Geriatric Alcohol Use Disorder: A Review for Primary Care Physicians

Tanner J. Bommersbach, BA; Maria I. Lapid, MD; Teresa A. Rummans, MD; and Robert M. Morse, MD

CME Activity

Target Audience: The target audience for *Mayo Clinic Proceedings* is primarily internal medicine physicians and other clinicians who wish to advance their current knowledge of clinical medicine and who wish to stay abreast of advances in medical research.

Statement of Need: General internists and primary care physicians must maintain an extensive knowledge base on a wide variety of topics covering all body systems as well as common and uncommon disorders. *Mayo Clinic Proceedings* aims to leverage the expertise of its authors to help physicians understand best practices in diagnosis and management of conditions encountered in the clinical setting.

Accreditation: Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Statement: Mayo Clinic College of Medicine designates this journal-based CME activity for a maximum of 1.0 *AMA PRA Category 1 Credit(s)*.™ Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Learning Objectives: On completion of this article, you should be able to (1) explain the risk factors for the development of alcohol use disorder (AUD) in the geriatric population, (2) state 2 effective screening tools for detecting AUD in the geriatric population, and (3) discuss medical stabilization, detoxification, and chemical dependency treatment for AUD in the geriatric population.

Disclosures: As a provider accredited by ACCME, Mayo Clinic College of Medicine (Mayo School of Continuous Professional Development) must ensure balance, independence, objectivity, and scientific rigor in its educational activities. Course Director(s), Planning Committee members, Faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so that those participants in the activity may formulate their own judgments regarding the presentation.

In their editorial and administrative roles, William L. Lanier, Jr, MD, Terry L. Jopke, Kimberly D. Sankey, and Nicki M. Smith, MPA, have control of the content of this program but have no relevant financial relationship(s) with industry. The authors report no competing interests.

Method of Participation: In order to claim credit, participants must complete the following:

1. Read the activity.
2. Complete the online CME Test and Evaluation. Participants must achieve a score of 80% on the CME Test. One retake is allowed.

Visit www.mayoclinicproceedings.com, select CME, and then select CME articles to locate this article online to access the online process. On successful completion of the online test and evaluation, you can instantly download and print your certificate of credit.

Estimated Time: The estimated time to complete each article is approximately 1 hour.

Hardware/Software: PC or MAC with Internet access.

Date of Release: 5/1/2015

Expiration Date: 4/30/2017 (Credit can no longer be offered after it has passed the expiration date.)

Privacy Policy: http://www.mayoclinic.org/global/privacy.html

Questions? Contact dletcsupport@mayo.edu.

Abstract

Alcohol use disorder in the geriatric population is a growing public health problem that is likely to continue to increase as the baby boomer generation ages. Primary care providers play a critical role in the recognition and management of these disorders. This concise review will focus on the prevalence, risk factors, screening, and clinical management of geriatric alcohol use disorder from a primary care perspective.

 ■ Mayo Clin Proc. 2015;90(5):659-666

Alcohol use disorder (AUD) is a growing public health problem in the elderly population that causes substantial morbidity and mortality and escalation of health care costs. Prevalence rates vary depending on the study methods and alcohol use definitions used. Community-based studies report 12-month prevalence rates as low as 0.24% for alcohol dependence in the elderly in a national sample[1]; 6% heavy drinking (>2 drinks per day) in community-dwelling individuals 60 years and older in a New York cohort[2]; and 15.4% of a large cross-sectional sample of community-dwelling elderly individuals (≥65 years) endorsed symptoms of alcohol abuse and dependence.[3] Rates in the medical environment are much higher: 10% to 15% of all elderly primary care patients met the criteria for problem drinking (defined as drinking at a level that has resulted in adverse medical, psychological, or social consequences or drinking that substantially increases the likelihood of such problems) in 1 study,[4] and up to 30% of all older patients hospitalized in general medicine and up to 50% of older patients hospitalized in psychiatric units have AUD.[5] Hospital

From Mayo Medical School (T.J.B.) and the Department of Psychiatry and Psychology (M.I.L., T.A.R., R.M.M.), Mayo Clinic, Rochester, MN.

claims data from the Health Care Financing Administration found that the rate of alcohol-related hospitalization in elderly individuals was similar to that of hospitalization for myocardial infarction, with 38% having an alcohol-related diagnosis for the primary diagnosis.[6] Perhaps the most striking prevalence data estimates from national surveys of noninstitutionalized adults predict that the number of Americans aged 50 years and older with a substance use disorder will double between 2006 and 2020 (from 2.8 million to 5.7 million people).[7]

Despite this growing problem, little attention has been given to AUD in the elderly. Between 2000 and 2010, less than 1% of articles published in major gerontology and substance abuse journals addressed this issue.[8] Often, AUD in the elderly is undiagnosed, underreported, or overlooked and, therefore, is not properly managed. Impairments in social, occupational, or recreational activities due to drinking can go undetected if an older individual lives alone, is socially isolated, has given up driving, is retired with no risk of losing a job or career, and has no close family members to be burdened with family conflicts. Moreover, AUD can mimic other common diagnoses in older adults, including depression and dementia. With many preexisting medical problems and polypharmacy, elderly people are especially at risk for further medical complications from excessive drinking. Older adults generally have a lower tolerance for alcohol and are more likely to experience delirium during periods of withdrawal.[9] Finally, as is the case with any addiction, but especially in the elderly population, stigma and shame can play a major role in the detection of AUD. Many older individuals believe that alcoholism is a moral weakness, and denial is a common response to inquiry about an AUD.[10] Not only is this a concern for patients, but it can be a barrier to provider inquiry into the older adult's alcohol use. Providers may carry predisposed stereotypes about what a person with an AUD should look like. Providers may also fear offending the patient and may opt not to ask about alcohol use.

It is, therefore, essential to recognize and properly manage the elderly patient with problematic alcohol use to prevent alcohol-related morbidity and improve quality of life. In this article, we use the *Diagnostic and Statistical Manual of Mental Disorders* (5th Edition) (*DSM-5*)[11] term Alcohol Use Disorder to refer to alcohol abuse or dependence as previously defined by *DSM-IV-TR*, except when articles cited use older terminology. We present an overview of AUD in the elderly population and outline practical guidelines for nonpsychiatric clinicians in evaluating and managing AUD in this population.

ETIOLOGY AND RISK FACTORS

Alcohol use disorder can be a lifelong illness with early onset and recurrences or relapses into old age. However, AUD can also occur for the first time late in life in the setting of major life changes. The specific cause of late life—onset AUD is unclear, although known biological and psychological risk factors and major life events or psychosocial stressors later in life may play a role. There is strong evidence for genetic factors associated with AUD. Children of alcoholic parents have demonstrated a genetic predisposition to alcoholism, regardless of the environment.[12] Twin studies show risk of alcohol dependence to be genetically determined in 50% to 60% for men and women.[13] The "Asian gene," which is a deficiency in aldehyde dehydrogenase enzymes, causes flushing and vasomotor symptoms after alcohol ingestion and leads to alcohol aversion, possibly explaining lower rates of AUD in Asians.[14]

Despite strong evidence for genetic determination for AUD, genes alone do not account for this risk, as psychological, social, and environmental factors also play a role. Some studies have used large national surveys to extrapolate possible risk factors for the older population. In a study of 8205 adults older than 65 years, Lin et al[15] found that being 65 to 74 years old (compared with ≥75 years), white (compared with Asian/Pacific Islander), divorced/widowed, and male were associated with increased risks of lifetime AUD, whereas increased odds of having AUD in the past year were associated with being male and aged 65 to 74 years. Financial strain also places older adults, especially older women, at higher risk for heavy drinking.[16]

What is different about alcohol use in older adults compared with younger adults? Aging-related biological and physiologic changes affect alcohol absorption, metabolism, and elimination. Decline in hepatic and renal function,

Mayo Clin Proc. ■ May 2015;90(5):659-666 ■ http://dx.doi.org/10.1016/j.mayocp.2015.03.012
www.mayoclinicproceedings.org