

## CLINICAL VIGNETTE

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# Alcohol and Primary Care

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Michael Estes, MD

### Case

The patient is a 55-year-old male with a history of hypertension, psoriasis, anxiety and depression. He had been my patient for a few years with sporadic urgent visits and wellness examinations. His chronic conditions were seemingly well managed. I knew he had a troubled relationship with alcohol frequently drinking more than considered healthy, but never realized the extent of its impact on his life. He came to my office with his wife in clear emotional distress. He has lost more than 10 lbs in a month. He appeared sallow. His wife explained that he was having a difficult time coping with work stress. He was not sleeping soundly, stopped exercising, and missing time at work. Routine labs shows mild pancytopenia and transaminitis. He was referred to a hematologist who concluded that his blood dyscrasias were from heavy alcohol use. A few weeks later, he was hospitalized for severe abdominal pain and hyponatremia. The work up was unrevealing and he was counseled on his alcohol consumption and effect on his overall health. His depression worsened. He was taking trazodone for sleep, lorazepam as needed for anxiety, and citalopram for mood. As it became increasingly apparent that he lost all control over alcohol use, his wife and I worked hard to convince him of the need for help. He eventually ended up in a hospital detox program followed by a rehab stay. When I saw him after rehab, he had resumed some alcohol consumption but at a much lesser volume. He had established care with an addiction medicine specialist as well.

### Discussion

Alcohol consumption is widespread in the United States as are its health consequences. According the CDC, it accounts for more than 88 thousand deaths annually and more than 245 billion healthcare dollars.<sup>1</sup> Quantity definitions changed a few years ago. Moderate drinking is considered 1 per day for women and 2 per day for men. Heavy drinking is 8 or more drinks per week for women and 15 or more per week for men. Lastly, binge drinking is 4 or more drinks during a single occasion for women and 5 or more for men. A standard drink is 12 oz of beer, 5 oz of wine or 1.5 oz of 80-proof liquor.

The short term health risks associated with alcohol are well understood. Alcohol is responsible for accidental deaths, motor vehicle accidents, violence, acute poisoning, high risk sexual behaviors and pregnancy complications. Over the long term, heavy drinking can lead to cardiovascular disease, stroke, liver disease, multiple cancers including throat, esophagus, liver and

colon, mental health disorders, social problems and memory decline.

The first step in primary care is screening for alcohol use disorders. It is a grade B USPSTF recommendation to screen all patients over the age of 18 for unhealthy alcohol use. The terms alcohol dependence and alcohol abuse have been replaced by “at-risk drinking” and “alcohol use disorder.” These new standardizations are defined by the National Institute of Alcohol Abuse and Alcoholism (NIAAA).<sup>2</sup> At-risk drinking is 4 drinks per day or 14 drinks per week in men and 3 drinks per day or 7 drinks per week in women. Alcohol use disorder (AUD) is defined in the DSM-5 as “a maladaptive pattern of alcohol use leading to clinically significant impairment or distress”.<sup>3</sup>

There are several validated alcohol screening questionnaires. The fastest is the single question - “on any given occasion during the past 3 months have you had more than 5 drinks?” The AUDIT-C screen asks 3 questions - “how often do you have a drink containing alcohol, how many standard drinks containing alcohol do you have on a typical day, and how often do you have six or more drinks on one occasion?” The AUDIT-10 has more questions and is useful in identifying AUD patients. The CAGE questionnaire is older and asks about feeling one should Cut down, Annoyance about others criticizing consumption, feeling Guilty, and having Eye opener drinks. Regardless of which assessment is chosen, the important step is taking the time to ask the questions. Many patients will not offer information about their drinking and the associated problems without first being asked.

After a clinician has successfully identified a patient with at-risk drinking and/or AUD, the work does not end. Physicians should screen for co-morbid mental illness, risk for severe withdrawal, other substance abuse and drinking and driving.<sup>4,5</sup> A focused physical examination should assess for liver disease and labs should include complete blood count, AST/ALT and INR. Counseling should follow the examination. Briefly, doctors should give feedback about drinking, discuss the possible health hazards, assess readiness for change and arrange for a follow up.<sup>4,5</sup> Many patients with heavy alcohol use are not ready to quit but reducing their intake can be a helpful first step. Suggestions can include avoiding triggers, addressing stressors, increasing sleep and exercise and attending AA or other support group meetings.

For patients ready to quit, the location of treatment can differ. Acute withdrawal symptoms are often managed in inpatient or residential centers.<sup>6</sup> After detox, many patients transition to treatment centers and then to sober living facilities. In recent years, the clinician office has become a focal point as well.

In recent years, pharmacotherapy has become an integral part of treatment. Benzodiazepines and beta blockers are used in acute detox. There are three FDA approved medications for use in alcohol use disorder: disulfiram, acamprosate and naltrexone.<sup>6,7</sup> Disulfiram inhibits acetaldehyde dehydrogenase producing an increase in acetylaldehyde leading to nausea, flushing, sweating and racing heart when the patient consumes alcohol. A large VA trial showed fewer drinking days in studied patients.<sup>7</sup> Acamprosate blocks NMDA and GABA receptors and there is evidence that it improves abstinence. Lastly, naltrexone blocks opioid receptors and can reduce heavy drinking days and increase time of abstinence.<sup>7</sup> It is available in oral and long-acting injectable forms. Physicians should become comfortable with prescribing these medications and counseling patients on their risks and benefits. Referrals to addiction medicine and addiction psychiatry, where available, can also prove beneficial.

### Conclusion

My patient has done much better in the last few years. He receives monthly naltrexone injections through the addiction medicine office to help curb alcohol cravings and desire, has stopped all benzodiazepine medications, and remains on effective depression medication regimen. While he still consumes occasional alcohol, the volume has remained low, the use infrequent, and it does not appear to be affecting his life at this point. He returned to work, resumed exercise, has less anxiety and a better relationship with his colleagues and spouse.

### REFERENCES

1. CDC.gov Fact Sheets about Alcohol.
2. "Alcohol Alert." US Department of Health and Human Services. NIH. NIAAA. April 2005.
3. **US Preventive Services Task Force, Curry SJ, Krist AH, Owens DK, Barry MJ, Caughey AB, Davidson KW, Doubeni CA, Epling JW Jr, Kemper AR, Kubik M, Landefeld CS, Mangione CM, Silverstein M, Simon MA, Tseng CW, Wong JB.** Screening and Behavioral Counseling Interventions to Reduce Unhealthy Alcohol Use in Adolescents and Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*. 2018 Nov 13;320(18):1899-1909. doi: 10.1001/jama.2018.16789. PubMed PMID: 30422199.
4. **Spithoff S, Kahan M.** Primary care management of alcohol use disorder and at-risk drinking: Part 1: screening and assessment. *Can Fam Physician*. 2015 Jun;61(6):509-14. Review. PubMed PMID: 26071154; PubMed Central PMCID: PMC4463891.
5. **Spithoff S, Kahan M.** Primary care management of alcohol use disorder and at-risk drinking: Part 2: counsel, prescribe, connect. *Can Fam Physician*. 2015 Jun;61(6):515-21. Review. PubMed PMID: 26071155; PubMed Central PMCID: PMC4463892.
6. **Friedmann PD.** Clinical practice. Alcohol use in adults. *N Engl J Med*. 2013 Jan 24;368(4):365-73. doi: 10.1056/NEJMcp1204714. Review. Erratum in: *N Engl J Med*. 2013 Apr 25;368(17):1661. *N Engl J Med*. 2013 Feb 21;368(8):781. PubMed PMID: 23343065.
7. **Zindel LR, Kranzler HR.** Pharmacotherapy of alcohol use disorders: seventy-five years of progress. *J Stud Alcohol Drugs Suppl*. 2014;75 Suppl 17:79-88. Review. PubMed PMID: 24565314; PubMed Central PMCID: PMC4453501.