

109 Anaphylaxis to Indigo Carmine with Hypotension: Case Report and Review of the Literature

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INTRODUCTION: Indigo carmine (IC) is an organic blue dye excreted by the kidneys, that is useful for visualizing the ureters during cystoscopy or surgery. Adverse effects include acute hypertension due to α -adrenergic stimulation by IC. Anaphylaxis (AP) with hypotension is rare and its mechanism unknown. We describe a case of hypotensive AP to IC, our literature review and a possible mechanism.

CASE: In 1998, during radical prostatectomy, a 68YOWM developed acute hypotension 5 min post-IV IC (0.8%, 5 ml), consistent with AP to IC. Other causes were excluded. The patient (pt) responded to intervention and recovered without sequelae. In 2002 he was reevaluated prior to a herniorrhaphy. His medical history included hypertension, treated with enalapril since 1982; colon cancer (1983) and AP to sesame seeds, with no other history or signs of atopy. Latex-specific IgE was not detected. Prick skin test (SKT) with 0.8% IC produced an immediate, 5 \times 9-mm wheal-and-flare, but no reaction in a control subject. The pt was cleared for surgery and had no complication.

LITERATURE REVIEW: MedLine, Biosis and Embase were searched for reports in English on anaphylactic or hypotensive reactions to IC and risk factors.

RESULTS: 8 cases of AP to IC, including ours, were identified. All were 58YO or older, 2/4 were male and 5/8 had hypertension \pm diabetes. Of the 4/8 pts with data on allergic status, none was clearly atopic. No other pt had IC SKT.

CONCLUSIONS: AP to IC is rare, idiosyncratic and may involve non-IgE-mediated vasodilation, as suggested by this case.

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110 Stinging Nettle Anaphylaxis

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RATIONALE: Stinging nettle (*Urtica dioica*) comprises the most common cause of contact urticaria worldwide, but systemic anaphylaxis has not been previously described. We report a case of anaphylaxis to stinging nettle.

METHODS: A 47-year-old female reported the lodging of numerous stinging nettle needles (trichomes) in her legs while mowing a field; 20 minutes later, she developed rapid onset of facial and lip edema, scalp pruritus, dyspnea, and lightheadedness. Hypotension was documented in the emergency department. A second episode 1 year later in which a few needles were lodged in a finger resulted in swelling of the digit to twice the normal diameter within minutes. Skin prick testing using the needles of a stinging nettle plant were performed on the patient and a control subject.

RESULTS: The patient developed a 6 \times 6 mm wheal with flare. The control subject's wheal was 2 \times 3 mm.

CONCLUSIONS: Histamine and other mediators endogenous to the stinging nettle plant are thought to cause the associated contact urticaria. Plant histamine is inoculated by injection into the skin from the hollow syringe-like needles after the terminal bulb is broken by pressure from the skin. Acetylcholine and serotonin may also contribute to the wheal and flare response. We postulate that this patient's anaphylaxis was secondary to exogenous massive histamine inoculation. However, given her positive skin test, an IgE-mediated mechanism cannot be excluded.

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111 Anaphylaxis Caused by Buckwheat Ingestion

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RATIONALE: Buckwheat (BW) is recognized as a potent common food allergen in Korea, Japan, and northern European countries. In Japanese children, BW sensitivity approximates that of peanut allergy in the United

States. BW is not recognized as a cause of anaphylaxis in the United States. Hypersensitivity results from the ingestion or inhalation of buckwheat allergen and causes immediate manifestations of allergic symptoms including urticaria, wheezing, dyspnea and anaphylaxis. These reactions are considered to be IgE-mediated.

METHODS: A 45-year-old male developed symptoms and signs of acute anaphylaxis 15 minutes after eating buckwheat groats. Symptoms were total body flushing, pruritus, facial edema, cough, dyspnea and lightheadedness. Emergency management required epinephrine, intravenous diphenhydramine, fluids and methylprednisolone. Personal history indicated seasonal allergic rhinitis present since childhood. No known food sensitivity. His BW exposure history included the following: BW pillow used for three years and pouring BW birdseed into containers for seven birds living in his home the past ten years.

RESULTS: RAST test class 5 "strongly positive" at 69.5 Ku/L (Mayo Medical Lab). The patient subsequently has avoided all BW exposure, and there have been no reactions.

CONCLUSIONS: This patient's risk factor was inhalational from pillow use and bird feeding. Unrecognized prior BW ingestion cannot be excluded. In the United States, BW exposure is increasing due to ingestion in food, use as human bedding, and in birdseed. Physicians should be aware of its sensitizing potential and allergic manifestations.

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112 Anaphylaxis to Horse

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There is limited information about allergy to horse, although allergy to furred animals is a common feature. As the most common manifestations of such type of allergy asthma, urticaria, angioedema and contact dermatitis were described. Our patient was a six-year-old girl, with a history of atopic dermatitis and any signs of respiratory allergies, who was admitted to the allergology clinic after presenting an episode of anaphylaxis three days before. The reaction occurred shortly after 10 minutes period of snow sledding. The symptoms included sneezing, running nose, blushed skin, edemated lips, dyspnea. The clinical examination revealed tachypnea, tachycardia (110/min), blood pressure 80/50 mmHg, and wheezes and crackles over the lungs were observed. After admission to the allergology clinic physical examination, spirometry and chest radiographs were all normal. Allergy tests with common inhalant allergens were performed in our clinic. Positive skin prick tests to horse epithelium, cat and dog were observed. Specific IgE (DPC, Germany) were positive against horse dander (>100 kU/l), cat and dog dander (respectively - 2.43 and 5.95 kU/l). Total serum IgE (Pharmacia, Sweden) was 214 kU/l. Repeated exposition to horse allergen when the girl visited stable, elicited early asthmatic response, confirmed by spirometry (25% fall in FEV1 after 20 min). The case report points out the fact of allergy on horse as a trigger of anaphylaxis. It must be remembered that horse allergens may be present in the urban environment not only in the country.

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113 Remission of Anaphylactoid Reaction to Alcohol

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RATIONALE: Anaphylactoid reactions to alcohol and its metabolite acetic acid have been reported in the literature but their natural history is not known. We report a case of a patient who had anaphylactoid reactions to alcohol that were recurrent over a 2 year period then remitted after 6 months of abstinence from ethanol.

METHODS: A patient with recurrent anaphylactoid reactions (angioedema, hypotension, urticaria) to several types of alcoholic beverages was skin tested to ethanol and acetic acid. She then underwent oral challenge