Understanding Dizziness and Balance Problems Caused by Medicines

A patient guide — understanding your condition and your treatment plan.

Your clinician has told you that a medicine may have affected your balance, hearing, or coordination. This leaflet explains what is happening, how it is checked and treated, and what you can do to protect your hearing and balance.

What is medicine-related dizziness?

Some medicines can affect the inner ear or the brain's balance centre.

A few medicines — used for good reasons, such as treating serious infections or cancer, or controlling seizures — can affect the inner ear (the organ that controls balance) or the part of the brain that coordinates movement. This can cause unsteadiness, and sometimes hearing changes. It is nobody's fault, and many of these problems improve when the medicine is reviewed — especially when it is picked up early.

Key idea: Medicine-related dizziness is an uncommon but often preventable cause of unsteadiness. The earlier it is recognised and the medicine reviewed, the better the chance of recovery.

What are the symptoms?

The most common symptom is feeling unsteady on your feet. People often notice:

- The world seeming to bounce or blur when you walk or move your head.
- More difficulty balancing in the dark or on uneven ground.
- Feeling clumsy or unsteady; sometimes slightly slurred speech or hearing changes.

You may not feel a spinning sensation, which is one reason this can be missed. Tell your doctor about any new unsteadiness, blurring with movement, or change in hearing.

What causes it?

Certain medicines can be toxic to the inner ear (for example some strong antibiotics called aminoglycosides, some cancer medicines such as cisplatin, and water tablets called loop diuretics) or to the brain's coordination centre (for example some epilepsy medicines, lithium, and certain others). The risk is higher with higher doses, longer courses, reduced kidney function, or certain combinations. A few people carry a gene that makes one antibiotic family especially risky.

How is it diagnosed?

There is no single test. Your clinician builds the picture from your medicine history and timing, hearing tests, and special balance tests (such as video head-impulse testing, caloric testing, and VEMPs). A scan and blood tests may be used to rule out other causes. A key clue is that the trouble started after a particular medicine — and that it settles when the medicine is changed.

How is it treated?

Treatment focuses on protecting you and helping your balance recover. The main steps are:

- Step 1 — Review the medicine: where it is safe, your team will stop it, lower the dose, or switch to a gentler alternative.
- Step 2 — Treat anything reversible: correcting things like salt levels or other contributors, and monitoring drug levels.
- Step 3 — Balance retraining (vestibular rehabilitation): tailored exercises that retrain your brain to rely more on your eyes and feet. Starting early and doing them regularly makes the biggest difference.
- Step 4 — Safety and support: walking aids, better lighting, fall-prevention advice, and hearing support where needed.

What tests might I have?

Your team works out what is going on using a few simple tests, none of which are painful. Hearing tests check how well each ear hears and whether this is changing over time. Balance tests look at how your inner ear and eyes work together — you may be asked to follow moving targets, wear lightweight video goggles for some quick head movements, or have warm and cool air gently placed in your ears. An MRI scan and some blood tests are often done to rule out other causes.

What can I do to help myself?

There is a lot you can do to help your recovery and stay safe day to day:

- Do your balance (vestibular) exercises regularly — little and often works better than long sessions now and then.
- Take your medicines exactly as prescribed, and never stop a medicine suddenly without advice.
- Make your home safer: good lighting, removing trip hazards, and using rails on stairs and in the bathroom.
- Take extra care in the dark, on uneven ground, and when getting up quickly.
- Tell every doctor, dentist and pharmacist about this reaction, so the same medicine is not given again.

What does recovery usually look like?

Recovery depends on which medicine was involved and how it affected the inner ear or the brain. Some people recover fully once the medicine is changed. Where the balance organ has been permanently affected it does not grow back — but the brain is very good at learning to rely more on your eyes and your feet, so most people steadily become more stable with regular rehabilitation. This usually happens over weeks to months, and it is normal for progress to come in small steps rather than all at once.

Questions you might want to ask us

It can help to bring a list of questions to your appointment. You might ask:

- Which medicine is thought to be causing this, and can it be safely changed?
- Is the effect likely to improve, and how long might that take?
- Which balance exercises should I be doing, and how often?
- Are there any medicines I should avoid in the future?
- Could this run in my family, and should my relatives be told?

Looking after your wellbeing

Changes to your balance or hearing can feel worrying or tiring, and some people feel low or anxious for a while. This is common and understandable. Pace yourself, keep doing the things you enjoy where it is safe to, and lean on family and friends. If worry or low mood is getting in the way of daily life, please tell us — support is available, and it helps.

Words you might hear

Your team may use some unfamiliar words. Here is what a few of the common ones mean:

- Vestibular system — the balance organ inside your inner ear that senses movement and position.
- Ototoxic — a word for a medicine that can affect the inner ear's hearing or balance.
- Bilateral — affecting both ears, or both sides of the body.
- Oscillopsia — the sense that the world bounces or blurs when you move your head.
- Vestibular rehabilitation — tailored exercises that retrain your brain to keep you steady.

Living with it

Where the inner ear has been permanently affected, the balance organ does not regrow — but your brain can be retrained to compensate, and most people steadily improve with rehabilitation. If you ever needed the same medicine again, tell every doctor about this reaction so it can be avoided. Keep your follow-up appointments, do your exercises, and tell us about any new dizziness or hearing change — worry about balance is common and we can help.

Please contact us if: your balance suddenly worsens, your hearing drops, or the world starts bouncing or blurring when you move — these can signal a problem that needs early review of your medicines.