Where did it come from?  

Let’s start with some definitions. What is anaphylaxis? If you didn’t grow up with allergies, you may not have become familiar with the term anaphylaxis until you had children. I recently read the book “The Peanut Allergy Epidemic” by writer, historian and mom to peanut allergic kids, Heather Fraser. I was fascinated to learn in this book, about the historical reference to immunologist Charles Richet when he coined the term, anaphylaxis, in 1901.

Richet was working on creating a vaccine for poison from the sea creature, Portuguese Man of War. His experiments included injecting dogs with the poison. Those that survived the initial dose were re-injected with a much smaller dose. He hypothesized that the first injection would protect the dog by building immunity, but what he found was just the opposite. The dogs had become hypersensitive, making the very small second dose deadly, resembling what they called in those days: “serum sickness”.

Richet used two Greek words: anaphylaxis (against) and phylaxis (protection) to describe what he witnessed with the dogs. He went on to win the Nobel Prize in Medicine in 1913 for his work. In his view, from this research, there were three outcomes of vaccination - unchanged sensitivity, diminished sensitivity and heightened sensitivity (resulting in anaphylaxis with subsequent injections).

Richet went on to prove a mechanism for food anaphylaxis. For these experiments, he fed dogs raw and cooked meat and measured their blood. He then injected the same dogs with the raw meat that he had fed them and provoked anaphylaxis. These same dogs ate the raw meat before the injection with no anaphylaxis, but after injection the anaphylaxis was present. Richet had discovered a new mechanism for this type of allergy.

So that is all fascinating, but what do dogs and raw meat have to do with peanuts and Epi-pens?!

Fast forward to the late 1980’s and early 1990’s, when emergency room and hospital records for food anaphylaxis discharges began to show the onset of today’s epidemic. In a report from the National Center for Health Statistics from the CDC, titled: “Food Allergy Among US Children: Trends in Prevalence and Hospitalizations”, the numbers of food allergy discharges, steadily increased from 2,615 discharges in 1998-2000 to 9,527 for the 2004-2006 time period, more than tripling in less than ten years.

What was going on?

So, if one of the few mechanisms found near the turn of the century for inducing food anaphylaxis involved injecting food (protein) into the blood stream of animals (Richet’s Nobel Prize winning work); was this same thing happening in children? Author, Heather Fraser points out in her book that indeed this was exactly what was happening and she chronicles both the political changes (the 1986 National Childhood Vaccine Injury Act was passed, giving vaccine manufacturers liability protection over harm caused by vaccines) and the resulting medical and economic changes (the childhood vaccine schedule was greatly increased between 1985 and 1995, and government subsidized funding for vaccines increased).

Due to the fact that peanut oil (as well as cross reactive, soybean oil) has been used in the manufacturing of vaccines and injectable pharmaceutical products for years (dating back to penicillin shots in the 1940’s, the Flemansky formula), and due to the fact that these ingredients are not required by law in the US to be labeled in the use of injectables due to their GRAS (Generally Regarded As Safe status), it is difficult to pinpoint which childhood “injections” might be the culprit.

My interest was piqued, who was...
researching this today? I looked in PubMed (a database of medical literature) and found a few articles studying peanut allergy in mice and guinea pigs. I was a bit disturbed to find that the articles began by describing how the researchers made a “peanut anaphylactic mouse/guinea pig” in the lab. Most of those experimental protocols included injecting the animal with peanut protein or oil plus a toxic pathogen: measles, mycobacteria (Freund’s adjuvant) and sometimes adding an aluminum adjuvant, to illicit anaphylaxis. (PMID: 5032489, 22194949, 18288389, 9032902, 12626588)

Was history repeating itself in children?
Some of the most recent research I was able to find, points to bacteria in the stomach (closstricia) as a clue to solving the peanut epidemic. (PMID: 25157157)
Since it is estimated that a large portion of the immune system is in the gastrointestinal tract, this is not surprising. But what disrupted these gut bacteria in the first place?
So what is a parent to do? My advice for all parents is to do your own research (a few medical sources to get you started are presented in this article), have a candid discussion with your doctor and

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