WHY EVERY MAJOR HOSPITAL SHOULD HAVE AN ALLERGIST/CLINICAL IMMUNOLOGIST ON STAFF

OR

COST-EFFECTIVE ALLERGY/CLINICAL IMMUNOLOGY DIAGNOSIS & THERAPY

EXAMPLES:

1. Hospital patient with penicillin allergy. Patient is admitted to hospital for treatment of MSSA osteomyelitis and started on vancomycin given a history of penicillin allergy. Penicillin allergy reaction goes back to infancy when he apparently developed a rash after being given a penicillin antibiotic. He subsequently has had 3 hospital admissions for treatment of various infections including pneumonia, cellulitis, and a post-operative infection – all treated with more expensive alternative antibiotics to the penicillin family. The patient is seen by an allergist at the hospital and penicillin skin testing done with diluted penicillin G solutions as well as a histamine control which proves negative. They are subsequently given a test-dose of IV penicillin G and tolerates this and has subsequently been able to switch to cloxicillin antibiotic which he tolerates well and his infection responds more quickly to his choice of antibiotics.

2. Eating disorder patient with multiple food allergies. A 20-year-old woman is admitted to Eating Disorders Ward in hospital with severe malnutrition with a tentative diagnosis of anorexia nervosa and bulimia. The patient claims she is allergic to multiple foods and has been unable eat. She has seen a naturopath in the past who did blood testing which came back with multiple food "sensitivities" and the patient has been trying to avoid the suspected foods. The patient is assessed by an allergist and skin testing various foods is negative. The patient undergoes double-blind placebo-controlled challenges in hospital – none of which elicits any significant reactions to the foods she was supposed to be allergic to and she is counseled to expand her diet more effectively which allows her to regain weight.

3. Multiple drug-allergic patient. A 50-year-old woman is admitted to the general medical ward in hospital with severe hypertension and mild renal function impairment. Her stay in hospital is prolonged and complicated by apparent drug reactions to just about every medication she has been put on to treat her hypertension. She is seen by an allergist who elicits history. She has had a history of urticaria and sensitive skin in the past and elicits dermatographia reactions even though she is not on any medications. The allergist diagnoses chronic urticaria probably auto-immune in origin and not multiple drug allergies. The patient is treated with a combination of H1 antihistamine and H2 blocker and is able to tolerate anti-hypertensive medications without any significant problem subsequently.

4. Allergic asthma patient. A 36-year-old man is admitted to hospital with severe exacerbation of his asthma. His attacks come on quite suddenly and are quite severe and he is not aware of what specific factors have brought this on. In the past he has been hospitalized for several days on at least 2 occasions for management of severe asthma. The patient is subsequently assessed by an allergist who confirms severe cat allergy. Avoidance measures are implemented and immunotherapy started to reduce his sensitivity to cat allergy and he has subsequently been able to avoid any further emergency visits or hospitalizations because of asthma exacerbations.

5. Recurrent throat swelling. A 40-year-old woman is presented to emergency on at least 6 occasions complaining of throat swelling, difficulty swallowing, and some shortness of breath. On examination by the emergency physicians on each occasion failed to see any obvious swelling of her throat. Chest is clear and oxygen saturation levels are normal. She is given antihistamine injection and her symptoms seem to settle down. No obvious trigger factors have been noted but the patient wonders whether she might be allergic to certain foods or is sensitive to perfume smells. The patient was subsequently seen by an allergist and allergy skin testing is negative to all common foods and environmental factors. Serum tryptase level is done at the time of her next presentation to emergency which comes back negative. The patient is subsequently diagnosed by an allergist as having globus hystericus and psychiatric counseling helps to reduce her anxiety levels.

6. Insect sting anaphylaxis. A 25-year-old woman has come to emergency on 4 occasions following insect sting reactions which have caused faintness and generalized urticarial reactions. She has been prescribed an EpiPen autoinjector but is afraid to use it, preferring to go to emergency at the local hospital which has been fairly close at hand. The patient is subsequently seen by an allergist who confirms yellow-jacket venom allergy and started on immunotherapy for desensitization. The patient is subsequently stung the second year of immunotherapy and has no further reactions and continues the immunotherapy for a 5 year period. She is no longer required to obtain her epinephrine autoinjectors which she had been obtaining but not using because of her fear of injections.

7. Recurrent infections. A 56-year-old man is seen in hospital by an allergist/clinical immunologist regarding problems with recurrent infections. He has been hospitalized with severe pneumonia, including requiring ventilation in the ICU on 3 occasions in the past. He has had numerous respiratory infections and sinusitis and has also undergone sinus drainage procedure in the past. Assessment by the allergist by doing quantitative immunoglobulins confirms he has severe hypogammaglobulinemia, probably of the common variable type. The patient is subsequently trained for home subcutaneous globulin administration and remains generally in good health, not requiring any additional hospitalizations.

8. Recurrent heartburn and dysphagia. A 32-year-old man presents in emergency with complaints of difficulty swallowing and having a piece of meat getting stuck in his esophagus. The patient is admitted to hospital and subsequently undergoes endoscopy which retrieves the impacted piece of meat and biopsies which were done confirmed eosinophillic esophagi is. The patient was subsequently seen by an allergist/clinical immunologist and starts him on inhaled fluticasone powder and his symptoms greatly resolve and he has not had any further episodes of dysphagia. He has not had any further episodes of dysphagia.