



## Questions About Anaphylaxis

### **Do reactions get worse with each successive episode?**

This may be the most common misconception about anaphylaxis. In fact, subsequent reactions could be the same, better or worse. The reason this is so unpredictable is that the nature of any reaction depends on two main factors: how allergic you are and the dose of allergen ingested. While a person's level of allergy may vary in either direction over time, the dose of allergen is an even bigger variable.

For example, with one reaction you may have eaten 1/100 th of a peanut and with another the equivalent of 3 peanuts. With a 300-fold higher dose your reaction will almost certainly be much more severe.

The only good research in this area was done with bee-sting allergy, in which it was shown that with subsequent stings, (which deliver an approximately equal dose), especially in children, reactions were almost always either the same or less severe.

### **What Medications can be used to prevent anaphylaxis?**

Unfortunately, no medications will reliably prevent anaphylaxis. Some patients will take a dose of antihistamine before going out to eat, just in case. While this might help in some instances, it is not recommended and it will certainly not prevent a severe episode. In addition, inducing vomiting after food has been ingested to try to prevent a reaction is inappropriate.

### **Do I always need to use epinephrine?**

The patient and the doctor on an individual basis must determine the answer to this question. Patients with a history of severe reactions should certainly take epinephrine as soon as they suspect they have eaten a problem food or feel a reaction starting.

Epinephrine is used more routinely in patients with asthma because they are at risk for more dangerous reactions. In addition, for some patients the specific recommendations for the use of epinephrine may vary depending on the particular situation, such as if we do not trust a caretaker (e.g., a baby-sitter) to make an accurate decision. For patients who have a history of milder reactions, such as isolated hives, just giving an antihistamine and observing them for evidence of a more severe reaction may be appropriate.

## **Which medicine should be given first?**

If you fit into the group of those who have severe reactions, epinephrine should be given first. If you don't fit into that group, start with antihistamine and be ready with the epinephrine in case the reaction progresses. If a steroid has been recommended, immediate administration is less critical because most of its benefits are not seen for several hours anyway.

## **Are steroids always needed?**

Although most reactions will resolve without steroids, they are usually recommended for any severe reaction. In some cases of anaphylaxis, symptoms will persist for hours or days, and steroids will help prevent these symptoms.

## **Which patients should carry epinephrine?**

This is another individual decision for you and your doctor to discuss. For example, many patients with milk and egg allergy do not need to carry epinephrine because their reactions have always been mild. Patients with peanut and nut allergy should carry epinephrine, even if their prior reactions have not been alarming. Once epinephrine has been prescribed, it must be carried at all times.

## **At what age should a child be switched from an EpiPen Jr. to a full-strength EpiPen??**

The answer depends not on age but on size. The regular strength EpiPen? is appropriate for children over 45 pounds.

## **At what age can a child carry his/her EpiPen??**

This is a difficult issue. On one hand, children over the age of seven or eight can be trained to administer an EpiPen?. On the other, asking a child that age to make a decision about whether epinephrine is needed in a given situation is very inappropriate.

While a younger child might be able to carry the epinephrine, any child under the age of 12 or 13 may not possess the responsibility to make an accurate decision on when to use their EpiPen?.

## **How many doses of epinephrine can be given during a reaction?**

Although a single dose of epinephrine is all that is needed in most cases of anaphylaxis, some cases may require multiple doses. This is one reason for going to the emergency room immediately after giving a dose of epinephrine. However, if you are more than a few minutes away from medical attention, you may have to administer one or more additional doses on your own.

Additional doses may be given every 10-15 minutes if symptoms persist or worsen and you still have not received formal medical attention, which also means you should carry more than one dose of epinephrine if you think medication attention may not be readily available. This is another issue that

should be discussed with your doctor.

### **How reliable is epinephrine – or, more accurately, can I (my child) die from anaphylaxis?**

Despite the existence of rare reports to the contrary, the appropriate use of epinephrine will prevent fatalities from anaphylaxis. Appropriate use means prompt – ideally as soon as the reaction begins – since there is clear evidence that a delay in the administration of epinephrine by more than one hour will increase the odds of the person dying from anaphylaxis. Epinephrine needs to be readily available and “action plans” need to be in place at all times for all circumstances.

\*\*Adapted from the Food Allergy News