Food allergies are interesting and sometimes confusing scenarios. A report in the *Lancet* gives a case of lupin flour anaphylaxis.

A 25-year-old woman was transferred to a London hospital after eating chicken in a restaurant. The meal included french fries and onion rings. During the meal she noticed that her mouth itched and that her lips and tongue started to swell. Within 15 minutes she was having difficulty breathing, her throat had narrowed and she felt very weak. She was given intramuscular adrenaline by the ambulance attendants on her way to hospital, but continued to deteriorate and required continuous oxygen and two further doses of adrenaline during the journey. When she arrived, she was given intravenous fluids, hydrocortisone and chlorpheniramine. After this she recovered, with no further complications.

She had a background history of mild asthma and when she was 15, had a severe anaphylactic reaction after eating a peanut. Since then, occasional inadvertent peanut ingestion had induced minor allergic reactions. The assumption was that the meal she had eaten was contaminated with peanuts, but the restaurant chef thought this was unlikely and suggested that she contact the distributor of the onion rings. It appeared that the onion rings were covered in a batter that contained lupin flour and this is what might have caused her attack. She was referred to an allergy clinic. Skin prick tests revealed only an allergy to birch pollen. The skin prick test to peanut was strongly positive and she had positive reactions to garden pea and soya. The skin prick test to Brazil nuts and hazelnuts were negative. A crude solution of lupin was made by mixing lupin flour with sterile isotonic saline. This gave a strongly positive skin prick test and the patient, not surprisingly, refused an oral challenge. Specific IgE to lupin was identified.

IgE-mediated food allergy is an important cause of dangerous anaphylaxis, with peanuts, tree nuts such as Brazil nuts, cashew nuts or hazelnuts, and seafood being the commonest causes in adults. The first report of lupin allergy was in 1994, involving a 5-year-old girl with a known peanut allergy who developed urticaria and angioedema after eating spaghetti fortified with lupin flour. Reports of lupin flour allergy in Europe have been mainly among patients known to be allergic to other legumes, particularly peanuts and soya or pea. The first report of lupin anaphylaxis was in 1999 and the overall prevalence of lupin allergy has increased dramatically in some countries. This is particularly the case in France where lupin flour has been added to wheat flour since 1997. In 2002, lupin was the fourth most frequent cause of severe food-associated anaphylaxis reported to the French Allergy Vigilance Network. Over 800 000 tonnes of lupin are grown annually in Australia where 3 cases of anaphylaxis have been reported.

Since this case, the authors have seen one other case of severe lupin anaphylaxis caused by lupin flour in an Italian apple tart and they are investigating 2 other possible cases. It would seem that, along with peanut allergy, lupin allergy is increasing and anyone with peanut allergy should be advised to avoid products containing lupin until they can be tested. Lupin flour is available in South Africa and has been since 1991, so we may start to see cases here, if they have not already occurred.


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