

Do I have a penicillin allergy?

Patient information sheet

What is a penicillin?

A penicillin is a type of antibiotic that is often the first choice antibiotic used to treat many common infections.

Examples of penicillins include:

- Amoxicillin
- Phenoxymethylpenicillin (penicillin V)
- Flucloxacillin
- Co-amoxiclav (amoxicillin and clavulanic acid)
- Piperacillin with tazobactam

What is a penicillin allergy?

A penicillin allergy is caused by the body's immune system responding unusually to a penicillin antibiotic. For most people, an allergic reaction will be an unpleasant mild skin reaction or rash that develops slowly after several hours or days of taking the antibiotic. Sometimes a more severe reaction can occur, called anaphylaxis.

Anaphylaxis usually develops within minutes of taking the antibiotic and may consist of:

- A widespread itchy rash (hives)
- Breathing difficulty
- Swelling
- Collapse

What is the difference between an allergy and side effects?

All medicines can cause unpleasant side effects such as a mild skin reaction (eg rash and mild itchiness), vomiting or diarrhoea. Side effects are different to allergic reactions. Having side effects to penicillin, whilst unpleasant, does not mean you need to avoid penicillin antibiotics completely, as these are not allergic reactions.

This is particularly true in severe infections where penicillin may be the best antibiotic. In these

situations, it is often best to receive penicillin and manage any side effects if they happen.

How common is penicillin allergy?

Approximately 1 in 100 people have a genuine penicillin allergy.

The most severe allergy, anaphylaxis, occurs in about 1 in 10,000 people taking penicillin. It is extremely rare.

Despite real penicillin allergy being uncommon, about 1 in 10 people have either been told or have assumed that they have a penicillin allergy.

Most people (about 9 in 10) recorded as having a penicillin allergy are not actually allergic.

Why might I have been labelled as allergic to penicillin if I'm not really allergic?

There are a number of reasons why penicillin allergy is over-reported including:

- Mistaken diagnosis due to the presence of an incidental viral rash.
- Labelling of intolerance (for example, nausea or headache) as an allergy.
- Loss of sensitivity over time – approximately 80% of people with a true allergy to penicillin will lose this sensitivity after 10 years.

What are the risks associated with being labelled as allergic to penicillin?

Penicillin antibiotics are excellent treatments for many infections. Being labelled as allergic to penicillin means you are more likely to receive alternative, broad-spectrum antibiotics. As a result, you are more likely to develop an antibiotic-resistant infection in the future and have a greater risk of acquiring healthcare-associated infections like MRSA and C. difficile.

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I have had a recorded penicillin allergy for a long time. Why should that change now?

Penicillins are highly effective treatments for many infections. They are also commonly used in patients having a surgical procedure. Being unable to take penicillins may put you at a disadvantage especially if you are admitted to hospital with a severe infection.

What are the benefits to me of finding out whether I am allergic to penicillin antibiotics?

A simple test can be conducted within the hospital that will tell you if you have a penicillin allergy. If your test results show that you are not allergic to penicillin, then your medical records will be updated. Removing the penicillin allergy label from your record means you can be given penicillins when you really need them. It also means you will have more treatment options if you have an infection or require antibiotics before an operation.

What does the test for penicillin allergy involve?

The test could in theory happen at any opportune time. In likelihood, this will be during admission. You will be asked about the symptoms you had in the past that led to the penicillin allergy label. If it is decided that you may have been incorrectly recorded as having an allergy, you will be offered a test to see if the allergy label can be removed. You will only be offered this test if it fits the national criteria and it is safe to do so and there is a low chance of an allergic reaction. The test involves giving you a dose of an oral penicillin antibiotic under careful supervision. You will be monitored for one hour after you take the dose.

What happens after the test?

At the end of the test the hospital team will discuss with you what your test results mean. If you have not experienced any reaction, a letter will then be sent to your GP informing them of the result of the test. Your GP will be asked to remove the penicillin allergy label from your GP record. We will also give you an information leaflet to take home with you explaining the results and what they mean for your future care.

If you need an antibiotic now or in the future for either treatment or before surgery, then your doctor will have the option to use a penicillin antibiotic. If the test confirms that you are allergic to penicillin, then we will advise your GP of the test result and ask them to record this in your GP record. We will also give you a leaflet about avoiding penicillin in future.

Do I have to take this test?

The benefits of having the test have already been outlined. If you do not want to be tested, please let the team know. Your decision will not affect your ongoing care.

Are there any risks or side effects?

There is a small chance that you may experience an unpleasant side effect such as nausea or an allergic reaction. Allergic reactions will usually be mild but a severe allergic reaction including anaphylaxis, although uncommon, is possible. You will be closely monitored during the test by staff trained in the recognition and treatment of allergic reactions and other side effects. In the unlikely event you experience a severe allergic reaction, you will be given treatment to reverse the reaction.

What will happen if I do agree to have the test?

One of the clinical team members will ask you to read and sign a permission form indicating your consent to proceed with the test. The team member will also sign this form, and it will be retained in your medical notes as a record of your agreement to the test.

What will happen if I do not have the test?

If you do not have the test, then your medical notes will continue to state you are allergic to penicillin and you will not be given penicillin when you are treated for an infection or have a surgical procedure in the future. You can re-consider having the test at any time.

Should you have any queries or want to ask further question please contact the AMS team on 01223 638777.

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