Diagnosis and Treatment of Drug Abuse in Family Practice

Treatment

Providing treatment requires an understanding of the natural history of recovery from addiction. Recovery from drug addiction and/or alcoholism is a long-term process that often requires multiple attempts and many behavioral changes. Most people relapse several times before achieving long-term abstinence, regardless of whether the drug of abuse is nicotine, cocaine, heroin or other addictive substances. People who do achieve long-term abstinence can, in stressful situations, relapse after years of abstinence. The long-term relationships between family physicians and patients and their families may make a significant difference in supporting a patient’s recovery efforts.

In discussing options with the patient, the physician should recommend a comprehensive treatment plan. Some patients may resist those choices, often preferring a less intensive approach. Others may refuse all outside help, insisting that they can "kick the habit" on their own - which represents another form of denial. In either case, negotiation with the patient is more effective than a protracted discussion. Sometimes, it is possible to enter a contract in which the patient agrees to undertake a more intensive approach if the first set of treatment options - those preferred by the patient - fails. Regardless of which approach the patient chooses, the physician should be supportive.

Brief Interventions

Illicit drug abusers may sometimes respond to brief interventions such as those used for smoking or alcohol abuse. In some cases, this approach may successfully modify the patient’s behavior by itself. In many others, failure may be used as a springboard to convince the patient of the need for more extensive treatment.

The goal of a brief intervention is to provide the patient with information about the disorder and suggestions to help modify his or her behavior. The physician should stress the possible negative consequences of the patient's drug use, both currently and in the future. Giving the patient educational materials may help reinforce these points. Then the physician can make a specific recommendation for cutting down or stopping. The patient can return in a month to report progress. If the patient has been able to control the habit sufficiently to reverse the negative consequences, no further treatment may be necessary. However, if the patient cannot stay within the agreed-upon limits, a more intensive therapeutic strategy is warranted, such as participation in a 12-step program or other self-help groups.

Detoxification

Many drug-dependent patients can safely undergo withdrawal as outpatients. This approach is less expensive and less disruptive of the patient’s life than inpatient therapy. Moreover, it allows withdrawal to be completed in the same environment in which the patient must continue to live, work

and remain abstinent.

To qualify for outpatient detoxification, the patient must clearly agree to abstain from using any mood-altering agent, other than those prescribed by the treating physician. He or she must also agree to participate in a treatment program. The choice of program depends on personal finances and community resources. During the first few days, the patient also needs a sober and responsible family member or friend who will encourage participation in a program, watch for serious signs of withdrawal, assist with medications, get the patient to the physician's office and dispose of any alcohol or drugs in the patient's home.

The physician should evaluate the patient every day until he or she has started a treatment rehabilitation program and the risk of withdrawal is minimal. This interval may range from three days for alcohol abuse to 10 days for methamphetamines, opioids and cocaine. Physician monitoring is essential on the weekend, when the risk of relapse is greatest. No more than a two- to three-day supply of medication should be dispensed at any visit, to preclude the misuse of medication and possible overdose.

If the criteria for outpatient therapy are not met, inpatient or residential therapy may be indicated. This has the advantage of placing the patient in a protected setting where access to substances of abuse is restricted (although not necessarily eliminated). The withdrawal process may be quicker and safer because the patient can be monitored more closely and treatment can be more finely tuned.

Hospital treatment is more likely to be needed for withdrawal from sedative drugs, such as alcohol, barbiturates and benzodiazepines. Withdrawal from these drugs can be life-threatening. Hospital treatment is also indicated for patients who have a very high tolerance for the substance of abuse or who developed seizures, delirium or psychosis during a previous withdrawal. Medical indications for inpatient therapy include a history of recent head trauma or cerebrovascular accident, acute abdominal pain, jaundice, liver failure, electrolyte imbalance, pneumonia, sepsis, dehydration, AIDS, arrhythmias, angina, ischemic heart disease, hypertension, severe respiratory disease and age greater than 65 years.

Hospitalization is almost never indicated for opiate detoxification, which is best accomplished through an outpatient methadone program. Hospital recovery programs of fixed stays of 14 to 28 days have been overutilized, with scant evidence of benefit for any but a few carefully selected patients.

Safe detoxification (outpatient or inpatient) is labor-intensive, and physicians often find it difficult to obtain commensurate reimbursement. That is why many state and local governments have created specialized facilities or programs for low-income patients who need these services. Each state receives "block grant" funding from the Public Health Service to help meet these needs. A call to the local public health department, state drug abuse and/or mental health agency or the national hotline will lead the family physician to whatever services are available locally. Admission can often be facilitated by the family physician who agrees to continue seeing the patient for other medical problems in coordination with the public program. In areas where there are no other services, the family physician may be the only qualified provider, and telephone consultations may become vital. The patient's family and peers can be used as a therapeutic network to join the patient at intervals in therapy sessions.[35]

Hospital Treatment

With admission to the hospital for withdrawal, the patient should undergo an evaluation, including urine drug screens, to determine whether he or she has been using other drugs not previously mentioned.[36] Detoxification is initiated to withdraw the patient from the substance of abuse and to restore cognitive ability. No other treatment goals should be addressed until both goals are achieved.

At that point, a major goal of therapy is to help the patient identify the consequences of his or her experiences and to understand the risks of relapse. Another goal is to address emotional issues such as hopelessness and despair over the seemingly inevitable progress of the addiction and grief and remorse associated with comprehension of past behavior. Barriers to recovery are identified, including internal barriers such as the patient's personality or personal resources and external barriers such as the home or work environment. The patient is protected from self-destructive or other violent behaviors.

Because dishonesty, violence and risk-taking are survival skills in active addiction but become self-destructive in recovery, new sets of behaviors are introduced. Twelve-step and other recovery programs describe a set of new behaviors that allow the addict to deal with the consequences of the past and the problems of the present. Involvement with groups such as Alcoholics, Narcotics or Cocaine Anonymous, Rational Recovery or Women for Sobriety should begin during hospitalization and be maintained after discharge; decreasing use of such support groups often leads to relapse.

Short-term hospitalization is useful as a means of facilitating entry into long-term treatment. By itself, however, hospitalization has no demonstrable effect on long-term recovery.[37]

Pharmacotherapy

Traditionally, the physician's role in pharmacologic treatment of drug abuse has largely been limited to the management of withdrawal symptoms and medical complications. However, clinical and neuropharmacologic advances provide a greater opportunity for family physicians to use their therapeutic expertise in the collaborative treatment of addictive disorders

Sedative Withdrawal

When someone has been taking central nervous system depressants for a long time and the use is no longer medically indicated, or when there are signs of abuse or addiction (such as a pattern of increasing use, periods of intoxication, psychoactive prescriptions from multiple doctors, functional impairment and unsuccessful attempts to decrease or discontinue the dose), detoxification may be necessary.

Sedatives associated with withdrawal include alcohol, both short- and long-acting benzodiazepines, barbiturates, methaqualone (which is no longer legally available in the United States), glutethimide, chloral hydrate and meprobamate.

The prototypic withdrawal syndrome occurs with cessation of alcohol use; the patterns seen with other sedatives represent small variations on alcohol withdrawal. Minor (stage 1) withdrawal is characterized by restlessness, anxiety, sleeping problems, agitation and tremor; other signs include tachycardia, low-grade fever, diaphoresis and elevated blood pressure. Major (stage 2) withdrawal involves the signs and symptoms associated with minor withdrawal plus visual or auditory hallucinations. Whole-body tremor, pulse exceeding 100 per minute, diastolic pressure exceeding 100 mm Hg, pronounced diaphoresis and vomiting may also be present. Delirium tremens (stage 3) may

be accompanied by a temperature exceeding 37.8 degC (100 degF) and disorientation to time, place and person, as well as global confusion and inability to recognize familiar objects or persons. This is a medical emergency, with a mortality of 2 to 5 percent,[38] and should prompt a thorough medical evaluation for other physical problems.

Alcohol withdrawal seizures may occur 12 to 48 hours after the last drink; seizures from barbiturates usually occur within 72 hours after the last use. Withdrawal from long-acting benzodiazepines may not manifest for up to a week or more.

Detoxification of patients dependent on sedatives should be done with extreme care, because abrupt withdrawal may be associated with potentially life-threatening effects. Detoxification involves either supervised stepwise dose reduction or substitution with a cross-tolerant, longer-acting substance (such as diazepam or phenobarbital) that has less risk of severe withdrawal symptoms. The cross-tolerated drug is given in gradually tapering doses. The goals of treatment are to relieve symptoms, prevent stage 2 or 3 withdrawal, prevent seizures, minimize the chance of a new dependency on the medication used for withdrawal and minimize the toxicity of the medication. It should be noted that the triazolobenzodiazepines (e.g., triazolam [Halcion] and alprazolam [Xanax]) may not be completely cross-tolerant with other sedatives. Patients dependent on alprazolam require a particularly gradual tapering from their initial dosage.[39]

Stimulant Withdrawal

Risk factors for severe withdrawal from stimulants include use of cocaine or methamphetamines and smoking the drug or using it parenterally. Stimulant withdrawal syndrome is characterized by depression, hypersomnia, fatigue, headache, irritability, poor concentration, restlessness and, in severe cases, suicide attempts. Drug craving is prolonged and intense. Paranoia and acute psychosis may occur. Most often, no treatment other than support is needed for the initial phase of stimulant withdrawal.

Pharmacotherapy is determined by the specific symptoms. Haloperidol (Haldol) and thioridazine (Mellaril) are the drugs of choice for treating a patient with symptoms of paranoid psychosis. An antidepressant such as desipramine (Norpramin) or fluoxetine (Prozac) may be useful in treating depressive symptoms; this therapy should be continued for three to six months, but because of the risk that the drug may be used in a suicide attempt, no more than one week’s supply should be given at a time. Panic attacks may be treated with an antidepressant or a benzodiazepine. Drugs being investigated for the treatment of generalized withdrawal symptoms include adrenergic agonists and calcium channel blockers.

Opiate Withdrawal

The severity of opiate withdrawal may be placed into one of four categories. Grade 0 opiate withdrawal is characterized by drug craving, anxiety and intense drug-seeking behavior; grade 1 by yawning, sweating, lacrimation and rhinorrhea; grade 2 by mydriasis, gooseflesh, muscle twitching and anorexia; and grade 3 by insomnia, increased pulse, respiratory rate and blood pressure, abdominal cramps, vomiting, diarrhea and weakness.

The preferred drug in the treatment of opiate withdrawal is methadone, if an opiate agonist is to be used; if methadone is not available, some symptomatic relief may be obtained with clonidine (Catapres). Clonidine is a centrally acting alpha-adrenergic agonist familiar to most physicians as an antihypertensive agent. As an agent for opiate withdrawal, clonidine suppresses restlessness, lacrimation, rhinorrhea and sweating. Because of the ease with which clonidine tablets can be sold on

the street for self-treatment of opiate withdrawal, many physicians prefer the use of clonidine patches for this indication. Because clonidine does not treat some of the symptoms associated with severe withdrawal, other nonscheduled medications may be indicated when attempting to manage opiate withdrawal without the benefit of methadone. These include promethazine (Anergan, Phenergan, etc.) or hydroxyzine (Atarax, Vistaril, etc.) for nausea and vomiting, loperamide (Imodium, Kaopectate, etc.) for diarrhea, and methocarbamol (Robaxin) for muscle cramps and joint pain.

12-Step Programs

After detoxification, almost every addict will need a combination of professional (group or individual) counseling plus attendance at a self-help group to maintain sobriety. The self-help support approach to treatment of alcohol and drug dependence began in 1935 with the development of Alcoholics Anonymous (AA), the first and largest 12-step group. Millions of people believe they have maintained sobriety and health through these programs.[40] Narcotics Anonymous (NA), Cocaine Anonymous (CA) and other offshoots of AA use the same 12-step model.

In general, any patient who has continued alcohol or drug use despite significant consequences (e.g., family and health problems) may benefit from a 12-step approach. The main message of these programs is that addiction is a chronic relapsing disorder with no cure, and recovery is an ongoing process that needs continual work. Physicians can encourage the patient to participate and can facilitate the family's efforts to support the patient and participate in family-support groups. The physician should also frequently review the patient’s progress with him or her.

The physician as well as the patient must understand that 12-step programs are not religious organizations. References to God and the Higher Power are generic spiritual terms that do not refer to a particular religion. The higher power may be conceptualized as nothing more than the group itself.

Other Self-Help Groups

For those who still are unable to "resonate" with the spiritual approach of AA or NA, other self-help groups are available such as Rational Recovery (RR), which emphasizes a self-actualizing cognitive-behavioral approach, or any of the other groups listed in Resources of Information About Drug Abuse.

Outpatient Therapy

Another facet in the physician's role is to prescribe adjunctive pharmacotherapy in cooperation with an outpatient treatment program, or to continue to follow patients in consultation with such programs. Opioid-dependent patients can benefit markedly from structured programs that include the use of drug agonists or cross-tolerant drugs, which are less harmful than the primary drug. The only legal medications for this indication are methadone and levomethadyl acetate (Orlaam). The most commonly used agent is methadone, a synthetic mu-opioid agonist with a sufficiently long duration of action so that it may be given once a day. Usually patients receive the daily dose in a clinic. Some patients may be given take-home doses to avoid the disruption associated with visiting a clinic every day. However, this is inappropriate for poorly stabilized and/or poorly monitored patients, who may sell take-home doses of methadone.

Methadone maintenance has been effectively and safely used to treat opioid addiction for about 25 years.[41] Patients develop nearly complete tolerance for the analgesic, sedative and euphorigenic

effects of methadone at an established maintenance dosage. Thus, a methadone-maintained patient requires and should receive additional analgesics to treat pain that would require such treatment in a nonaddict. Nonnarcotic analgesics are indicated if the pain is not severe. Pure opioid-agonist drugs are appropriate for more severe pain. Mixed agonist/antagonist drugs such as pentazocine or butorphanol should be avoided. The quantity and duration of treatment must be closely monitored. However, such patients should be expected to require higher doses and sometimes more frequent dosing intervals because of the high tolerance induced by good methadone dosing practices.

Like methadone, levomethadyl can produce stable opioid effects when ingested orally. The U.S. Food and Drug Administration (FDA) recently approved the use of this synthetic opiate for the treatment of patients with heroin addiction. Its long duration of action may permit dosing three times a week, thereby eliminating the need for take-home doses. In clinics that already dispense methadone, levomethadyl will be increasingly available. For full activity, this narcotic agonist requires first-pass hepatic activation; therefore, it is pharmacokinetically unique among the currently marketed opioids in that it has a slower effect when injected than when taken orally.

Clinics licensed to treat narcotic addiction are the only facilities legally allowed to prescribe and dispense opiates (methadone or levomethadyl) for the treatment of addiction. However, office-based physicians can sometimes obtain approval from the FDA and the Drug Enforcement Administration to prescribe methadone to a limited number of patients, especially in areas where there are no licensed programs. Methadone can be administered to hospitalized patients if they are already enrolled in methadone maintenance or are being detoxified with methadone. Hospitalized patients on methadone maintenance should seldom be withdrawn from opiates, and then only in close consultation with their program's physician. Outpatient treatment programs without medication are most useful for patients addicted to drugs other than opiates. Family physicians may find the long-acting opiate antagonist naltrexone (Trexan) useful for highly motivated patients who have someone to directly observe them taking medication several days a week.

Long-Term Residential Treatment

For patients who are not candidates for methadone maintenance or not successful with short-term detoxification followed by long-term outpatient treatment, another treatment option is a long-term residential therapeutic community (TC) or other types of long-term residential treatment programs. The TC is the most well established among residential drug treatment modalities; its success is related to the fact that it offers a unique form of stability and an opportunity for the patient to deal with the more complex problems of recovery.[42] The efficacy of the TC varies widely; in general, residents who participate for at least three months improve markedly. This treatment can be effective for the polydrug abuser. In patients who have participated in a TC program, the incidence of criminal activity is reduced and full-time employment increased three to five years after program completion.

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