

Alcohol Fact Sheet

Alcohol and Withdrawal

Alcohol Withdrawal Syndrome is a cluster of symptoms observed in persons who stop drinking alcohol following continuous and heavy consumption.

Milder forms of this syndrome include tremor, seizures, and hallucinations. Typically these normally occur within 6-48 hours after the last drink.

A much more serious syndrome, delirium tremens (DTs), involves profound confusion, hallucinations, and severe autonomic nervous system over-activity. These symptoms can typically begin between 48 and 96 hours after an alcoholic's last drink.



Understanding Withdrawal

In the central nervous system, alcohol in concentrations high enough to intoxicate humans interferes with the functioning in the body's nerve cells. Alcohol enhances the processes that tell these nerve cells to be restrained.

As a result, alcohol acts as a non-specific biochemical inhibitor of activity within the body's central nervous system.

During withdrawal from alcohol, the central nervous system experiences an over-activation

Clinical researchers have measured this over-activity in patients. The conclusion is that **even patients with moderately severe alcohol withdrawal can experience nervous**

system over-activation. This nerve cell stimulation increases production of the adrenal hormones, cortisol and norepinephrine. Both of these hormones in extreme amounts can be extremely toxic to nerve cell functioning.

Moreover, cortisol can also damage neurons in the hippocampus — a part of the brain that is thought to be particularly important for memory retention and control of affective states. Thus, repeated untreated alcohol withdrawals may lead to permanent damage of the hippocampus.

The implication here is that repeated untreated withdrawals from alcohol have a cumulative effect. This can lead to more medically serious withdrawals in the future.

Many physicians now believe that chronic alcoholics who cannot

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maintain abstinence should receive pharmacotherapy to control withdrawal symptoms. This will aid in reducing the potential risk for further seizures and possible brain damage.

Research suggests that repeated non-medical withdrawals produces future ones of increasing severity

Early Research/Medication Advances

Isbell's classic 1955 study has shaped our understanding of alcohol withdrawal. He found that **alcohol-related seizures occur only after stopping heavy drinking**. Over the years, clinical research findings have supported this interpretation of withdrawal.

Physicians traditionally have used benzodiazepines by administering decreasing doses over the period of alcohol withdrawal.

In 1988, Rosenbloom recommended the use of intermediate half-life benzodiazepines. Since these drugs do not linger in the system, they allow for doses being more easily adjusted to the patient's medical response.

Pharmacological treatments for alcohol intoxication, withdrawal and dependence, suggest that the current drug of choice for treating withdrawal is diazepam (Valium).

To date, evidence suggests there has been limited success with non-drug detoxification of ambulatory patients. Usually, this outpatient treatment consists of limited medical screening along with providing limited social support during the patient's withdrawal.

Most experienced physicians now use medications to diminish the symptoms of alcohol withdrawal

Advantages of Outpatient vs. Inpatient Detoxification

A recent study by Hayashida (1989) compared outpatient detoxification with inpatient detoxification.

The research concluded that while outpatient medical detoxification for some patients might be "an effective, safe, and low-cost treatment for patients with mild withdrawal symptoms. Yet, there still remains a large potential for significant medical risk.

Clinical decisions regarding outpatient detoxification must continue to rest upon sophisticated medical screening of patients

Procedures underlying this decision making must include emergency procedures for immediate transfer should patients run into medical complications.

At the 6-month follow-up, **those people treated as medical inpa-**

tients reported significantly greater improvement in their drinking behavior, despite having been measured as more impaired than the outpatient group at the time of admission.



Outpatient detoxification may be initially cheaper for some alcoholics. However, it is not clear to what extent serious complications may be left undetected when patients are placed in a non-medical setting.

These issues could lead to many more severe and expensive medical problems later, concurrent with possible medical/legal liability issues. When using sedatives to treat alcohol withdrawal, understanding the relative advantages and disadvantages of different drug administration techniques is important.

Administering drugs simplifies this treatment process, while freeing patients and staff to focus on the medical recovery process.

Existing medical conditions, such as chronic obstructive pulmonary disease, must also be medically monitored in an appropriate setting.

While non-drug detoxification offers a reduced need for medical staff, this practice represents a major medical risk to patients.

Data from these studies indicate inpatient detoxification services are more effective than current outpatient models

The Path to Healing

Reaping the benefits of treatment begins by recognizing the signs of alcohol addiction. This step is best facilitated by having a comprehensive assessment by a qualified healthcare professional. Although alcohol addiction can be diagnosed by primary care physicians, most often the physician will refer the patient to a psychiatrist, psychologist, counselors, or other professionals specializing in addictions.

Treatment is a partnership between the patient and the healthcare provider. It is important that informed consumers understand their treatment options and discuss all concerns with a treatment provider as they arise.



A key element of Rimrock's treatment is the active involvement of patients in the management of their own illness.

Empowerment is developed through the use of patient education, skills training and a strong emphasis on encouraging the individual patient to accept responsibility in managing their own condition. Along with the empowerment of our patients, is the emphasis on a treatment regimen which includes comprehensive clinical assessments and individualized patient plans.

Another important part of Rimrock's program is the emphasis we place on the integration of a broad spectrum of community, health, and human services for the benefit of the patient. This includes addressing

patient's physical, psychological, social and economic needs, which improves the likelihood of a successful treatment experience.

Healthcare services should be readily available to those persons needing treatment for addictions, since taking advantage of opportunities when they are ready for treatment is often crucial. Many times, patients can easily be lost in red tape if treatment is not immediately available or is not readily accessible.

Counseling (individual and/or group) and other behavioral therapies are critical components of effective treatment for addiction. In therapy, patients address issues of motivation, build skills to resist drug use, replace drug-using activities with constructive and rewarding non-drug-using activities, and improve problem-solving abilities. Behavioral therapy also facilitates interpersonal relationships and the individual's ability to function in the family and community.

Successful recovery principles in addiction treatment are characterized by the integration of personal, family, professional and other community resources toward the goal of enhancing the duration and quality of life of those we serve.

For further information about treatment for Alcoholism, please call Barbara Hansen, Rimrock Foundation Admissions Supervisor at 1-800-227-3953 or 1-406-248-3175.

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