

OCUS on *re:ACTION*

Drug-induced hallucinations

Key points

Hallucinations are serious reactions.

Hallucinations are one of the five most commonly reported serious adverse drug reactions to CSM West Midlands

Major drugs and drug classes associated with hallucinations include antimuscarinic agents, antiparkinsonian drugs, antidepressants, beta adrenoceptor antagonists and opiates.

What are hallucinations?

Hallucinations are "false sensory perceptions, unfounded on external realities, and outside the cognitive control of the affected individual." Hallucinations caused by drugs are commonly visual. They can be an isolated adverse effect but often occur as a part of drug-induced psychosis.

Hallucinations may consist of unformed abstract shapes or flashes of light; or can be more vivid in colour and have complex forms such as animals or people. Some may manifest as a misperception, such as a hanging coat taking the form of a person.

Drug-induced auditory hallucinations may be unformed tinnitus, bangs, whistles or thuds, although they may take the form of singing [see *re:ACTION* No 5, 1994].

Patients sometimes re-experience the hallucinations as 'flashbacks', mainly after use of recreational drugs such as lysergide (LSD), cannabis, ketamine and ecstasy.

It can sometimes be difficult to establish if a hallucination is caused by a drug or an underlying illness.

Up to 30% of adverse drug reactions in primary care may be neuropsychiatric.

Reported hallucination cases

The West Midlands Centre for Adverse Drug Reaction Reporting has received 163 reports of drug-associated hallucinations.

Top 10 drugs or classes associated with hallucinations.

SSRIs
tramadol
bupropion
venlafaxine
quinolones
proton pump inhibitors
clarithromycin
zopiclone
ropinirole
β -adrenoreceptor antagonists

Review

Antimuscarinic agents such as benzhexol and procyclidine are known to cause visual hallucinations.

Between five and thirty percent of patients treated with levodopa develop hallucinations,¹ which can be vivid. Those with a psychiatric history appear more at risk. The hallucinations are dose-related and re-