## Notes on Jack Herbal Hazard? presentation. Karen Binkley, MD, FRCPC • Increasingly severe allergic reactions, despite not having √ Jack is a 32-year-old advertising manager. He presents with three any food allergies • Developed a sore throat episodes of increasingly severe allergic reactions over the past year before last episode and a half. An initial episode involved mild urticaria and upset stomach, while two subsequent reactions involved diffused, generalized urticaria, nausea, abdominal cramps, wheezing and shortness of breath. He was seen in ER on the last two occasions. Jack's BP was 60/40 mmHg, his pulse was 130 bpm and his respirations were 15 per minute. Mild wheezing was noted on auscultation of the chest and urticaria was observed. The physical examination was otherwise unremarkable. The patient responded to adrenaline, antihistamine and corticosteroids. ✓ The patient could not recall having consumed any common food or food ingredient on those occasions. However, he was able to recall that he had been developing a sore throat just before the last episode. Medical history: √ Medical history includes: · Seasonal allergic rhinoconjunctivitis in the fall, with a positive test for ragweed allergy · Antihistamines and intranasal corticosteroids used seasonally give excellent symptom control · No history of asthma, or any current chest symptoms · No known food allergies and he is otherwise in good health Medications: √ Echinacea p.r.n. Physical exam: √ Unremarkable

## Diagnosis: Echinacea allergy in a What do you suspect? ragweed-sensitive √ Echinacea allergy in a ragweed-sensitive individual. ✓ Echinacea is capable of causing allergic reactions, including individual anaphylaxis, in some ragweed-allergic individuals. Echinacea contains glycoprotein molecules that can be recognized by some ragweed-specific IgE antibodies. When a ragweed-allergic individual with these antibodies ingests echinacea, they can bind to the ragweed-specific IgE antibodies, triggering mast cell degranulation and clinical symptoms of allergy, which can include anaphylaxis. Reactions can be life-threatening and strict avoidance is required. Other foods which may cause symptoms in some ragweed-allergic patients include: · chamomile. · carrots. celery and · melons. Management: √ Avoidance of these foods is not necessarily required in ragweed-allergic patients; many ragweedallergic patients enjoy these foods without any difficulties whatsoever and it is not necessary to remove them from their diet. If any individual experiences anaphylaxis with these foods, strict avoidance is necessary and the patient should be instructed to carry autoinjectable adrenaline at all times. They should be referred to see an allergy specialist. Upcoming cases... Dr. Binkley is an Assistant Professor of Medicine, Division of Clinical Immunology and Allergy, University of Toronto and a Staff √ **September:** Bagel Boggle Member, St. Michael's Hospital and Sunnybrook √ *October:* Nose Plug Health Sciences Centre, Toronto, Ontario.