

BENZODIAZEPINE WITHDRAWAL

Introduction

An abrupt cessation or reduction in the dosing of a benzodiazepine can result in a physical withdrawal syndrome in patients who have been using these drugs for a prolonged period of time and have become dependent.

Reactions are similar to alcohol withdrawal, although they are usually of a milder degree. Only very occasionally will reactions be severe.

Withdrawal syndromes have been described not only for benzodiazepines but also a range of other sedative - hypnotic agents as well, including:

- Barbiturates
- The newer non-benzodiazepine sedative-hypnotic agents (zolpidem, zopiclone)
- GHB
- Baclofen
- Chloral hydrate
- Paraldehyde (now rarely used)

Most patients can be managed as an outpatient

Pathophysiology

Prolonged benzodiazepine use is thought to result in down regulation of the benzodiazepine receptors.

When abrupt cessation or dosage reduction occurs, GABA receptors are less responsive, leading to hyper-excitability type symptoms.

Clinical Features

Clinical features of benzodiazepine withdrawal can vary markedly between individuals.

This variability is seen in the rate, type and severity of symptoms, and is related to multiple factors including:

- The doses being taken
- The duration of time the agents have been taken for
- The rapidity of withdrawal
- Elimination kinetics of the agent being taken
- Individual patient factors

The onset of symptoms is generally within **2 - 10 days**, and can last some weeks.

In **general terms** symptoms are usually fairly mild and can include the following:

1. Agitation/ dysphoria
2. Anxiety/ panic attacks
3. Tremulousness
4. Insomnia/ sleep disorders, nightmares.
5. Inability to concentrate
6. Memory disturbances
7. Autonomic upset:
 - Tachycardia/ palpitations
 - Sweating
8. Perceptual disturbances:
 - Photophobia
 - Hyperacusis

Rarely more severe symptoms are seen which may resemble a delirium tremens type picture with:

8. Hallucinations
9. Seizures

This clinical picture is in contrast to the withdrawal syndromes seen with opioids or cannabis where delirium and seizures are not normally seen.

Complications

Further complications in some patients may include:

- Dehydration
- Electrolyte disturbances
- Concomitant withdrawal syndromes (eg alcohol)
- Exacerbation of pre-existing psychiatric conditions

Investigations

There are no specific or routine investigations required for patients suffering from benzodiazepine withdrawal, this will depend on the severity of symptoms and the need to rule out alternative diagnoses or secondary complications.

The following may need to be considered:

1. FBE
2. CRP
3. U&Es/ glucose
4. Blood alcohol
5. Urine drug screens
6. Septic workups, according to clinical suspicion.

Management

Many patients can be managed as outpatients but close supervision is required.

In general terms

1. IV rehydration as clinically indicated.
2. Reintroduction of benzodiazepine:
 - Careful supervised reintroduction of the agent may be required to control symptoms, particularly when there has been an intercurrent medical illness which has interrupted the regular benzodiazepine use.

This is followed by gradual supervised reduction in dosing.

The usually strategy is to substitute a longer acting benzodiazepine (where possible) and then to slowly reduce the dose.

If symptoms recur, then the dose is transiently increased or the reduction occurs more slowly.

A typical approach is to taper the dose by around 15% per week and so complete withdrawal from the agent may take some weeks

3. Severe reactions:

- Management of severe reactions is similar to that of alcohol withdrawal

Disposition:

Most patients with benzodiazepine withdrawal can be managed as outpatients.

Withdrawal in a supervised Residential setting, by specialized staff with specific training in drug and alcohol related problems, may be required for:

- Past history of severe withdrawal symptoms
- Poor social circumstances
- Failure of outpatient management

In a small number of patients hospital admission may be required for patients at risk of a severe delirium tremens type syndrome:

These patients are identified by the following:

- Abnormal vital signs despite initial treatment
- Present to the ED with severe symptoms
- Hallucinations
- Seizures
- Altered conscious state
- Significant medical co-morbidities
- Significant psychiatric co-morbidities

Counselling

Patients who are cooperative and motivated should also be referred to a specialist **Drug and Alcohol Counsellor**.

References

1. Benzodiazepine Withdrawal in: Murray L et al. Toxicology Handbook 2nd ed 2011.

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