Medicine Allergy Challenge

A medicine allergy challenge is a test used to find out if a child is allergic to certain drugs or medicines, often an antibiotic. It is dose-graded. This means the child is given small doses (amounts) of the drug in question. Then they are closely watched for side effects or for signs of an allergic reaction, also known as anaphylaxis (anna-fa-LAX-is). Side effects are NOT the same thing as an allergic reaction.

When children have any of the common side effects to a medicine, medical providers often label them as having an allergy to it. If a medicine allergy is listed in a child’s medical record, a health care provider may avoid giving them a medicine that might be the best and least costly treatment. This is why it is important to know for sure if a child has had side effects or a true allergic reaction to a medicine.

The allergist will ask you detailed questions about what happened to your child in the past after taking the medicine. If they think it will be safe to give it to your child again, they will schedule an allergy challenge test at the outpatient allergy clinic.

A medicine allergy challenge is safe to do. Even if your child reacted to the medicine in the past, you and your child do not need to be afraid. You will be with your child the entire time. The allergy team will closely watch them throughout the process.

Before the test

- If your child is old enough, tell them:
  - Very few children have any symptoms at all during the test.
  - The test is safe to do.
  - You will always be with them.
  - If they have an allergic reaction, they will get emergency medicine right away.

- If your child is sick, please call the clinic at (614) 722-5803 to reschedule the appointment. For everyone’s safety, your child should not have a fever, cold, runny nose, cough or feel ill.
• The test may need to be rescheduled if, on the day of the test, your child already has hives or a skin rash.

**How to prepare for the test**

**Your child:**

• Cannot take any antihistamines, such as diphenhydramine (Benadryl®) or cetirizine (Zyrtec®), for at least 4 days before the test.

• Should **not** stop taking any other prescribed medicines, including asthma inhalers, nasal sprays or skin creams.

• Can eat and drink whatever they like before the challenge.

• Can bring things to occupy them, such as books, electronic games and stuffed toys.

**How the test is done**

• Your child will be watched or monitored for about 90 minutes. They will not be hooked up to any kind of machine. In total, the appointment will take about 2 hours.

• Most challenge tests are done by giving your child a small dose of medicine in a liquid to drink. We are also able to test medicines that can only be given by injection (needle or shot).

• After your child takes the medicine, we will check on them in 20 to 30 minutes. If they do not show side effects, like a rash, or signs of an allergic reaction, they will get a larger dose.

• After another 40 to 60 minutes, we will check on your child once more. The test is now over. If your child showed no signs of an allergic reaction, then we will know they are not allergic to the medicine.

**Risks and possible complications**

It is unlikely that your child will have side effects during the test. A true allergic reaction almost never happens. If we need to treat your child for any reason, we will stop the test.

• To treat mild side effects like itching, rash, coughing or vomiting, the doctor will give your child an antihistamine to help them feel better.

• Although very rare, if your child shows severe signs of an allergic reaction, such as trouble breathing, repeated vomiting or low blood pressure, they will get the emergency medicine epinephrine. Epinephrine works very quickly to reverse anaphylaxis.

**After the test**

• When the test is over and you go home, you should continue to watch your child for a
few more hours just to be sure that they have no side effects. If they do, let us know.

- If your child did not have symptoms of an allergic reaction, we will remove the incorrect allergy information from their medical record.

- In the future, your child can safely take the medicine any time it is needed. Please be sure to share this information with their health providers and others who need to know.

**When to call the allergy clinic or 911**

- Call the allergy clinic if your child shows side effects, like itching, rash, coughing or vomiting after going home on the day as the test.

- **Call 911** for signs of an allergic reaction:
  - trouble breathing or talking
  - throat tightness
  - swollen tongue
  - repeated vomiting
  - feeling of doom