Striving for Abstinence in Alcoholic Pancreatitis: Act of Humanity, Economic Necessity, or Flogging a Dead Horse After All?

See "The recurrence of acute alcohol-associated pancreatitis can be reduced—a randomized controlled trial," by Nordback I, Pelli H, Lappalainen-Lehto R, et al, on page 848.

Excessive alcohol consumption (ie, alcohol abuse or dependency) is ranked third among causes of preventable death in developed nations and in the United States. In 2003, the worldwide prevalence of alcohol use disorders was estimated at 1.7%, accounting for 1.4% of the total world disease burden in developed countries.[1] In the United States, 18 million Americans (8.5% of the population age ≥18) suffer from alcohol use disorders.[2] Only 7.1% of these individuals received any treatment for their alcohol use disorders in the past year.[1,2] Problems related to the excessive consumption of alcohol cost US society an estimated $185 billion annually.[2] This short spotlight on the medical-social-economic relevance of the oldest exhilarating substance in human history underlines the importance of alcohol policy as an instrument of public health and calls on every physician taking care of a patient with alcohol-related diseases not only to treat the medical condition, but also to help the patient to stop drinking.

In no other medical field—except probably in psychiatry—are patients with alcohol-related diseases seen so frequently and treated so intensively as in gastroenterology. Approximately 29% of men and 9% of women hospitalized in general hospitals feature alcohol-related diseases.[3] Often, medical attention focuses on the physical consequences of chronic alcohol intake and neglects the fundamental disease of alcohol dependence. In this issue of GASTROENTEROLOGY, Nordback et al[4] address the question of whether in alcoholic pancreatitis patients receiving both standard medical therapy and treatment of the underlying alcoholic abuse influences the course of the disease. The authors found that repeated brief (30-minute) motivational interventions at 6-month intervals in the gastrointestinal outpatient clinic seem to be more efficacious than the single, standardized, in-hospital intervention alone in reducing the risk of recurrent acute pancreatitis over a 2-year period.

The study by Nordback et al[4] is remarkable because it is one of the few scientific investigations in internal medicine and gastroenterology[5] that targets both the underlying alcohol abuse and the alcohol-associated disease. Moreover, in pancreatology it is the first report of this kind, drawing our attention to a therapeutic need that seems to be neglected in scientific gastroenterology and pancreatology. As mentioned by the authors,[4] actual international guidelines for the diagnosis and treatment of pancreatitis do not contain any recommendation on how to diagnose and prevent alcohol-associated pancreatitis. The majority of authors restrict themselves with statements such as "abstinence is the cornerstone of therapy" or "all patients received clear advice to abstain totally from alcohol," without mentioning a validated method or intervention to achieve abstinence. One often forwarded excuse for this astonishing observation points toward the excessive labor of clinical gastroenterologists being too occupied with the treatment of the medical disease and its complications having no energy or time left to "play" or to consult the psychiatrist. As highly specialized physicians, they may not feel responsible for diseases out of their own specialty. Moreover, the problem of the patient's alcohol abuse may even be missed. In addition, some physicians are not well informed about the substantial evidence that alcohol dependency is treatable efficaciously (>50% of alcoholics are abstinent 2 years after starting treatment[6]). Thus, "therapeutic nihilism" seems out of place.

If we strive for optimal medical and highly cost-effective care of patients with alcoholic diseases, gastroenterologists should take up the challenge issued by Nordback et al.[4] Optimal care in gastroenterology should include effective prevention efforts. These efforts must address the burden of alcohol and drug problems among our patients. American trauma surgeons have demonstrated how medically and economically effective alcohol-related injuries can be treated in a way that future trauma admissions are reduced. Trauma centers have already developed highly cost-effective prevention programs including in-hospital brief interventions regarding alcohol consumption.[4] Similar preventive programs and studies can also be performed in our patients. In cooperation with our colleagues in addiction medicine, we should design long-term, randomized, prospective studies to delineate the effect of abstinence on the course of patients with alcoholic pancreatitis. Special emphasis should not only be given to the progression of pancreatitis, but also to the course of alcohol dependency and other related disorders.[2]

For future studies on alcoholic pancreatitis, the study of Nordback et al[4] serves as a good platform to start with. Some relevant questions are the following.

Can the Natural History of Alcoholic Pancreatitis Be Changed at All? Although it may seem surprising, even today the distinction between acute and chronic alcoholic pancreatitis cannot be readily made.[7] If we believe, however, that lifestyle changes will reduce recurrence and ultimately prevent progression of the disease, this issue may play a crucial role. The actual, widely accepted, necrosis–fibrosis hypothesis of alcoholic pancreatitis suggests that the occurrence of repeated episodes of acute pancreatitis with cellular necrosis results in the development of chronic pancreatitis as the healing process replaces necrotic tissue with fibrosis.[8] If this hypothesis is true, there would be a good chance for abstinence to alter the course of disease in early alcoholic pancreatitis. However, if the first clinically "acute" alcoholic pancreatitis is already based on underlying chronic pancreatic changes,[9] then it would be difficult to alter or to stop the progressive disease by alcohol abstinence.

So far, the impact of abstinence on alcoholic–chronic–pancreatitis has been judged controversially. Most studies have been performed in later stages of the disease (for review see Strum[10]), and no structured interviews or other psychological interventions to motivate the patient to stop alcohol use were carried out in these studies. The effect of abstinence on quality of life, improvement of social interactions, and capacity to resume work were only rarely reported. Cessation of alcohol use often allows resumption of normal life and diminishes the death rate,[10] whereas continued alcohol abuse coupled with smoking increases mortality.[11] Alcohol cessation seemed to attenuate progression of exocrine dysfunction,[8] and continued drinking hastened the development of pancreatic dysfunction. Similar results were found for pancreatic pain.[10] In 1 study, the remission of pain did not significantly differ in subjects who continued to drink as compared with those who stopped.[8] Hence, the question arises if there is a point of no return for the development of chronic pancreatitis beyond which the progression cannot be stopped. At present, no valid, clinical parameters to determine such a point of no return are available.

What Is the Ideal Observation Period to Determine Efficacy of Intervention in Acute Alcoholic Pancreatitis? The observation period of 2 years by Nordback et al[4] might be too short; they themselves observed in an earlier study[4] that >50% of recurrent pancreatitis cases occurred after >2 years. Another Scandinavian group observed a mean interval between the first and second admission owing to acute pancreatitis of approximately 1.5 years.[12] In a large, European, multicenter study, patients with acute alcoholic pancreatitis developed a second attack of pancreatitis in only 30% of cases during a 5-year period.[13] These findings do not diminish the value of the present study. Nevertheless, they clearly point to the need for long-term studies to ensure correct estimates for changes in recurrence rate and disease progression.

Because Smoking Is an Important Contributor in the Development of Alcoholic Pancreatitis, Does Cessation of Alcohol Intake Have to Be Accompanied by Smoking Cessation? Up to 90% of alcoholics are smokers who, in general, smoke heavily, become addicted to nicotine more heavily, and are less successful at quitting smoking than other smokers. This puts them at a much higher risk for certain cancers and cardiovascular diseases that develop more readily in the presence of both alcohol and nicotine.[1,2] In chronic pancreatitis, smoking and drinking at the time of diagnosis are major independent predictors of mortality.[11] Heavy smokers are diagnosed with pancreatic disease approximately 5 years earlier than nonsmokers.[14] Recent data indicate that smoking alone can induce chronic inflammation of the pancreas.[15] Hence, it may be surmised that alcohol is the prerequisite inducing acute pancreatitis, whereas continuous smoking is the crucial factor feeding the inflammatory process. The design of future abstinence studies should reflect the combined effects of alcohol and smoking on the pancreas.

What Is the Typical Course of Alcohol Dependency? What Are the Success Rates of Long-Term Therapy and Brief Interventions? Alcohol dependency is a chronic, relapsing disorder. For several years inpatient treatment ("long-term therapy") was the key element of rehabilitation for alcohol-dependent patients (Table). By analyzing relapse situations, social competence training, social reintegration, and personality development, abstinence rates of 46% after 4 and 40% after 10 years have been accomplished (for review see Heinz[6]). However, long-term psychotherapeutic interventions are not applicable or indicated in every case; and only a small minority (about 8%) of drinkers receive these complex and costly treatments.[16] It was a somewhat astonishing discovery of the last 15 years that brief interventions, which require a time investment of 10 to 60 minutes within 1 to 5 sessions have been shown to produce a significant, sustained reduction in alcohol use.[17] Brief interventions are applicable with little training[18] and consist of an exact physical and psychological examination of the patient and of professional feedback of the personal risk and impairment. It emphasizes the patient's personal responsibility for change and accepts the patient's autonomy in decision making; however, clear advice as to what the professional would suggest should be offered given his knowledge of the patient's alcohol-related problems.

A recent metaanalysis published in *Cochrane Database Systematic Reviews*[19] analyzed 21 randomized, controlled

Table. Treatment Options to Achieve or Maintain Abstinence in Alcohol Dependence

	Duration	Intervention
Brief motivational interventions	1–6 sessions for 15–60 minutes over 3–12 months	Feedback of personal risk or impairment; emphasis on personal responsibility for change; acceptance of the patient's autonomy in decision making, clear professional advice, enhancement of client self-efficacy or optimism
Anticraving medication	3–12 months	Pharmacologic relapse prevention treatment with naltrexone, acamprosate, disulfiram (topiramate, ondansetron, baclofen, varenicline)
Qualified detoxification	3–6 weeks	Physical withdrawal, treatment of physical and psychiatric comorbidity, psychoeducation, motivational intervention, social support
Long-term treatment	2–6 months	In- or outpatient rehabilitation programs in specialized clinics; psychotherapy, psychoeducation, sociotherapy
Self-help groups	Weekly meetings, several years	Includes Alcoholics Anonymous (AA), other 12-step programs; encouraging a personality change sufficient to recover from alcoholism by admitting the inability to control one's addiction, examining past errors, and learning to live with a new code of behavior

trials including about 7300 patients. They found that participants receiving 1 to 4 brief intervention sessions reduced their alcohol consumption compared with the control group by 41 g/wk. The effect was even larger in the male subgroup (57 g/wk); meta-regression showed a trend toward increased reduction in alcohol consumption, dependent on the duration of treatment exposure. Even if this reduction in alcohol intake may not sound very impressive, at the population level it will drastically reduce the incidence of alcohol-related diseases. Based on these data, however, brief motivational interventions in the secondary prophylaxis of alcoholic pancreatitis should reach the significance of dietary guidance in diabetes.

Thus, the results of Nordback et al[4] demand (1) long-term, multidisciplinary, prospective studies of the treatment of alcohol dependency or abuse (including brief interventions and possibly anti-craving medication [eg, acamprosate, naltrexone]) in patients with alcohol-related diseases of the gastrointestinal tract, the liver, and the pancreas; (2) allocation of professional staff for brief interventions in general hospitals either independently employed professionals or liaison psychiatrists; (3) increased educational efforts in medical school as well as during continuing medical education to enable physicians to recognize alcohol abuse and dependence in their patients. This training should focus especially on general practitioners because they see up to 75% of alcoholics annually[16]; and (4) motivation of physicians to include their patients in preventive programs and longitudinal studies; however, it should not be forgotten that new ways of compensation for the additional work load have to be launched.

Finally, treating alcohol dependency is an act of humanity as well as of economic necessity. Even if the course of alcoholic pancreatitis cannot be definitely changed, the diminution of alcohol intake serves additional goals such as risk reduction regarding other alcohol-related somatic disorders, increase of social functioning, psychic stabilization, and enhancement of quality of life.

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Conflicts of interest

The authors disclose no conflicts.

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