A 35-year-old woman with low mood and concerns about her alcohol use

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A 35-year-old single woman with no history of mental disorders presents to a family physician with concerns about her alcohol use and emotional problems. She was referred from the emergency department. She drinks one to two bottles of wine almost every night and notices that she has to drink substantially more to achieve the same effect. She was unsuccessful in previous attempts to reduce her drinking; she could abstain for a week but relapsed because of cravings (i.e., strong urges to drink that she had multiple times a day) and her inability to control the amounts of alcohol she consumed. Drinking has affected her relationships and social life — she left a long-term relationship and has become more isolated as her friends have commented on her excessive drinking and associated erratic behaviour. Each morning, she is nauseated, has headaches and cannot focus on her work as a retail manager. She has had to call in sick on several occasions. She often feels tired, wakes up several times a night and does not feel rested in the morning. She has low appetite, has lost weight, and feels sad, isolated and worthless most of the time.

Physical examination does not show any concerning abnormalities. Bloodwork done in the emergency department showed moderately elevated serum levels of γ-glutamyltransferase, aspartate transaminase and alanine transaminase, and a larger mean corpuscular volume.

What diagnoses should be considered?

The patient meets six diagnostic criteria for alcohol use disorder:[1] increased tolerance; inability to cut down drinking; cravings; failure to fulfill major role obligations; alcohol affecting health, personal life and work; and spending substantial time consuming alcohol and recovering from its effects. The extent of her symptoms and effect on function are consistent with a diagnosis of alchohol use disorder. Her mood disturbances qualify her for a major depressive episode — she feels depressed, tired and worthless most of the time, and there are changes in sleep and appetite.[1] However, given that this may be alcohol-induced, the diagnosis would require reassessment after a period of abstinence.[2,3] Appendix 1 (available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.160132/-/DC1) contains a diagnostic checklist.

Does the patient require admission to hospital or medication for alcohol withdrawal?

A careful assessment of alcohol use history, drinking patterns and symptoms of alcohol withdrawal are very informative in making decisions about managing alcohol withdrawal. Alcohol withdrawal can be masked when patients drink daily. Because this patient was able to abstain recently without substantial withdrawal suggests that no medication for alcohol withdrawal (e.g., benzodiazepines) is required (e.g., for more information on managing alcohol withdrawal, https://porticonetwork.ca/web/alcohol-toolkit/treatment/alcohol-withdrawal).

Does the patient require any investigations?

Although the diagnosis of alcohol use disorder is made primarily on self-reported symptoms, any assessment should include specific laboratory tests such as complete blood cell count and serum levels of γ-glutamyltransferase, alanine transaminase and aspartate transaminase[4] to determine the impact of alcohol use and to guide pharmacotherapy (e.g., naltrexone would be contraindicated if serum levels of transaminases were higher than three to five times the upper limit). Because the patient had these done recently in the emergency department, they do not need to be repeated at this time.

Although there are newer biomarkers, such as carbohydrate-deficient transferrin, none are currently used in regular clinical practice.

What should the treatment plan include?

The first step is clarifying the goal of treatment with the patient. Although abstinence has been promoted classically, reduction of alcohol consumption has also shown to be beneficial.[5] Abstinence is easy to monitor but may be difficult to maintain. Recognizing the patient's goal is important in strengthening the therapeutic relationship. A motivational approach can be helpful to guide the patient toward the optimal treatment regimen.[5] A stepped-care approach that includes support groups has been shown to be effective.[6]

A discussion of the physician's duty to report medical conditions that interfere with driving abilities should be part of the plan. Patients who have children in their care should prompt a risk assessment and involvement of the Children's Aid Society if necessary. Thiamine should be prescribed to supplement depletion in severe cases (e.g., patients who are malnourished, those with liver disease and/or requiring medical withdrawal management). The usual dosage would be 100 mg three times a day (orally) for one month, but it should be started parenterally in the most severe cases (refer to the National Institute for Health and Care Excellence (NICE) guideline for a list of criteria).[6,7]

Medications approved by Health Canada (naltrexone, acamprosate and disulfiram) should be offered to all patients with alcohol use disorder as first-line therapies. Second-line therapies would comprise other medications that have shown utility in clinical trials, such as topiramate or gabapentin.[2,8,9]

If mood does not improve after four to six weeks, the Canadian Network for Mood and Anxiety Treatments task force guideline and other experts recommend the addition of an antidepressant to the treatment plan.[2,3] Specifically, sertraline was shown to be an effective addition to naltrexone in a randomized controlled trial that examined the management of relapse in patients with alcohol dependence and depression.[10] The available evidence (from systematic reviews and clinical trials) suggests that pharmacotherapy should be supported by psychotherapy and psychoeducation to increase compliance and effectiveness.[11]

Case resolution

The patient set a goal to reduce the amount of alcohol she consumed. She was prescribed naltrexone and provided supportive counselling. She reduced her alcohol consumption to one or two glasses of wine twice a week. Her mood did not improve substantially during the first six weeks of monotherapy with naltrexone (50 mg orally, taken once a day) but improved when sertraline was added at a dosage gradually increased to 150 mg daily. After four months of treatment with naltrexone, the patient's cravings for alcohol were under control, and the treatment was stopped. She continued to take sertraline to maintain a stable mood.

References

1. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington (VA): American Psychiatric Association Publishing; 2013.
2. Beaulieu S, Saury S, Sareen J, et al.; Canadian Network for Mood and Anxiety Treatments (CANMAT) Task Force. The Canadian Network for Mood and Anxiety Treatments (CANMAT) task force recommendations for the management of patients with mood disorders and comorbid substance use disorders. *Ann Clin Psychiatry* 2012;24:38-55.
3. Nunes EV, Levin FR. Treatment of co-occurring depression and substance dependence: using meta-analysis to guide clinical recommendations. *Psychiatr Ann* 2008;38:nihpa128505.
4. Allen JP. Use of biomarkers of heavy drinking in health care practice. *Mil Med* 2003;168:364-7.
5. Marlatt GA, Witkiewitz K. Harm reduction approaches to alcohol use: health promotion, prevention, and treatment. *Addict Behav* 2002;27:867-86.
6. *Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence*. London: National Institute for Health and Care Excellence; 2011. Available: https://nice.org.uk/guidance/cg115 (accessed 2017 Feb. 9).
7. Bower P, Gilbody S. Stepped care in psychological therapies: access, effectiveness and efficiency. Narrative literature review. *Br J Psychiatry* 2005;186:11-7.
8. Rolland B, Paille F, Gillet C, et al. Pharmacotherapy for alcohol dependence: the 2015 recommendations of the French Alcohol Society, issued in partnership with the European Federation of Addiction Societies. *CNS Neurosci Ther* 2016;22:25-37.
9. Jonas DE, Amick HR, Feltner C, et al. *Pharmacotherapy for adults with alcohol-use disorders in outpatient settings: executive summary*. Rockville (MD): Agency for Healthcare Research and Quality; 2014.
10. Pettinati HM, Oslin DW, Kampman KM, et al. A double-blind, placebo-controlled trial combining sertraline and naltrexone for treating co-occurring depression and alcohol dependence. *Am J Psychiatry* 2010;167:668-75.
11. Willenbring ML, Massey SH, Gardner MB. Helping patients who drink too much: an evidence-based guide for primary care clinicians. *Am Fam Physician* 2009; 80:44-50.

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