

## Why Don't We Diagnose Alcoholism in Our Patients?

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The paper by Brown et al<sup>1</sup> in this issue of *The Journal* uses a novel approach to document a serious problem we face in the day-to-day practice of medicine. From the descriptions given in the paper, the respondents were careful, well-trained clinicians, but only one third recognized alcoholism. Why did they miss this important diagnosis? How can physicians avoid making the same mistake?

There are numerous factors that probably contribute to a reluctance to diagnose alcoholism among patients. First, the stereotype of the alcoholic was generated from years of training in public hospitals and the portrayal of the "skid road" alcoholic on television and in the movies. This stereotype is wrong. In fact, the obviously intoxicated and homeless alcoholic represents less than 10 percent of the individuals with severe alcohol-related life problems.<sup>2</sup> The average patient with the diagnosis of alcoholism in the family physicians' practices is likely to present in a sober state, with no evidence of severe liver disease (only 15 percent of alcoholics have cirrhosis), and in no obvious state of withdrawal (only 5 percent or fewer of alcoholics actually develop delirium tremens).<sup>3</sup> Also contrary to preconceptions, alcoholism is a genetically influenced disorder, and there is clear evidence that biologic factors, not an absence of moral fiber or adverse childhood experiences, strongly contribute to the risk of alcoholism.<sup>4,5</sup> Therefore, a major reason why physicians miss the diagnosis of alcoholism is because erroneous stereotypes prevent them from recognizing that any of their patients can be an alcoholic.

A second reason physicians might not think of alcoholism as often as they should is that they are all products of a standardized medical educational system. Few have received formal education on how best to utilize historical information, laboratory data, and the results of physical examinations to properly identify alcoholics. Of equal importance, physicians have not been given adequate un-

derstanding of the usual course of alcoholism, including data demonstrating that 70 percent or so of middle-class and highly functional alcoholics achieve and maintain abstinence with treatment.<sup>6</sup>

This state of affairs is most unfortunate for numerous reasons. The lifetime risk for severe and persistent alcohol-related problems in the general population is at least 10 percent for men and 3 to 5 percent for women, with an additional 10 percent or more of each likely to develop disturbing, but temporary, problems.<sup>2,7</sup> Also, alcoholism and abuse of other substances is associated with a high incidence of medical and psychological problems, with the result that at least 20 percent of the patients coming to physicians will actually qualify for an alcoholic label.<sup>2,3</sup> The recognition of the proper diagnosis along with subsequent confrontation and treatment are of paramount importance because heavy intake of alcohol will exacerbate almost all preexisting medical or psychological difficulties and can on its own precipitate major disorders.

Thus far, I have concentrated on the bad news. The good news is that physicians can begin to improve in this area by paying attention to the pattern of problems and test results likely to be associated with alcoholism among patients, and by beginning to learn a bit about confrontation and referral techniques. While these tasks cannot be accomplished adequately in a single editorial, a number of references are offered below for additional readings, and numerous continuing medical education courses are available on this important topic.

The first step in diagnosis is to change stereotypes by recognizing that any patient might be alcoholic. The second step is to evaluate carefully a series of blood tests, the results of which are likely to change when a person consumes five or more drinks per day over an average of 2 or more weeks (a drink is defined as the amount of alcohol contained in 10 to 12 oz of beer, 4 oz of wine, or a 1.5-oz shot of 80-proof liquor).<sup>8-10</sup> The most sensitive value is gamma-glutamyltransferase (GGT), an enzyme induced in the liver in the presence of alcohol or a variety of other drugs. For this test, values in the high normal range (eg, above 0.50  $\mu$ kat/L; 30 U/L) should be considered indic-

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ative of possible heavy drinking. The second measure of value is the mean corpuscular volume (MCV), with high normal values in the range of 95 fL ( $95 \mu\text{m}^3$ ) often indicating heavy and persistent consumption of alcohol through both the direct effects of ethanol on blood cell production and the indirect actions of low folic acid levels. A third type of useful measure includes any of the usual liver function tests, especially aspartate transaminase (SGOT) and alkaline phosphatase. Other blood tests that are useful, although not so sensitive, are a high normal uric acid level and increases in high-density lipoprotein cholesterol (HDL) in the absence of a marked increase in exercise. A final laboratory test that can be of value is to determine the blood alcohol concentration. Any measurable level at a time of a physical examination should raise the suspicion of possible alcoholism, but values in excess of 80 to 100 mg/dL (0.08 to 0.10 g/dL) in a patient who otherwise appears to not be impaired is likely to indicate tolerance and be closely associated with the diagnosis of alcoholism.

A third mechanism for increasing information about the pattern of alcohol-related life problems in patients is to use a self-administered paper and pencil questionnaire.<sup>11,12</sup> While several such instruments are available, the one most frequently used, and for which the greatest amount of information on sensitivity and specificity is available, is the 25-item Michigan Alcohol Screening Test (MAST). An unweighted score of 3 or higher on this instrument indicates an individual for whom alcohol is likely to be interfering with life functioning.

A fourth mechanism for increasing physicians' ability to identify alcoholics is to increase an awareness of the pattern of medical disorders and physical findings most likely to be associated with alcoholism: modest elevations in blood pressure (eg, 140/90 mmHg), complaints of insomnia (alcohol increases the ability to fall asleep, but fragments the sleep pattern and results in frequent awakenings), sexual complaints including impotence (a result of the direct effects of alcohol as well as interpersonal difficulties related to the heavy drinking), signs of anxiety and sadness (again related to the direct effects of alcohol as well as problems associated with even mild alcoholic withdrawal), and so on.<sup>3,13</sup> A number of severe disorders that are seen at significantly higher rates among alcoholics include cancer of the head and neck, esophagus, stomach, liver and pancreas as well as cirrhosis and a number of neurologic disorders including peripheral neuropathies, persistent dementias, and cerebellar ataxias.<sup>3</sup>

Although these four steps can help physicians identify patients most likely to fulfill alcoholic criteria, there is a need to recognize the actual pattern of major life problems related to alcohol, placing an emphasis on evidence of a job loss or layoff, or physical evidence that alcohol had harmed health, or breakup of significant relationship, or two or more arrests related to alcohol to establish a definite or probable alcoholism label. While there is no substitute for gathering a personal history from the patient and a resource person to establish the actual diagnosis, the steps

outlined above can help the clinician identify those patients for whom such individual histories may be most relevant.

Space constraints do not allow for an adequate discussion of the optimal method of confrontation and referral. Briefly, my philosophy is to use the patient's area of concern (eg, general health, sleeping problems, interpersonal problems, etc) and to inform the patient that he or she indeed has difficulties and that it appears as though a point in life may have been reached where alcohol is contributing significantly toward the problems. My suggestion is that total abstinence would be appropriate, but that this is a difficult goal to achieve on one's own. Therefore, I also recommend referral to Alcoholics Anonymous as well as an outpatient or inpatient alcohol treatment program in my area about which I am knowledgeable. I can reassure the patient that with help, the achievement and maintenance of abstinence is not beyond reach.

In summary, as physicians our levels of knowledge and expertise about alcoholism are in an important stage of flux. We have come a long way in the recognition of erroneous stereotypes, the high prevalence, contributory causes, and ways to help establish the diagnosis of alcoholism in our patients. It is up to us to incorporate this information into our daily practices. Doing so will save our patients a great deal of difficulty and will also help us to avoid the frustrations inherent in offering suboptimal and, at times, improper treatments that focus on secondary symptoms while ignoring the underlying diagnosis of alcoholism.

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