

Aminoglycosides – your hearing and balance

Information for patients, relatives and carers

Name of your aminoglycoside:

① For general information about this drug, please contact:

Medicines Information

York Hospital, Wigginton Road, York, YO31 8HE

Telephone: 01904 725960

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What are aminoglycosides used for?

Aminoglycosides are a family of antibiotics which include Gentamicin, Tobramycin, Amikacin and Neomycin. They are used to treat a range of serious bacterial infections including those of the urinary tract (e.g., kidneys or bladder), pulmonary (lung) and blood (bacteraemia or septicaemia).

Why is aminoglycoside the antibiotic for you?

Aminoglycosides are strong and effective antibiotics which are less likely to lead to C. difficile or MRSA* than following some other antibiotics. They are important drugs as bacteria do not easily become resistant to them. Aminoglycosides are very useful when rapid control of a serious infection is required.

How are aminoglycosides given?

They are usually given into a vein; it can be given either as a slow injection or via a drip (infusion). The frequency of gentamicin infusions given to you will depend on the type of the infection, your age, height, body weight and how well your kidneys are working.

* Clostridium difficile or Methicillin Resistant Staphylococcus aureus

How can aminoglycosides affect my hearing and balance?

Like all medicines, aminoglycosides may occasionally cause side-effects, sometimes causing damage to the hearing and balance mechanism inside your ears.

This may make you dizzy or lose your balance.

Sometimes it can cause a ringing in your ears (“tinnitus”) or hearing loss. In some patients these effects may be irreversible. The risk of these effects happening is rare, is different for each patient and depends on a few factors as explained below.

What can be done to reduce the chance of this happening?

It is important to tell your nurse or doctor if you have any current ear and / or balance problems **or** if you have any kidney problems so that these factors can be considered in your treatment plan. They could increase your risk of developing problems with aminoglycosides, so we would reassess your treatment. In this situation your doctor will discuss the risks and benefits of treatment with you.

The amount of aminoglycoside in your blood will be measured regularly to check that the correct blood levels have been achieved. Your doctor will also carry out blood tests to check your kidney function before and during treatment with aminoglycosides.

Your doctor might review any other medicines you are taking which may also affect your hearing or balance.

Your doctor should discuss this with you and may ask you to stop taking these temporarily, while using aminoglycosides.

Some genetic conditions may increase your chance of side-effects from aminoglycosides. If your treatment is planned, your doctor may arrange a test to check. You should discuss this with your doctor.

Who can I speak to if I have any questions?

The doctors, nurses or pharmacists looking after you will be happy to answer any questions you may have relating to your specific aminoglycoside treatment.

Is there anything that I can do to help?

We will check all the medicines you are taking when you come into hospital; however, it is important that you tell your doctor if you are taking any other medicines, including over the counter medications or herbal remedies, because aminoglycosides and other medicines you may be taking can sometimes affect each other's action.

Before starting a course of an aminoglycoside

It is extremely important that you tell your doctor or nurse if you already have problems with your hearing, balance, or kidneys as this could increase your risk of developing problems with aminoglycosides.

Mitochondrial Disease

There is also a potentially increased risk of hearing damage in those with known mitochondrial mutations or in patients with a maternal history of deafness or both. Please make your clinician aware if you or members of your family have a history of these conditions.

Whilst you are receiving a course of aminoglycosides

It is equally important that you inform your nurse, doctor or pharmacist if whilst being treated with an aminoglycoside, you experience any problems which may be caused by damage to the ear, such as difficulty keeping your balance, dizziness, a ringing in your ears or hearing loss.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please email:
yhs-tr.pharmacy.antimicrobialsyork@nhs.net.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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