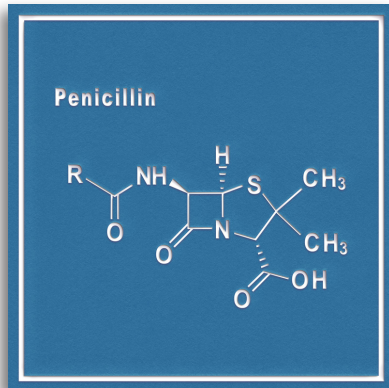


My child got a rash on amoxicillin, so are they **PENICILLIN ALLERGIC?**

by Doug Puder, MD



A family history of penicillin allergy is not a reason to avoid it.

If your child does get a rash while taking an antibiotic, stop giving it right away and call us. Benadryl by mouth should be given. Take a photo of the rash if you can. The rash could be caused by penicillin allergy, but **true penicillin allergy is rare in children.**

Penicillin allergy is reported in about 10% of children, yet a full **95% of these children are not allergic!** Most rashes which occur while on penicillin class antibiotics are from viruses, eczema, etc. Amoxicillin and amoxicillin-clavulanate are the most common penicillins medications we use.

Sometimes your doctor can rule out allergy by taking a careful history and examining the rash. Viruses such a *roseola* (sixth disease) give high fever followed by a classic rash which doesn't itch or hurt. If your child was taking amoxicillin at that time (maybe for an ear infection), the rash may be **misabeled** as a penicillin allergy rash.

Yes, true penicillin allergy can lead to *anaphylaxis*, a life-threatening condition with dizziness, difficulty breathing, swelling of the tongue or throat, very low blood pressure, and vomiting. So if our evaluation cannot rule out penicillin allergy, before giving amoxicillin again, we recommend testing by an allergist.

There is a penicillin skin test which is used if history and examination of the rash do not rule out allergy. It is followed by an oral challenge if the penicillin skin test is negative. Typically about 10% of a treatment dose of amoxicillin is given and your child is observed in the office for 20-30 minutes. Then the remaining 90% of a treatment dose is given with another one to two hours of observation. If there is no reaction to this, your child's medical record should be delabeled and "penicillin allergy" removed.

A family history of penicillin allergy is not a reason to avoid it. Drug allergies are not passed on from parent to child. A mom, dad, brother or sister with an antibiotic allergy is not a reason to avoid the medication in another family member.

If your child is tested and is found to be penicillin allergic, we will carefully label your child's medical record. This information will be transmitted to your pharmacy as well. Many studies have confirmed that the cephalosporin class of antibiotics can be safely used in penicillin allergic children. First generation cephalosporins (cephalexin) have less than a 5% risk of allergy. Second, third, and fourth generation cephalosporins have no cross reaction risk with penicillin allergy.

Why bother testing? Children with penicillin allergy may require more expensive, sometimes overly broad spectrum, and sometimes less effective treatments. Risks of antibiotic resistance increases. So we think it is worth testing!

We hope you find our Parentletter helpful and informative. Please keep in mind that receipt of this newsletter does not create a doctor/patient relationship and that it is not meant to serve as a substitute for professional medical advice. For particular pediatric medical concerns, including decisions about diagnoses, medications and other treatments, or if you have any questions after reading this newsletter, we encourage you to speak with your child's pediatrician.