

—CHAPTER 16—

**CASE STUDIES OF IBOGAINE TREATMENT:
IMPLICATIONS FOR
PATIENT MANAGEMENT STRATEGIES**

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I. Introduction

Ibogaine's development as a putative treatment of substance-use disorders may certainly be described as unusual. In Western Europe and the United States, the use of ibogaine originated among individuals using drugs for the purpose of altering consciousness in the early 1960s, a period identified historically with the widespread introduction, and ethnographic and ethnobotanical studies of hallucinogens (1,2). The work of Timothy Leary and R. Gordon Wasson (3-5), as

well as the media attention focused on psychedelics, led to the establishment of the group, in which ibogaine's apparent utility to treat opiate, cocaine, and amphetamine dependence was first described. Historically, the lines of this research can be traced to Aldous Huxley and Lewis Lewin and, with some liberty, into prehistory (6,7).

This chapter reviews the use of ibogaine in three different contexts; a drug user group, a self-help organization, and a clinical research setting. Each section is followed by the self-report of a subject who has taken ibogaine within the setting being reviewed. These settings contrast with the use of iboga in Gabon, Africa as a practice of the Bwiti, an African religion sometimes referred to as an initiation society, as documented by Fernandez and Gollnhofer, during which ibogaine-containing plants are provided in rites to assist in the transition from adolescence into adulthood, for psychiatric healing, or for other purposes (8-10).

II. A Drug User Group

Research on ibogaine as a putative treatment for addiction began in the United States with a group of lay drug experimenters organized in New York in 1962 by the first author (HSL), who was 19 at that time. The group had formed to study a topic of common interest, namely, the evaluation of the subjective effects of psychoactive drugs. It consisted of a core of 20 individuals, who were mainly Caucasian, in their late teens and early 20s, and were attending or had attended college. Seven of these individuals were heroin dependent. During this period, which preceded the scheduling of "psychedelic" and other psychoactive drugs, the group attempted to evaluate a variety of agents obtained from botanical and chemical supply houses. The method of "evaluation" consisted primarily of discussion comparing the subjective effects of various categories of drugs, such as stimulants and hallucinogens. The group shared an interest in the psychotherapeutic potential of hallucinogens.

The effects of ibogaine were entirely unknown to this group's participants, who ingested it in escalating dosages ranging from 0.14 mg/kg to 19 mg/kg. An apparent effect on opioid withdrawal was noted by the heroin-dependent subgroup, and these observations became the basis for subsequent research on ibogaine in the United States. The oversight provided by the group consisted of a single individual taking notes on the experiences reported by the person taking ibogaine during the period of the strongest visualization effects, which was generally the first 4 hours. Post-treatment discussions would take place among the group members after their ibogaine experiences, the interpretations of which tended to reflect the group's common interest in psychotherapy. The absence of

any philosophical conflict over drug use provided a permissive, nonjudgmental atmosphere in which individuals could disclose information relating to effects on craving. Those who did return to heroin use offered a candid explanation that they were doing so because they identified, and accepted themselves, as heroin addicts.

The following self-report of a heroin addict treated with ibogaine is comprised of posts to a virtual Internet drug user's group. This particular individual took an initial dose of ibogaine, followed by a second dose 17 days later, and then took a third dose 56 hours following the second dose. He then reports on his state 41 days following the third dose.

A. SELF-REPORT (ANONYMOUS)

I was lucky enough to be able to obtain some ibogaine to try and help treat my heroin addiction.

Briefly here is how it went. I took the ibogaine and laid down. It took effect within a half hour or so. I had a sensation as though I were rocking, gently forward and backward. The rocking sensation would slowly increase in intensity, but not in speed. Then I would have this weird image of a twisted stick or root being shook rapidly, accompanied by a deep sound, something like a didgeridoo. When I had this image the rocking would stop. The image lasted about 3 to 5 seconds. After the image left my mind, the rocking would start again, slowly forward and back. The rocking would go on, increasing in intensity for about 20 minutes or so, then the image of the shaking root and the sound while the rocking stopped, and then started all over again. I kept feeling like something else was going to happen although nothing else did. This went on for what seemed about 5 or 6 hours.

Then I fell asleep. I had already closed my eyes after about 3 hours of this, and I don't know if it was the rocking sensation or what, but I simply fell asleep. Now I am very disappointed that I did because I feel like I missed out on most of the beneficial effects of the drug. I had no astounding revelations, nor did I really even get to analyze any part of my drug history or motivations or anything.

The next 18 hours or so consisted of intermittent waking from bizarre dreams. Every time I woke, I would be very confused and had trouble discerning reality from the dreams. None of the content of any of the dreams is memorable to me now, though. Each time I woke, I was extremely exhausted and fell back asleep within minutes. At one point I got up to go to the bathroom and was very ataxic. By the time I woke and didn't feel too exhausted to stay awake, the experience was pretty much over—just about 24 hours, which is somewhat shorter than what I understand to be the normal duration (36-48 hours). There were other slight lingering effects for another 6 hours maybe, but they were very minor.

I was extremely disappointed in myself for sleeping through the drug's effect,

as I did not get any of the mental resolve and self-insight or other effects that many ibogaine users report. After waking, I had a runny nose and watery eyes and I was truly afraid that it had not attenuated my withdrawals. However, those symptoms resolved within 3 to 4 hours, and no other withdrawal symptoms at all occurred. I was very happy about that.

So that was it. I don't feel as though I have gained anything in the way of mental, emotional, or spiritual help in staying off of drugs, which makes me fear that it didn't really work other than to get me off of the dope for right now. So I am hoping that AA will help me stay clean. I am going to try and get a hold of a second dose, but I doubt I will be able to.

I kind of feel like I blew a once-in-a-lifetime opportunity. But I didn't think that sleeping on that stuff was even possible as I have never been able to fall asleep on other psychedelics, so when I closed my eyes, I made no attempt to try and remain awake. And after I had already slept on it, the exhaustion I felt each time I woke was overwhelming.

. . . A while back I wrote about the disappointment of my first ibogaine experience. Well I have much better news this time. Overwhelming success is what I would call it.

My second experience was very different from my first and came 2 weeks and 3 days after my first experience. I had already decided to try and not use heroin for a day before taking the second dose to try and avoid sleeping through the experience like I did last time. I made it about 20 hours and was already pretty sick from withdrawal by the time I took the ibogaine. My second and third doses were both smaller than my first dose being about 14mg/kg.

The initial few hours were similar to my first experience, with a strong feeling of being, well, I guess, drugged. After the first few hours I spent the next 20 hours or longer, I really can't remember how long but it was, thinking about everything under the sun; actually I spent some time thinking about the sun itself too. I had lingering effects this time also, mostly visual effects in dim lights, but also an almost complete inability to sleep, and occasional waves of warmth or chill across my skin, especially my scalp.

I had initially planned on taking my third dose somewhere between a week and a month after the second, but I had time off from work and decided to take it during this period since it is unusual for me to have even 2 days off in a row. This may have been a mistake, but it doesn't seem to matter to me much now. So I took the third dose a little over 56 hours or so after the second. The reason I say it may have been a mistake is because the lack of sleep has lasted long enough to grow uncomfortable.

My third experience was pretty much the same as the second, both in effect and duration. It has now been about 60 hours since I took the third dose and I still have the same lingering effects I listed above.

I have had absolutely zero desire to touch heroin since I took the second dose.

It has no temptation for me at all. So despite the inability to sleep I am very pleased with the results.

Well, there you have it. It does work. And it is also true that multiple doses can be effective when a single dose is not. Even though it is 4 a.m. and I haven't slept more than about 6 hours in 4 days, I am extremely happy with how things turned out.

. . . I fell off the wagon, got back on that horse, went back out and whatever other euphemisms you can think of. I had 41 days off the shit today. I went out to buy some freaking CDs with no intention of using, and somehow I came home with smack. I had to go to four places to find the two CDs I was looking for, and somehow while I was driving around the thought to use occurred, which then turned into a craving, and finally a deep need. Or so it seemed anyway. I am seriously bummed by this turn of events. At least I was smart enough to know my tolerance would be low, but damn I am flying off the smallest piece. So now I am seriously considering flushing the other 95% of what I bought. Sorry to say that in here, I know just about everyone who reads that will wince at it, but there it is. I only know where to get black tar around here, so I had to buy a \$25 blob (the smallest amount you can get) and I don't want to have any of this shit left over tomorrow or I will use it. And I doubt I could finish it tonight without getting really sick

. . . Well I got sick as a dog and flushed the rest of the shit. Man, I didn't even enjoy the buzz. My lack of tolerance pretty much made it so that I have just been puking with a throbbing headache. I am back on the wagon, off that horse, and whatever other euphemisms you can think of for quitting dope.

I have heard from some people that their past is played out something like a movie, but I never experienced it quite like that. I did have certain things that I had more or less repressed, things dealing with my parents and my childhood, that came to the surface and I was forced to deal with them. Some of that stuff is quite unpleasant but I always feel better later. Someone put it like this and I found it fairly accurate. He said it was like taking out your emotional carpet and beating it with a broom so that all the dirt comes out. And you do feel somewhat "cleansed" afterward . . .

As far as it wearing off, you're just talking about the relief from cravings. Damn, getting off heroin with no withdrawals is reason enough to take it, the relief from cravings is really just a bonus. And a heroin addict really can't expect that just taking some other drug is going to cure them of their addiction. I mean, there are consequences of becoming an addict. Besides, the longer you go without using, the less you crave. So if you got 6 months free of cravings, you should be able to resist the urge to use if it did reappear. I had a month free of cravings and then when they did come back, I was so unaccustomed to them I think I was actually surprised to have them. Now I crave now and then, but I know that if I can resist for a few hours at the most, they will go away. And there were some

mental changes (as far as attitudes and stuff) that I think were probably permanent. No acid trip I ever had made any permanent changes in my attitudes. That to me makes ibogaine seem like a very powerful drug.

III. Self-Help Organizations

In the late 1980s, The International Coalition for Addict Self-Help (ICASH) initiated a small number of ibogaine treatments among heroin dependent drug users, which appeared to confirm that ibogaine would eliminate narcotic withdrawal signs and interrupt drug craving (11). More than 25 years had passed between the original observation of ibogaine's ability to interrupt opioid and cocaine dependence and the revisiting of those findings by a second group of drug users. The work of ICASH can be viewed historically in a context of AIDS patient activism and the activities of advocacy groups such as ACT UP.

ICASH sought out countries with drug policies that were not hostile to drug users and made contact with drug user activists in The Netherlands. The first and most influential of these contacts was with Nico Adriaans, a fieldworker for the European Addiction Research Institute (IVO) at Erasmus University in Rotterdam, and one of the founders of the Junkie Bond or Junkie's Union as it was popularly called (12). Shortly after contact between ICASH and Adriaans, Adriaans was treated with ibogaine and thereafter established Dutch Addict Self-Help (DASH) with G. Frenken and others. DASH's principal goals were to supply ibogaine to Dutch heroin users and to influence the Dutch government to authorize ibogaine as a medicine.

After a year of discussion concerning the background and merits of ibogaine with the late Professor Dr. Jan Bastiaans of Leiden, The Netherlands, Bastiaans agreed to attend and observe treatments for patients recommended by NDA International, a U.S. corporation involved in the attempt to develop ibogaine. NDA informed DASH of this agreement, and DASH, in turn, referred people who wished to be treated to Bastiaans for ibogaine therapy. Other Dutch physicians and researchers became interested, and in some cases they observed ibogaine therapies. The self-help organizations, during their work in the late 1980s and early 1990s, provided further case study evidence of the antiaddictive effects of ibogaine.

A. SELF-REPORT (ANONYMOUS)

The following article was written in 1990, 6 months after I underwent treatment with ibogaine in an attempt to curtail my heroin use. I was born and

raised in Amsterdam and was 26 years old at the time.

I heard about ibogaine from a friend in New York, and then contacted the International Coalition for Addict Self-Help (ICASH) to request treatment for me and my boyfriend. We were the first people to be treated in Holland. My ibogaine treatment took place on October 25, 1989, in a hotel room in Amsterdam. My boyfriend had been successfully treated the day before.

The night before my treatment, I was given a small oral dose of 100 mg of Ibogaine to see if I would have an allergic reaction, which I didn't have. After an hour, I had strong memories of my childhood. I was walking through the house I was raised in. This kind of memory was a new experience in the sense that I actually viewed the interior of the house at the visual height of a child at age 4. While walking, I recalled all kinds of details in the house, which I never expected to be relevant. I experienced how my parents must have seen me when I was a child.

Before the treatment I was told that, like in a movie, I would relive certain events in my life and I would experience repressed memories. In my experience, it didn't happen in a chronological way. At 10 o'clock in the morning I take 1200 mg of ibogaine in capsule form with some tea on an empty stomach.

I wait for a flow of memories. Twelve hours have passed since I took my last dose of heroin, therefore I am experiencing withdrawal symptoms.

After about an hour, I start visualizing pink diamond shapes. My body feels quite heavy, but I am still able to coordinate my functioning. For about an hour I am being checked on by the person who is guiding me through the treatment. To me, his appearance now resembles a pygmy. He wants to see if I start walking wobbly, one of the symptoms that ibogaine is taking effect. I am told to walk through the room several times. This request bothers me; I don't want to be disturbed. Even though the ibogaine is affecting my coordination, I keep walking straight lines. I want to show that through willpower, no drug has to influence you if you don't want it to. Through this experience I realize that the same goes for all the other drugs you can take. There is one eternal aspect in yourself that is unchangeably present. My conclusion was, "why take drugs to suppress this state of consciousness?" I also realized the enormous possibilities of a mind that is crystal clear.

In the following four hours, stroboscopic flashes of remembrance happen to me in visions and sounds. Sounds are particularly irritating to me because they echo back loudly in an oscillating way. There is a constant zooming in the room, as if there is a gigantic fly in the top corner of the room behind me. It makes me think of the writer Carlos Castaneda when he described the fly as a guard "between two worlds." I resent the idea of experiencing "this older world." In the meantime, I have already reached its vast planes.

I see several rolls of film unfold from my head through the room, displaying cartoons. I notice that the humor in these cartoons is mostly based on violent

interactions, and realize that these are the first imprints in the mind of a twentieth-century child like myself.

There are sounds in the back of my head. The more I concentrate, the louder they become. There are sounds of African drums, and immediately I have visions of walking through the jungle of dark Africa. I hear a neighboring village transmit a message on hollow tree-trunks and I play them a message back. It's like the rhythms have always been in my head, they just needed to be relived. Totally realistically, I'm walking barefoot through the jungle and dew from the leaves drops on my skin. I'm scared of the possibility of getting attacked by wild animals or stepping on a snake. This is why the visions of Africa make me uncomfortable. For the first time in my life, I am grateful to be born white in the 20th century in Northern Europe. I realize the enormous comfort and technological possibilities I am able to enjoy in my current life.

I sit on my bed and bend my hands in front of my mouth, blowing through them as if it is a large tube or pipe directed to the ground. I am producing vibrating tunes and hear wailing sounds in the back of my head, but I don't understand why. Months after the treatment, while on a trip in India, I met a German man in Delhi, who played an Australian instrument called a "Didgeridoo." This is the first time I learned of the existence of such an instrument. It's a tube-like branch of a tree, 6 feet long, that is hollowed out by termites and rubbed with beeswax. The instrument is played by putting the top part against your mouth and pointing the bottom down, in order to create a vibrating, wailing sound while blowing through it.

Two hours have passed since I have taken ibogaine. My stomach is upset. I throw up a little. I have a vision of walking through my brain, as if walking in a giant computer-like file cabinet. There are long narrow drawers with selected, collective information, to be opened on request. Somebody in the hotel turns on a radio and commercials are playing. Immediately a drawer in my brain is opened and all the jingles I have heard in my life come out as one long song. I realize the incredible amount of bullshit that is taking the place of more important information.

Four hours after taking ibogaine, I throw up twice. The person that is supposed to guide me through the treatment has fallen asleep, and his snoring disturbs me. On top of that, my boyfriend keeps interrupting me in an effort to share his enthusiasm of being clean. Where the hotel had provided a quiet setting for him the previous day, activities have broken loose on this Monday. Maintenance people are washing windows, vacuum cleaning hallways, and cutting trees in front of the hotel. I decide to go home to Utrecht. I leave my sleeping guide a thank-you note, in which I wish him fun exploring new, freaky cultures in Africa with his friends. On the train home I see a lot of people who I experience as being "dead in the head." I feel intensely connected with black people.

At home, I don't feel good. This gives me the feeling I have been cheated. I am

not supposed to feel withdrawal now. Everything seems very awkward and I try to throw up. Throwing up helps me feel relief, but everything tastes and smells bitter from the ibogaine. In an attempt to get rid of ibogaine's effects, I decide to cop some smack (heroin), after which I feel less anxious and more relaxed, though still trippy. Later that night the effect of the heroin finishes and I lay down on the couch and fall into a dreamlike half-awake state.

I see myself laying on the couch, which is followed by a vision of myself as a fetus in my mother's womb. I am actually, very rapidly, going through a rebirthing process. I feel an incredible devotional love coming from my parents. This memory enables me to accept the mistakes my parents have made in raising me. For the first time I can feel respect for my parents, which shapes our whole relationship into a more harmonious reality.

Many other dream flashes appear. The next morning I awake fully refreshed, newborn, and hungry as a wolf. I give my heroin away to my roommate. My boyfriend and I start to evaluate our experiences. It is as if new things keep falling into place. It's as if all information in your brain file cabinet is shaken out of it's drawers on to one big pile, looked at "objectively" and put back in, untwisted from emotional trauma.

It takes time to realize that we're not getting sick. There is no need to arrange money to run to the dealer anymore. That time can now be used to prepare our planned trip to India and Nepal. The following days go by in an up and down rhythm. One day is incredibly energetic and active; the next one is needed to relax. We both feel very positive, joyful and enthusiastic. A withdrawal never took place just some occasional yawning and minor chills. In a normal withdrawal, you need all your motivated energy to go through being sick, which burns you out completely. This time, the motivated energy is reinforced, and together with all of the visual experiences, it puts you on the path directed toward your goal.

Initially my junkie friends were very skeptical, until they realized that my boyfriend was selling his daily portion of 65 mg methadone every day, for weeks in a row, and he was not spending his money on smack, cocaine, or alcohol, but on traveling gear. Some of them thought our enthusiasm was irritating. Others wanted to experience ibogaine too, and it felt very frustrating that I couldn't give it to them.

The presence of hard drugs in my environment after the treatment was not threatening in any way. It didn't seem particularly positive or negative. It just didn't matter anymore. I did use some smack to see if I would still like it, but I didn't care for the effect anymore. It actually seemed like it reactivated the ibogaine. Up until 4 months after the treatment, I experienced colors and light very intensely. I never experienced any negative side effects, mentally or physically, after ibogaine. I've noticed that I'm not sensitive to the influence of drugs as I used to be. I lost a great deal of interest in drugs in general, because the

effect of ibogaine goes far beyond their effect, though not necessarily in a pleasant way. Ibogaine is quite an ordeal; therefore I hope I don't ever need to use it again. It is not possible for me to resume the same addictive personality, unless it would be my conscious choice. Ibogaine has given me this choice. Heroin never did. Momentarily, I can use any drug without being used by them.

It is through the treatment that I don't experience events in the past as problematic anymore. I experience the present with the past as reflection. The past therefore is no longer perceived as an obstacle, but as a source of collective information. The realization of the collective consciousness is a mystical, religious experience. It confirms a unity with all living beings and old feelings of separation between "you and the outside world" disappear.

Ibogaine was a mental process for me, a form of spiritual purification and a truth serum. I had to experience its results through time. It's only now after 6 months that I can say I'm not addicted anymore. It takes time to admit there is no way back. Ibogaine is not the solution in itself, although it takes withdrawal away completely and gave me clues that made it possible to figure out why I got strung out in the first place. Ibogaine made it possible for me to accept life on its own terms and access the willpower inside myself that I needed to pick up where I had left off.

After the treatment I was clean for about a year. I got retreated, but relapsed in a matter of weeks as a result of lack in aftercare. In that time treatments were still very experimental. As I treated many other addicts, I realized that in order to stay clean, most people need some kind of therapy. Besides a quick and effective detox, ibogaine can offer a lot of information to the underlying reasons for becoming a junkie, which can be helpful in working with a therapist. I eventually quit my addiction the "old-fashioned way," with the use of some methadone and pills. After my first treatment with ibogaine, I was so impressed that I started treating other addicts. Together with Nico Adriaans and Josien H., I set up an addict self-help group and we treated many people. We learned how important it is to provide treatments in the presence of ibogaine experienced ex-addicts and to provide aftercare.

Today we are called INTASH (International Addict Self-Help) and work to establish worldwide ibogaine treatments.

IV. Regulatory Development and Clinical Research Settings

The Dora Weiner Foundation (DWF), a philanthropic organization, was established in 1983 for the purpose of promoting the formal regulatory development of ibogaine. The fundraising efforts of the foundation were not

successful. The general public appeared to have little more than an adversarial interest in drug users, whose condition they felt was self-induced and were deserving of little or no comfort. The pharmaceutical industry as a whole had little interest in the treatment of chemical dependence, due to the liability associated with the patient population of drug users and the desire to avoid the stigma attached to chemical dependence. Additionally, there appeared to be little profit in a medication like ibogaine that would be provided only a few times to the patient.

DWF found that though sizable grants were being provided for drug use prevention, there was no interest from the major philanthropies to make funding available for the development of medications to treat chemical dependence. The DWF became inactive, and in 1986, a for-profit corporation, NDA International, Inc., was established to raise the necessary financing to meet FDA regulatory requirements for the approval and marketing of ibogaine.

In late 1990, Howard Lotsof, president of NDA International, Inc., contacted Dr. Charles Grudzinskas, then a vice president with Lederle Laboratories. Dr. Grudzinskas asked that he be sent material on ibogaine. In a discussion some weeks later, he informed Lotsof that Lederle was not interested, but that as of January 1991, he would be named as the director of the National Institute on Drug Abuse's (NIDA's) new Medications Development Division (MDD), and to contact him once he was in office. That contact resulted in MDD/NIDA requesting NDA International to submit a Product Profile Review to MDD, and thus began the clinical development stage of ibogaine. This eventually led to FDA approval of an IND, in 1993, for University of Miami personnel under contract to NDA International, Inc., to initiate a Phase I study of ibogaine in human subjects.

The use of ibogaine in a conventional research setting has occurred in the Republic of Panama, on the island of St. Kitts, and with FDA approval at the University of Miami (13,14). The hospital setting of these treatments contrasts with the nonhospital environment characteristic of the informal treatments in the Netherlands and elsewhere (15-17).

A. SELF-REPORT

The following report is from a hospital setting in the Republic of Panama. The patient is a physician who had become dependent on 600 mg of Demerol a day and had attempted to stop his drug use a number of times without success. One particular interest we had in this subject was the hope that, as a medical doctor, he might provide us with some professional insight into the results of his treatment. He kept notes and provided a report on the four different doses he received, which is presented in its entirety. This subject proved to be more sensitive to ibogaine than any other individual in our studies conducted outside

the United States, and he had a full-blown subjective experience from a 10 mg/kg dose. The patient had participated in a research protocol, which called for an intermediate dose of 10 mg/kg of ibogaine, which was administered as part of a pharmacokinetic study and was not expected to have a therapeutic effect, but it did. As part of the protocol, patients would then be administered a known therapeutic dose of 20 mg/kg.

Needless to say, this patient enjoyed certain advantages that affected his treatment outcome. He had a career, was highly motivated, and had available significant psychosocial supports needed by so many others who do not have his background.

(ANONYMOUS)

First Day: 100 mg (test dose #1). I've taken my ibogaine dose, and went to bed, and stayed laying down. I felt nothing, until the medical staff arrived to do the 1-hour tests. I was surprised, because in my mental measurements, I thought I had taken ibogaine about 20 minutes earlier. When I stood up, I felt a little drowsiness, and it was difficult to walk in a straight line. I was feeling photophobia and every little noise seemed to be much louder than in reality. The sounds were very disturbing to me.

During the 2-hour testing, symptoms were worse. It was very difficult to walk in a straight line, and the room seemed to beat, like a heart. I felt very tired, and the only thing I wanted was to rest in bed. Each head movement seemed to make things worse.

When I stood up for the 3-hour test, I felt that the symptoms were disappearing. I was very hungry and ate. After eating, I was a little nauseated. For the following hours I felt nothing, except for a sensation that my mind images were richer in details than before, like a 3-D movie.

I ate with no nausea, slept very well, and awakened in very good condition.

Second Day: 25 mg (test dose #2). After this dose of ibogaine I felt nothing different from my normal state.

Third Day: 10 mg/kg (experimental dose). For the first 2 hours I felt a little different, like I had smoked marijuana. I was very calm and relaxed and all the tension of the beginning of the procedure was gone. The room seemed to be a little different and the colors around me sharper than normal. The lights and sounds were disturbing to me, like the first time. Suddenly, with my eyes closed, I began to see images that appeared in screens, exactly like TV or cinema screens. These screens were appearing in small sizes and then they would get bigger as I focused my attention on them. Sometimes they appeared small and would then

begin to grow, like I was walking in their direction, and sometimes they were going from left to right, in a continuous way.

The images on the screens were moving in slow motion and were very sharp and well defined. I saw trees moving with the wind, a man with bells in his hands, various landscapes with mountains and the sunset. At this time I was a little nauseated, and when the doctors asked me to stand up for some tests, I vomited. From all of the hundreds of images I saw this day, I recognized only two: the first, an image of myself as a child, static like a photo. This image began to approach me and get bigger, but something in the room happened and I opened my eyes, losing the image. The second image I recognized was one of some horses dancing in a circus. It was a TV show that I had seen two days before. The time seemed to go very quickly, because after about 4 hours (in my mind), they told me I had taken ibogaine 9 hours earlier! It was very difficult for me to speak in English or in Spanish. I was only able to speak in my native language. At this time the images started to appear at a slower rate and for another 2 hours I saw only screens with no images on them. About 10 to 11 hours after the beginning of the experiment, they disappeared.

I ate very well and stayed awake all night long, falling asleep only about 7 a.m., almost 24 hours after the medication had been administered. During the night I had some insights about my life and about the things I realized I was doing wrong. I stayed all the following day very tired, sleepy, but very happy and relaxed, in a way I never was before.

Fifth day: 20 mg/kg (therapeutic dose). The first 3 hours were similar to the last time: photophobia and a bad sensation with little noises. After that the images began to appear, in a slower rate than the other time. There were less images, but I was recognizing all of them as part of my childhood. I saw myself playing in my father's farm, riding a motorcycle, playing with a cousin, feeding a fish and other things. I saw some recent images, like one of my father, laughing in the living room of my house. This happened about a year ago. I understood that I had a happy childhood, and there was no one to blame for my addiction, only myself. I felt their love coming from my parents and relatives. I was feeling the same time distortion that I felt the other day, and after many hours I suddenly had an insight. It was that my mind and the universe were the same thing, and that all the people in the universe and all things in the universe are only one. I saw many mistakes I was doing in my life, so many attitudes I could not have, and this helped me to decide very strongly that I will never use Demerol again. Now I can see very clearly that I don't need Demerol to live my life. And I feel better if I don't use it. During the first 8 hours after taking the ibogaine I vomited four or five times, always when I tried to move. I was able to sleep about 4 a.m., and to eat only about 9 a.m. the following day. I awakened feeling weak, tired, and drowsy. As the hours were going, I slept a lot and began to feel better and in the morning of

the following day I was normal.

Differences in Day-by-Day Life after the Experience. I returned to my normal life with absolutely no cravings, with better appetite than before, and highly self-confident. Now I can see differences in some aspects of my personality, things are changed. For example, I used to avoid driving at night, because it reminded me of a car accident I had years ago. Now I can drive anytime, day or night, without anxiety. I'm sure that this is caused by ibogaine, because now I'm not the same very anxious person I was. I'm not as shy as I used to be, too. It's easier now to contradict people when I think they are wrong, and to make them know what I want and what I think. I used to accept all that other people said only to avoid a discussion, even when I was sure that my point of view was the correct one.

These are the main happenings in my ibogaine experience and the main differences I can perceive in these few days.

Some Months Later. The most important thing I learned with all that happened is that I can never underestimate the power of the addictive personality I have inside. I can never say I'm cured because if I do this, I will forget to protect myself from drug-using thoughts. I must know I have a chronic disease that will be quiet in its place until I decide to give it a chance to grow. This decision, and that's the point, is a conscious decision. If I give in, the disease will be out of control in a few days. But if I could be strong to take real and honest control of my Demerol addiction using thoughts, I will be free forever.

A few days ago, because of professional needs, I had to keep two Demerol doses with me, in my house, all night long. To protect myself, I gave them to my wife. But it was amazing to see how I was not anxious to use them but to give them to the patients that needed them. I clearly felt that Demerol was a strange thing in my environment. I wasn't curious about the place my wife had put them. I wasn't feeling any craving. I was only looking forward to the moment I could give them to the patient and say, I've done it. And I did it, because of all of you from NDA. I don't want to be boring, but I have no words to say how grateful we, my family and I, are. I will remember you for a lifetime.

V. Psychological Aftereffects

The effects of ibogaine in human subjects have been described (1,8,9,11,13-21). In brief, ibogaine provides three different phases of effects in most, but not all, patients. In the first phase, the greatest intensity of which lasts approximately 3 hours, the patient appears to experience dreaming with eyes closed while

awake. The form of the material experienced during this ibogaine visualization period is as varied as the scope and breadth of material seen in ordinary dreaming, in that it may be realistic or symbolic, in black and white or color, and diverse in subject matter. The visualization will be interrupted if patients open their eyes. It should also be noted that this dreamlike phase tends to end abruptly.

A second phase consisting of cognitive evaluation lasts between 8 and 20 hours. The material reviewed and reported by patients during the cognitive evaluation phase may consist of material from the dreamlike experience, or of other memories, and often concerns traumatic or emotional experiences, personal relationships, and important decisions that the patient has made. The second phase transitions slowly into a third phase of residual stimulation. The third stage may last as long as 36 hours or longer in some patients. The first three phases will run their course in most patients within 48 hours. It is not uncommon for a subset of patients to recover within 24 hours.

Psychological aftereffects of ibogaine may include what appears to be a process of abreaction. Patients report an understanding of their condition associated with traumatic events and resolution of issues in a process somewhat similar to that of psychoanalysis. Whether improvement in anxiety and depression in patients treated with ibogaine is a result of this phenomena, or more readily explainable on the basis of effects on neurotransmitter systems, has yet to be determined (22-24).

In the authors' experience, ibogaine-related psychological aftereffects have been apparent either immediately or after an interval of weeks or months. Clinical examples of aftereffects seen either acutely, or after a period of months, are provided below.

A. IMMEDIATE PSYCHOLOGICAL EFFECTS FOLLOWING IBOGAIN TREATMENT

An example of the acute effects of a single treatment with ibogaine is that of a 39-year-old female patient dependent on 80 mgs per day of oral methadone that she supplemented with between \$120 and \$250 worth of heroin by IV administration. She had a 20-year history of heroin use.

The patient was HIV-positive and had an adolescent daughter. The patient's reason for seeking treatment was so that she might provide her daughter with quality time before her own anticipated death. Her treatment proceeded unremarkably, and she experienced little discomfort. On the third day after the treatment, being significantly recovered from the physical effects of ibogaine, she met with the psychiatrist who had supervised her treatment. The patient disclosed that she was suffering emotionally from the loss of her husband, who had died of a heroin overdose while she was in prison on a charge of heroin smuggling. The patient stated she had repressed emotions relating to the loss of her husband while

in prison, she complained that the feelings of loss were now painfully intense, and she cried. She was angry that she had to feel these emotions. Her psychiatrist suggested that she wait another day and visit him again to see how she felt.

On the following day she appeared to have achieved a significant degree of resolution of the grieving relating to the loss of her husband, and she attributed this to her treatment. She had no desire to use opiates and showed no signs of opiate withdrawal.

B. DELAYED PSYCHOLOGICAL EFFECTS FOLLOWING IBOGAINE TREATMENT

The patient was a 26-year-old female dependent on heroin for 3 months. Her husband had been using heroin for approximately 10 years. The treatment of the husband and wife overlapped in time. The man was treated on day 1. The woman was very cooperative and assisted in every way with her husband's treatment. The woman was treated the following day. Her husband refused to leave her alone in the treatment room. He informed the treatment team, including four medical doctors observing the treatment, as well as the attending psychiatrist, that if they attempted to keep him out of his wife's room and bed he would disrupt her treatment. The husband further told the treatment staff not to come into the room to care for his wife and only authorized entry to address a lengthy list of somatic complaints concerning his own condition. Eventually, he left the treatment site to go for an extended bike ride. During his absence, his wife cried in the arms of one of the female members of the treatment team. She told of her husband's abuse toward her, of his manipulating her into a ménage-à-trois, which he had planned with an earlier girlfriend, and how he then leaked information about the relationship to his wife's family in order to isolate her from them.

The following day, both husband and wife were recovered enough to return to their apartment. The treatment team's attempts to meet with either the husband or wife over the next few days were not successful.

Six months later, the treatment team was able to meet with the wife. She informed us that within days she and her husband had returned to heroin use, though they were not in withdrawal. She maintained the relationship for approximately 3 months, after which she realized that she no longer wanted the life of heroin addiction. She ceased heroin use, left her husband, filed for divorce, and entered nursing school, while hiding from her husband in the home of one friend or another. She attributed her ability to alter her lifestyle to a catharsis precipitated by her experience with ibogaine.

VI. Discussion

A. THE CLINICAL SIGNIFICANCE OF IBOGAINÉ VISIONS

There is evidence to suggest that ibogaine has been particularly efficacious for addressing physical opioid withdrawal signs (20,25,26). Reports over a period of more than three decades also suggest that ibogaine may be effective in reducing the craving that drives opioid (21) and cocaine dependence (27). The use of ibogaine to attenuate cocaine self-administration has been published in independent preclinical research studies by Cappendijk, and Sershen and Glick, and its ability to attenuate alcohol self-administration has been studied by Rezvani (28-31). Preclinical studies showing ibogaine's influence on drug place preference and learning, which are models of craving, are reported by Parker *et al.* (32). Double-blind clinical studies are needed at this time to verify the efficacy indicated in informal reports that have come from at least a dozen countries.

The self-reports that have been included in this chapter allow a review of the similarities of ibogaine effects that are consistent to the experience across multiple subjects. The most consistently reported ibogaine effect appears to be that of oneirophrenia, or the experience of apparently dreaming while awake. A question exists as to whether this phenomenon is significant to the antiaddictive action of ibogaine or separable from it. This issue may eventually be resolved should an *iboga* alkaloid devoid of oneirophrenic effects be developed, tested, and proven to have antiaddictive properties similar to ibogaine.

Whether the visualization or dreamlike experience of ibogaine is important or not, it is widely reported in the clinical literature (1,8,9,11,13-21). While the reports of dreamlike effects within the ibogaine experience are common, they do not invariably occur. Some ibogaine-treated subjects indicate that they did not experience oneirophrenia and proceeded directly to the stage of cognitive evaluation, which is generally considered to be the second phase. In some cases, visual images are reported during the actual experience, but are not apparently recalled afterward. Patients generally recall only a few of many images that they may have seen, similar to normal dreaming. It is difficult to assess whether the patients denying visualization after the fact simply do not recall the images, or that the images are so personal that the individuals do not wish to share them, or that visualization was simply not experienced.

The self-reports, the first example of which is found in Section II concerning drug user groups, provides an example of limited visualization occurring during the period when the majority of subjects have reported a rich and varied tableau. The self-report in Section II states, "Then I would have this weird image of a twisted stick or root being shook rapidly, accompanied by a deep sound something like a didgeridoo. When I had this image the rocking would stop . . .

I kept feeling like something else was going to happen although nothing else did. This went on for what seemed about 5 or 6 hours.” In keeping with normal expectations during the cognitive evaluation or second stage of ibogaine activity, the subject reports “After the first few hours, I spent the next 20 hours or longer, I really can’t remember how long but it was long, thinking about everything under the sun.”

The above example should be compared with the reports found in Section III, the self-help section, and Section IV, the clinical environment section in which the authors of those reports indicated more varied and significant visual material. Whether the more extensive review of visual material may be responsible for the longer duration of time free of craving and drug use will require additional research. The two individuals reporting greater oneirophrenic effects remained either drug or craving free for approximately a year after a single ibogaine treatment, while the individual reporting minimal visualization, by comparison, had a drug-free period of only months.

B. OPTIMIZING THE IBOGAINE TREATMENT SETTING

The question of the environment in which ibogaine should be administered is disputed among ibogaine treatment providers. Ibogaine treatment providers come from disciplines as diverse as varieties of shamanism, self-help, clinical research, and African religious practices. To maximize the possibility of success of the ibogaine experience in a hospital setting, certain matters should be addressed in the design of the protocol. It is advisable to include persons who have previously taken ibogaine for a substance-related disorder to work with the treatment team. Patients will relate to these team members and are generally reassured by their presence, knowing that these individuals may uniquely understand what the patient is experiencing during the procedure.

Keeping the treatment site free of distracting sensory stimuli, such as loud noises, discussions or arguments, strong or irritating odors, and bright lights, is strongly recommended during the therapy. Patients should not be compelled to open their eyes or respond to staff anymore than is absolutely necessary during the first 3 to 4 hours of the ibogaine experience, as this may interfere with mental processing and adversely affect the outcome of treatment.

The personal ibogaine experiences of the authors, and the reports of patients in various treatment venues, appear to support the value of the visualization and subsequent abreaction. Ibogaine aftereffects are an area of particular interest to clinicians, therapists, and counselors working with ibogaine-treated patients. The aftereffects appear to involve learning and understanding by ibogaine-treated subjects regarding issues of psychological importance, and the resolution of those issues may lead to attenuation of anxiety, depression, and drug self-administration.

For the treatment provider, therapist, or counselor, it is important to understand that ibogaine-treated subjects may be more open and able to make use of various occupational, educational, or psychiatric forms of therapy. Professionals involved with ibogaine-treated patients should regard the process of visualization and subsequent abreaction as a window of opportunity. This could require more intensive work, but it could also be more rewarding work.

C. IBOGAINÉ VERSUS OTHER TREATMENT MODALITIES

Four issues relating to ibogaine versus other treatment modalities are suggested for further discussion. The first is the differing philosophies held by the drug users involved in ibogaine and those not so involved. The second issue is the differences between medical professionals and the ibogaine self-help groups. The third matter of discussion concerns the various reasons for resistance to the development of ibogaine, and the fourth issue involves what might be learned from other medication programs for chemical dependence, such as methadone.

Among drug users, one unexpected result of advocacy for ibogaine treatment was a dispute that arose during a conference in Europe attended by Dutch Addict Self-Help (DASH). Nico Adriaans and other DASH members were promoting ibogaine availability and were quite surprised when other user groups indicated strong opposition to ibogaine in that they felt the availability of ibogaine would interfere with the possibility of legal heroin. DASH indicated that the two were not mutually exclusive, but to no avail. This conflict among heroin users over ibogaine was completely unexpected and continues to the present time.

In addressing the opposing philosophies of drug users and medical professionals providing treatment, a struggle relating to control and empowerment is seen in ibogaine therapy between user activists and the medical establishment. This is a result of ibogaine being first established within the self-help group context, and not the conventional medical setting as is usual for most medications. Some self-help groups feel the empowerment allowed by ibogaine should be maintained by drug users and self-help groups and not be turned over to the medical community for administration and control.

Resistance to ibogaine development is understandable. New technologies are often viewed with skepticism, and ibogaine appears to represent a particularly radical paradigm shift. As previously reviewed, the pharmaceutical industry for reasons of liability, perceived lack of profit, a lack of emphasis in the development of medications to treat chemical dependence, and a desire not to be associated with the stigma of the drug user population chose not to involve itself in ibogaine development.

As to the research community, until the advent of ibogaine, pharmacotherapies to treat chemical dependence tended to be distinct for each form of dependence. Some medications were used to treat opiate dependence, others to treat alcohol

dependence, and others to treat stimulant and sedative dependence. Thus, there was an understandable resistance to a single pharmacotherapy reported to have efficacy in multiple forms of substance-related disorders. There was also perceived resistance to the discovery being made by a person with no medical credentials, and promoted principally by drug users equally lacking in academic credentials. Years were spent in attempting to find interested pharmacologists who would perform ibogaine research. Once the first studies were accomplished, promising results accelerated research on the drug.

With regard to the future of ibogaine therapy, a look at methadone therapy may provide an understanding of what might go right and what might go wrong in the development of effective medications to treat chemical dependence. Methadone maintenance was the creation of Dr. Vincent Dole and the late Dr. Marie Nyswander (33-35). It consists of providing an opioid agonist in doses high enough to block the effects of heroin. Methadone is long acting, may be provided orally, and has been shown to promote a heroin-free lifestyle, social stability, and to reduce drug-related crime. So, what is wrong with methadone? The answer is nothing is wrong with methadone, but a good deal is wrong with many of the current providers who all too often fail to follow the Dole/Nyswander protocol. Adequate doses are often not given, and the humanitarianism shown patients has been replaced with indifference, animosity, a failure to acknowledge the patient as an individual, and the insistence of continuing to attach stigma to the patient in a punitive clinic environment (36). How this bodes for ibogaine therapy where even more skills may be needed, only the future can tell.

If a reduction in chemical dependence is to be accomplished, whether with ibogaine, its analogs, or other modalities, it will require that patients be better treated and better respected. It should not be anticipated that chemically dependent patients will readily remove themselves from that condition while they are marginalized, criminalized, and stigmatized. If the ultimate goal is to reintegrate these individuals into productive society, chemically dependent individuals must be provided with the same level of care and rights as patients who are being treated for other chronic, life-threatening conditions. In addiction medicine, as in other medical disciplines, it is of paramount importance that the physician listen to, respect, and not underestimate the patient. Ibogaine therapy offers a unique opportunity both for the physician and the patient.

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