CASE ONE

Short case number: 3_15_1
Category: Mental Health and Human Behaviour
Discipline: Psychiatry
Setting: Hospital Ward
Topic: Alcohol Abuse_Withdrawal

Case

You are the intern covering the evening shift; You are paged to the surgical ward to see Dr Noel Reedy (age 64) who is 36 hours post op for total knee replacement. He appears confused and trying to remove his gown stating that there are insects crawling all over him he can't understand why no-one is getting rid of them. The ward staff have already commenced an alcohol withdrawal chart and believe that he needs to be sedated.

1. What are the key steps in your assessment of Dr Reedy and why? How would you gather the information you need to make your diagnosis in this confused patient?

2. How you would use an alcohol withdrawal chart as part of your assessment and ongoing management of Dr Reedy?

You diagnose that Dr Reedy has delirium tremens.

3. Outline and justify your acute management plan for Dr Reedy on the ward that evening.

In the morning you hand over to the team intern explaining the night's events. Following the management plan you formulated from the evening prior, Dr Reedy is now settled. The team decide to organise a drug & alcohol consult for Dr Reedy.

4. You take a thorough alcohol history: demonstrate how you would quantify an alcohol history and determine harmful drinking levels.

Dr Reedy reports he has been drinking 3 litres of wine daily for the last 2 years. Previously a moderate drinker, he noticed his alcohol intake increasing since his wife's death. He thinks he should probably cut down his drinking, but is reluctant to accept he has delirium tremens. He wonders if there is another cause. He works in the neighbouring private hospital as a haematologist, and you have heard he is beloved by his patients. He denies ever going to work intoxicated and adamantly denies ever placing his patient in harm's way. In assessing his readiness to change his drinking behaviour it is determined that he is contemplative.

5. What is your pharmacological and psychological management plan for Dr Reedy? Use a biopsychosocial approach.

6. Would you report Dr Reedy to the Medical Council? Why or why not?

Suggested reading:

1. Management of Mental Disorders (5th edition) World Health Organisation, Collaborating Centre for Evidence in Mental Health Policy. Sydney 2013.
2. Kumar P, Clark ML, editors. Kumar & Clark's Clinical Medicine. 9th edition. Edinburgh: Saunders Elsevier; 2016.
3. Knox J, Hasin DS, Farren RR et aL. Prevention, screening, and treatment for heavy drinking and alcohol use disorder. Lancet Psychiatry. 2019 December; 6(12): 1054–1067. doi:10.1016/S2215-0366(19)30213-5.

Other Resources

1. NSW Health. Drug and Alcohol Withdrawal Clinical Practice Guidelines. 2008. Chapter 3 Alcohol, Appendix K Alcohol Withdrawal Scale
   http://www0.health.nsw.gov.au/policies/gl/2008/pdf/gl2008_011.pdf

2. **From Flinders University: Alcohol Withdrawal Observation Chart - NCETA**

   https://nceta.flinders.edu.au/application/files/9216/0156/0163/EN199.pdf
   (this also show the AUDIT)

ANSWERS

1. **What are the key steps in your assessment of Dr Reedy and why? How would you gather the information you need to make your diagnosis in this confused patient?**

   Key components of assessment include:
   1. Full drug consumption history
   2. Assessing risk associated with polydrug use, including impact on work performance
   3. Assessing past history of withdrawal and any associated symptoms
   4. Medical and psychiatric history
   5. Physical exam
   6. Mental state exam
   7. Investigations

   It would be important to talk to a family member/partner/nominated carer/next of kin and the patient's GP.

2. **How you would use an alcohol withdrawal chart as part of your assessment and ongoing management of Dr Reedy?**

Alcohol Withdrawal Observation Chart

Observations

Surname _____ First Name _____ Age _____

Date												
Time												
Breath alcohol reading												
Blood glucose reading												
Temperature (per axilla)												
Pulse												
Respiration rate												
Blood pressure												
Alcohol Withdrawal Assessment Score												
Nausea												
Tremor												
Paroxysmal sweats												
Anxiety												
Agitation												
Tactile disturbances												
Auditory disturbances												
Visual disturbances												
Headache, fullness in head												
Orientation and clouding of sensorium												
TOTAL SCORE												

AWS score

<8	Mild withdrawal
8-25	Moderate to severe withdrawal
>25	Very severe withdrawal

From Flinders University: Alcohol Withdrawal Observation Chart - NCETA

https://nceta.flinders.edu.au/application/files/9216/0156/0163/EN199.pdf

3. Outline and justify your acute management plan for Dr Reedy on the ward that evening.

General principles: Patient should be nursed in an area with low stimulation, with adequate attention to safety, hydration and general principles used in management of delirium.

Medical Management of Acute Alcohol Withdrawal:
When alcohol withdrawal is the reason for admission and assessed as likely to have moderate to severe (from the history), diazepam loading of the patient prior to significant withdrawal becoming evident is desirable.

However, when alcohol withdrawal complicates admission for another reason and the first indication is when alcohol withdrawal becomes evident, the appropriate action is to treat withdrawal according to the signs and symptoms experienced by the patient and reflected in the Alcohol Withdrawal Score (AWS)

a) Thiamine: 100 mg IM or IV daily for the duration of withdrawal symptoms. Check and correct electrolyte imbalances, very common in severe withdrawal (hypokalaemia, magnesium and phosphate deficiency) and make symptoms worse.

b) Loading regime (when significant withdrawal is predicted): Use of Diazepam

Loading with diazepam by weight is commenced – for the first day:

<75 kg: 20 mg oral 2 hourly for 3 doses (i.e. 60 mg total)
75-90 kg: 20 mg oral 2 hourly for 4 doses (i.e. 80 mg total)
>90 kg: 20 mg oral 2 hourly for 5 doses (i.e. 100 mg total)

Thereafter 20 mg diazepam oral 2 hourly until AWS score is 10 or less, further medical assessment is required for doses beyond 120 mg/day. If AWS score rises to 15 or more recommend, diazepam 20 mg oral 2 hourly after medical assessment.
Diazepam 5-10 mg prn (maximum four times/day) may be prescribed for subsequent days to a maximum of 4 days; temazepam 10-20 mg nocte prn may be prescribed for night sedation for 3 nights.

When alcohol withdrawal is unexpected and complicates admission for another reason then:
AWS score <8: No treatment with benzodiazepines is usually necessary but administer thiamine.
AWS score 8-25: where intercurrent illness does not preclude, diazepam 10-20 mg oral 2 hourly until AWS ≤8 and clinical sedation achieved, 2 hourly AWS observations.
If AWS score >20, more intense nursing supervision required
If >80 mg diazepam is needed 2 hourly oxygen saturation is recommended.
If >120mg diazepam needed, seek specialist advice.
AWS score >25: medical emergency, seek specialist advice. Administer thiamine IV and correct electrolyte imbalances. Slow IV diazepam 5 mg over 3-5 minutes, repeated if necessary up to 4 times in the first 30 minutes

4. You take a thorough alcohol history: demonstrate how you would quantify an alcohol history and determine harmful drinking levels.

An accurate consumption history should be recorded for each substance 1. Quantity, frequency, duration of use 2. Time and amount of last use 3. Route of administration 4. Recent pattern leading up to presentation 5. Average daily consumption. **This can be done by going through a typical day and recording intake rather than relying on patient's estimate.**

See: How to take a retrospective consumption history
https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2008_011.pdf

5. What is your pharmacological and psychological management plan for Dr Reedy? Use a biopsychosocial approach.

There are a wide range of treatment options for patients with alcohol dependence. Some of these treatments, such as AA's (Alcoholics Anonyms) 12-step self-help programs, have been around a long time. Others—including brief interventions and pharmacological treatments— are relatively new. Nevertheless, evidence about their effectiveness is still limited.

1. AA's twelve-step self-help program

Self-help groups are the most commonly sought source of help for alcohol-related problems. AA, the most widely known, outlines 12 consecutive activities or steps that alcohol dependent individuals should achieve during the recovery process. Alcohol dependent individuals can become involved with AA before entering professional treatment, as a part of it, or as aftercare following professional treatment.

2. Psychosocial therapies

• Motivational Enhancement Therapy

Motivational enhancement therapy (MET) begins with the assumption that the responsibility and capacity for change lie within the patient. The therapist begins by providing individualized feedback about the effects of the patient's drinking. Working closely together, therapist and patient explore the benefits of abstinence, review treatment options, and design a plan to implement treatment goals. MET may be one of the most cost-effective treatments. The motivational interviewing technique —a key component of MET— was shown to overcome patients' reluctance to enter treatment more effectively than did other conventional approaches. For motivational interviewing, please see question 4, short case number: 3_13_2.

• Couples Therapy

Evidence indicates that involvement of a non-alcoholic spouse in a treatment program can improve patient participation rates and increase the likelihood that the patient will alter drinking behaviour after treatment ends.

• Brief Interventions

Many persons with alcohol-related problems receive counselling from primary care physicians or nursing staff in the context of five or fewer standard office visits. Such treatment, known as brief intervention, generally consists of straightforward information on the negative consequences of alcohol consumption along with practical advice on strategies and community resources to achieve moderation or abstinence. Controlled trials demonstrated that this approach reduced drinking, alcohol-related problems, and patients' use of health care services. Most brief interventions are designed to help those at risk for developing alcohol-related problems to reduce their alcohol consumption.

3. Treating alcohol and nicotine addiction together

Nicotine and alcohol interact in the brain, each drug possibly affecting vulnerability to dependence on the other. Consequently, treating both addictions simultaneously might be an effective way to help reduce dependence on both.

4. Pharmacotherapy

Research has recently focused on the development of medications for blocking alcohol-brain interactions that might promote or maintain alcoholism. Some medications may be more effective for certain types of alcohol dependent individuals than others.

• Disulfiram (Antabuse), an alcohol-sensitising drug, has been available for a long time and may be a deterrent for drinking in patients willing to take it. Disulfiram won't cure alcoholism, nor does it remove the compulsion to drink. But if patients drink alcohol, the drug produces a severe and unpleasant physical reaction that includes flushing, nausea, vomiting and headaches.
More recently the emphasis has been on drugs that reduce craving such as naltrexone and acamprosate. These drugs don't make the patient feel sick after drinking.
• Naltrexone (ReVia) helps to prevent relapse among recovering alcohol dependent individuals who are simultaneously undergoing psychosocial therapy. However, naltrexone is only effective if taken on a regular basis and has side effects. There is an extended-release preparation available in the USA which requires one injection per month.
• Acamprosate (Campral) showed promise in treating alcoholism in several randomized controlled trials involving more than 3,000 participants who were also undergoing psychosocial treatment. Analysis showed that more than twice as many alcohol dependent individuals receiving acamprosate remained abstinent up to 1 year compared with participants receiving psychosocial treatment alone.

6. Would you report Dr Reedy to the Medical Council? Why or why not?

It is always best to talk over with patient and get them to refer themselves. You would report Dr Reedy to the Medical Council if you thought his impairment was affecting the safety and wellbeing of his patients (e.g., if he demonstrated impaired judgement, marked depression or suicidal ideation, disinhibition or cognitive capacity and/or memory).

DEALING WITH A MEDICAL COLLEAGUE WITH DRUG OR ALCOHOL PROBLEMS

You should:

1. Be alert to the possibility that a colleague may have a drug or alcohol problem. The general indicators apply equally to doctors. There are additional indicators that may alert you to a problem. These include:
   - Inappropriate prescribing
   - Administering patient medication in a secretive manner
   - Drug wastage, particularly in the case of narcotics
   - Poor compliance with documentation requirements, e.g. drug register
   - Patients complaining of inadequate pain relief
   - Collecting patient medications from the pharmacy
   - Unwillingness to respond to on-call responsibilities, e.g. refusing to return after-hours.

2. Take action, or make sure that someone else does! It is a regrettable truth that for a variety of reasons colleagues do not act, and the consequences can be tragic for the individual and their patients. The reasons include:
   - Not wanting to create waves
   - Hoping that someone else will take action
   - Unfounded fear of legal action
   - Not knowing what to do
   - Feeling intimidated by the person concerned.

The steps to take,
1. If you feel unable to deal with the matter yourself, make your supervisor, head of department or other appropriate person aware of your concerns. Do not let the matter drop until you are sure that you have been taken seriously.

2. If you feel able to talk to the colleague yourself, do not take on a treating role, but

- Arrange to meet with them privately
- Let them know that you are concerned and why
- Ask them to consult with an appropriate practitioner, and provide them with contact information. Follow up to make sure that they have taken your advice. Be aware that your colleague may tell you what they think you want to hear, having taken no positive steps. Consider the impact of their problem upon their work. If you believe that patient safety may be at risk, you should advise the doctor accordingly. If they are not receptive to your advice, you should seek the advice of the Medical Board.

https://www.medicalcouncil.nsw.gov.au/mandatory-notifications-0
https://www.ahpra.gov.au/notifications/raise-a-concern/mandatory-notifications.aspx

This material is available for doctors who have been reported about concerns for drugs/alcohol.https://www.medicalcouncil.nsw.gov.au/i-have-to-attend-drug-or-alcohol-screening-mcnsw