Drug-induced vertigo

Dizziness is a complaint frequently encountered in general practice. In practice it is difficult to distinguish between sensations referred to as dizziness and vertigo, that is, dizziness caused by vestibular dysfunction. Vertigo can be triggered by changes of posture or position, and is characterised by a feeling that the head is rotating or oscillating. The dizziness may be accompanied by other symptoms, such as nausea and vomiting, tinnitus, balance problems and falls. A vestibular cause is likely if nystagmus is present. The form most commonly seen in practice is benign paroxismal positional vertigo (BPPV).

Patient information leaflets for many drugs mention dizziness or vertigo as a possible side-effect. The present article outlines the research evidence on drug-induced vertigo. Only a few drugs are known to sometimes cause vertigo; it is a rare side-effect. In such cases the vertigo is not an isolated symptom, but is often accompanied by nausea, vomiting or otic symptoms. The data on this subject generally come from studies with a low evidence level. In many cases, it is unclear whether the diagnosis was confirmed by supplementary examination, and information on the course of the disease and possible reversibility are lacking. In addition, the terminology is not always used consistently. This is particularly true for reports submitted to adverse effects reporting centres.

Aminoglycosides have long been known to be ototoxic and may also be vestibulotoxic. There has, however, been little high-quality research into this side-effect. Published work largely consists of small randomised studies, case series and anecdotal reports, although these publications do report the use of supplementary examinations to conform vertigo. The available evidence for vertigo caused by antimalaria drugs, especially mefloquine, is also low-level. Meta-analyses of randomised studies have shown that the anti-epileptics pregabalin and lacosamide cause vertigo more often than placebo, but it is not clear whether these cases concerned actual vertigo or another form of dizziness. In addition, the included studies were not designed to test differences in side-effects. A database operated by the American Food and Drug Administration (FDA) has provided evidence that α-blockers can also cause vertigo. In view of their pharmacological characteristics, however, it seems more likely that these drugs cause orthostatic hypotension.

The important message for routine practice is that if a patient presents with symptoms of vertigo, drugs should be included in the differential diagnosis as a possible cause. If it seems likely to be a side-effect, for instance if the symptom subsides after the suspected drug is discontinued (dechallenge) and returns when the drug is reinstated (rechallenge), the doctor might consider trying a different drug. Other and future users will benefit if doctors, pharmacists and patients report suspected side-effects as accurately as possible, that is, including information about the possible temporal relationship, co-medication and other possible causes.

References*

27. Productinformatie pregabaline (Lyrica®), via: www.cbg-meb.nl, Geneesmiddeleninformatiebank.

*The literature refers to the Dutch text