

Perhaps the most important advancement in the treatment of crack cocaine addiction is one that has brought treatment efficacy from less than 10% to as high as 80%. Developed by Dr. George Drake, this dramatic increase in effectiveness has been brought about by recognition of the fact that:

1) Addiction to crack cocaine is, in part, a physical disease and must be treated as such. This is done through the use of dopamine agonists and re-uptake blockers in the early stages of treatment and the use of amino acid precursor loadings to rebuild the dopamine supply so heavily depleted during cocaine use.

2) A healing process must be undertaken that includes:
a) Detoxification under close medical attention until physical stability is reached. This usually takes up to ten days.

b) Inpatient or residential/day care intensive counseling and medical monitoring until psychological stability has begun. This may take two or three months. Nutrition is often a critical factor in this phase.

c) Continuing (e.g. halfway house) care and establishment of twelve step activities as a routine. In this phase, the patient/client is trained or retrained in becoming a useful member of society and given the tools to maintain his/her sobriety. This phase is often extended to a "three-quarter way house" (usually an apartment) in which the client has total responsibility for himself or herself but has a "home base" in which there are only fellow recovering persons and no drug pushers.

d) In extended care each client must rejoin society at large and function independently. (Twelve step activities may last the rest of the client's life.)

A prime example of this process is found in the work of several cooperating organizations in Houston, Texas. It begins in a hospital in the heart of the city. Any crack cocaine addict who wishes to get *clean and sober* can contact them or the nearby cooperating halfway house, at any hour. If there is a hospital bed available, he or she is admitted immediately. If one is not available, but one is expected soon, the person is "warehoused" in the halfway house facility. As soon as admitted, the patient is put under the care of the addiction recovery team.

The recovery team's treatment regimen begins with anti-craving medications. Patients addicted to crack cocaine usually suffer from severe craving which both interferes with their ability to participate in the treatment process

and reduces their likelihood of remaining in treatment. The cause of this severe craving is a significant depletion of the neurotransmitter, dopamine, which is stored in the hypothalamic area of the brain.

The team uses five (5) medications within the American Society of Addiction Medicine's four treatment levels.

A.S.A.M. Level I

(1) **Desipramine**, is given in doses ranging from 100-250 mg daily. Desipramine's anti-anxiety qualities have been proven by double-blind studies, conducted in 1987, to increase the sobriety rate of recovering cocaine addicts from 15% to 60%. They were conducted by Frank H. Gawin, M.D., Professor of Psychiatry at Yale and Herbert D. Kleber, M.D., Professor of Psychiatry at Yale.

In as much as the Desipramine does not take effect for two weeks, the team uses (2) **Bromocriptine** several times daily in dosages of 1.25 to 2.5 mg two to four times daily and PRN during the two weeks. When used PRN, it will eliminate craving within 20 minutes for approximately 4 to 6 hours. Bromocriptine is a dopamine agonist thus acting like dopamine at the postsynaptic receptor area. Bromocriptine is administered four to six weeks during the hospital stay and after discharge. This use of Bromocriptine was developed by Mark Gold, M.D., Director of Research, Fair Oaks Hospital, Summit, New Jersey. (Its use is controversial as some researchers believe it to possibly be addictive.)

Three times daily, the team uses an amino-acid and vitamin supplement, (3) **Neu-Replenish**, the primary ingredients of which are 300 mg of l-phenylalanine, and 200 mg of l-tyrosine. These act through precursor loading to increase dopamine availability levels. This adjunct to therapy was formulated by Dr. Kenneth Blum, Department Head for Substance Abuse Recovery at the University of Texas Health Science Center in San Antonio, Texas. Dr. Blum is known internationally for his discovery of the genetic link between the D₂ receptor and a propensity for alcoholism.

The medication, (4) **Amantadine**, is given for ten days only, at the onset of treatment, and acts by enhancing the release of active dopamine from its storage sites. Amantadine is given in the dosage of 200-400 mg. (It is similarly controversial)

The medical staff feels that none of the above medications have addictive properties when properly used. There are minimal side effects and these are controllable through reduced dosages. The team has found the medications have afforded an early window of opportunity for patients to receive and

comprehend treatment. There has also been a dramatic reduction in discharges against medical advice.

In addition to the above medications and adjuncts to therapy, patients receive from a physician, a minimum of two hours weekly of didactic education on the use and effects of these medications. The medical staff and its associated counselors begin use of twelve step model counseling as soon as the patient is physically able.

A.S.A.M. Level II

As soon as this detoxification program is complete the patient becomes a client/resident of the halfway house. For eight weeks the clients are transported daily from there to an outpatient licensed counseling facility. During this eight week program, each day includes eight hours of psychological therapy. The counseling is generally of the twelve step model and is designed to achieve psychological stability along with the physical stability being sought by the medical treatment. This therapy is interspersed with physical treatment including, on a patient specific basis, the use of the above antidepressants and precursor loadings, and also, as stress is a major cause of slipping, an amino acid stress effect inhibitor, (5) **Neu-Becalm'd™** is used. It is an amino acid and vitamin formulation containing, primarily, 150 mg each of d-phenylalanine, l-phenylalanine, and l-glutamine. This adjunct to therapy is designed to help prevent stress from causing the patient to go back to cocaine and alcohol, "his/her old stress medication". (For details call 1-800-232-7563.)

A.S.A.M. Level III

At the end of the professional counseling program the patient becomes the full time client of the halfway house program. The patient continues to be given the nutritional supplement, **Neu-Becalm'd**. The Level III program usually takes about eight to ten months. However, it sometimes requires less than six months and occasionally lasts a year or more. The client does not leave until he or she is ready in his or her own opinion as well as that of the program leaders.

The halfway house program begins with the assignment of simple tasks leading to independence within the facility. To remain in the program the client's sleeping and personal items area must be kept neat and clean. The client must cook for himself or herself and clean what ever kitchen ware is used in the process. The clients earn living room, television, etc. privileges by proving their ability to live

with the other clients in the program on a friendly, cordial basis. The older, more experienced and stable clients help the newer ones. Attendance in twelve step programs is mandatory, and attendance at the meetings of the religion of the client's choice is strongly encouraged.

As soon as the client is able, he or she begins working, even if only for two hours a day. From this point forward, take-home pay is split three ways: 1/3rd for the client, 1/3rd for the halfway house and 1/3rd paid toward the client's hospital bill (or what ever portion was not covered by insurance.) The hospital portion is continued until it is paid off. The halfway house 1/3rd continues until it reaches a maximum of \$600 per month.

The most important part of the counseling at the halfway house is to prepare the clients for a job and then help them to learn how to keep it. In some cases the clients may be highly educated people who must learn how to handle the stress of professional work without returning to the use of cocaine when things get difficult. More often the clients have gone from their parents' home at an early age and have little education or working skills. Some even must be taught to read! All of this training is made available to them through the help of a wide variety of charitable organizations, government agencies, and, of course, other clients who can help.

Most of the clients need help in how to interview for a job. This is one of society's most difficult and stressful interfaces, and yet everything begins with it. Time after time the entry level worker must face rejection at a time when building self confidence is already a most important and difficult task. With the help of the halfway house staff, nearly all finally succeed in getting through it.

Next, the client must work through the paradox of learning competitive teamwork. During the time he or she was a practicing addict, the client learned the ability to control others to a fine art. Each addict becomes ingrained with the idea that rules are only for those "dumb enough" to get caught. In short, the idea of working with others for mutual benefit and helping others just for the sake of doing it are very foreign concepts to the recovering addict. Learning or, in most case, relearning these ideas is part of *a long healing process*.

The healing process began with the taking of responsibility for maintaining one's self, sleeping area, cooking and eating facilities. If the client does not, the mess is deleterious to everyone else in the facility and it will cost the client valued privileges. Training continues

with salary sharing, as he or she begins to earn one, with the halfway house so that it can continue to house, clothe, and feed the client.

The client's responsibility to others is made even more clear as the debt to the hospital is paid off. And, ultimately, the client pays for more than his or her keep so that others less far into the program can be taken care of as the client was cared for in his or her early days of sobriety. These same new clients that the client is helping in a financial way are also a part of a new family, the staff and clients he or she has met and worked with at the halfway house.

The new family concept is a major part of the healing process. It becomes a group of people who are important as a support group. Further, their very existence provides a strong reason not to slip as doing so would be an affront to them. Those who do slip along the way must return to whatever stage is appropriate from which they can try again.

Most of the clients leave the halfway house to return to active society and maintain their sobriety. In the average case the program cost, above that paid for by the client, is about \$100 per month. Donations of *day old* food from groceries has brought this to less than \$10.00 per month.

ASAM Level IV

The client is now ready to enter a "three-quarter way" house. That is, to live independently in an apartment complex containing only recovering Level IV clients. Organized treatment at this level takes the form of weekly or bi-weekly group therapy and at least three support group (12 step) meetings per week. The people the client meets here become an important part of his or her new family.

In this ASAM Level of independence, the use of Neurecalm'd cannot logically be required. However, experience has shown it to be extremely important. And, its use, in times of stress, is highly recommended for the next ten years.

The above combination of programs have had year to year success rates varying from 60 to over 90 percent. This remarkable outcome is believed to be linked to an overall program which maintains a long term physical and psychological healing process in accordance with the A.S.A.M. criteria and, where necessary, job and job acquisition training

Cocaine Recovery Steps



The Healing Process

This regimen by Houston, Texas recovery specialist, the late, George K. Drake, MD, is outlined here by his associate, Al Bieser, M.S.