical history, two years ago, during a febrile bronchitis, she assumed AMX/CLV and during the assumption, she presented ED at all toes and at the knee.

Method: Skin tests (ST) were performed according to the European Network for Drug Allergy (ENDA) recommendations. Specific IgEs to amoxicillin, ampicillin, and penicillin G and V (Immunocap RAST, Uppsala, Sweden) were measured. An oral provocation test (OPT) to AMX/CLV [1/10-2/10-7/10 of the therapeutic dose (50 mg/kg/day in 2 doses) administered every 30 min] was performed following the current guidelines until the therapeutic cumulative dose was reached. The Lymphocyte Transformation Test (LTT) and the T cell line induction were performed after a month from the OPT.

Results: Being the ST and specific IgEs negative, an OPT was performed. On the second day, the therapeutic dose was administered all at once and after 2 h, she presented pain and hyperemia to all the pad of the fingers and tips of the finger; the next day after 2 h from the third dose she presented also tongue peeling. The OPT was continued in hospital setting and after the fifth dose the child presented ED to all the pad of the fingers and tips of toes without other signs and symptoms. The DPT was discontinued with complete recovery within a month. The LTT was negative but the specific T-cell line induction resulted positive for Penicillin, Amoxicillin and AMX/CLV.