

Table 1. Recommendations in the management of alcoholic liver disease

Environmental and genetic determinants
1. Patients with obesity or chronic HCV should avoid consumption of alcohol. (Conditional recommendation, very low level of evidence)
2. Patients with ALD should be advised to abstain from cigarettes. (Conditional recommendation, very low level of evidence)
Diagnosis of alcoholic use disorder
3. Patients who have heavy alcohol use (>3 drinks per day in men and >2 drinks in women) for >5 years) should be counseled that they are at increased risk for alcoholic liver disease. (Strong recommendation, low level of evidence)
Management of alcoholic liver disease
Management of alcohol use disorder
4. In patients with ALD, baclofen is effective in preventing alcohol relapse (Conditional recommendation, low level of evidence)
5. In patients with ALD, brief motivational interventions are effective in reducing alcohol relapse compared with no intervention (Conditional recommendation, very low level of evidence)
Alcoholic hepatitis
Treatment of alcoholic hepatitis
6. Patients with AH should be considered for nutritional supplementation to ensure adequate caloric intake and to correct specific deficits, yet its effects on patient survival has not been proven (Conditional recommendation, very low level of evidence)
7. Patients with severe AH should be treated with corticosteroids if there are no contraindications for their use (Strong recommendation, moderate level of evidence)
8. The existing evidence does not support the use of pentoxifylline for patients with severe AH. (Conditional recommendation, low level of evidence)
Liver transplantation in alcoholic liver disease
9. Liver transplantation may be considered for highly selected patients with severe AH (Strong recommendation, moderate level of evidence)

(R), EBM Reviews Cochrane Central Registry of Controlled Trials, EMBASE, and PsycInfo for the period 1980 through July 2016. A combination of database-specific subject headings (e.g., MEDLINE Liver Diseases and Alcoholic) and text words (Alcohol* (truncated) within three words of liver, or hepat* (truncation) or cirrho* (truncation)) in association with LT (subject's headings plus text words). The results were downloaded from each database into EndNote X7 and duplicates removed. To evaluate the level of evidence and strength of recommendations, we used the Grading of Recommendations Assessment, Development, and Evaluation system, as suggested by the American College of Gastroenterology Practice Parameters Committee. The strength of recommendation is graded as strong or conditional as a consensus among the authors, considering the weight of desirable and undesirable effects of intervention. The level of evidence was determined independently of the authors and designated as high, moderate, low, and very low, considering the confidence in the effect estimate based on current literature.

EPIDEMIOLOGY AND DISEASE BURDEN

Alcohol-use disorder (AUD) is one of the main causes of preventable disease and liver disease-associated mortality in the United States and worldwide. A recent report from the World Health Organization indicates that 3.3 million deaths (6% of all global deaths) are attributable to alcohol use, and that alcohol abuse is a risk factor in about 50% of cases of cirrhosis (1). Approximately 1 in 12 adults have AUD defined as consumption of >3 drinks per day in males and >2 drinks per day in females, or binge drink-

ing (defined by the National Institute of Alcoholism and Alcohol Abuse as >5 drinks in males and >4 drinks in females, consumed over 2 h period) (7). In the United States, one drink is defined as a beverage containing about 14 g of alcohol, which is present in 12 ounces of beer (5% weight/volume) or 5 ounces of wine (8–10% weight/volume), or 1.5 ounces of hard liquor (40–45% weight/volume) (7). Economic costs due to AUD (249 billion USD per year) are increasing. An estimated 88,000 people (~62,000 men and 26,000 women) die from alcohol-related causes annually, making alcohol the fourth leading preventable cause of death in the United States (8). Apart from ALD, accidents or violence are other common causes of death among adult people abusing alcohol. In 2014, alcohol-impaired driving fatalities accounted for 9,967 deaths in the United States (31% of overall driving fatalities) (1).

The association between alcohol and liver-related mortality is strongly supported by data showing a linear relationship between the standard liver death rate and overall alcohol consumption in many countries (9,10). Importantly, drinking patterns such as heavy episodic drinking vs. heavy daily use and the type of alcohol consumed may not independently predict the alcohol-attributable fraction of cirrhosis (11). However, designation of countries by moderate or heavy daily drinking most clearly demonstrates the weight of alcohol on the cirrhosis burden (10). The disease burden of alcohol is rapidly increasing in Asian countries such as China, Korea, and India. There are also regional differences in Europe between Eastern and Western Europe, likely to be due to implementation of policy measures leading to decrease in alcohol use in many areas of Western Europe.