Observational study of the long-term efficacy of ibogaine-assisted treatment in participants with opiate addiction

Tom Kingsley Brown, PhD (UCSD), Valerie Mojeiko (MAPS), Karim Rishi Gargour (CIIS), and Meg Jordan, PhD, RN (CIIS)

Sponsored by: MAPS
Can ibogaine treatment facilitate long-term recovery from addiction?
Outline

I. Previous research on ibogaine treatment for substance dependence

II. MAPS research design and current status

III. Preliminary results

IV. A call to collective research efforts
Evidence for Efficacy

✓ A plethora of anecdotal evidence
  • Treatments by Lotsof, addict self-help groups in the Netherlands and in New York City, and providers such as Eric Taub (K. Alper, D. Beal, and C. Kaplan (2001) *A Contemporary History of Ibogaine in the United States and Europe. The Alkaloids* 56: 249-282)

✓ Animal studies show that it greatly reduces craving, withdrawal (e.g. S.D. Glick, M.E. Kuehne, J. Raucci (1994) *Brain Res.* 657: 14-22)
Evidence from clinical studies (K. Alper, 2009 DPA Conference, Albuquerque, NM)

- **Complete resolution of withdrawal symptoms in 29 of 33 subjects** (Alper, Lotsof, Fremken, Luciano, and Bastiaans, Am J Addict 1999 (8): 234-242)

- In 27 cocaine- or heroin-addicted patients, “self-reported depression symptoms and craving were significantly decreased” at 1 month after ibogaine treatment (St Kitts study, D. Mash *et al.*, Ann N Y Acad Sci. 2000 (914): 394-401)

- Lacking good data on long-term efficacy
MAPS Ibogaine Outcomes Study

IOA-3

Protocol Design and Current Status
Primary Objective:

...to determine the effectiveness of ibogaine-assisted therapy in producing extended periods of opiate drug-use abstinence, in reducing opiate drug use, and in improving associated impacts of these behaviors as measured by the Addiction Severity Index Lite (ASI-Lite) composite scores over a period of 12 months following therapy.
Primary Objective:

...to determine the effectiveness of ibogaine-assisted therapy in producing extended periods of opiate drug-use abstinence...

(Measure: length of time from treatment until first relapse)
Primary Objective:

...in reducing opiate drug use...

(Measure and Compare: frequency and dosage of opiate use at baseline and at each monthly follow-up for 12 months)
Primary Objective:

…and in improving associated impacts of these behaviors as measured by the Addiction Severity Index Lite (ASI-Lite) composite scores over a period of 12 months following therapy.
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>D17: How many times have you had Alcohol DTS?</td>
<td>0/6</td>
</tr>
<tr>
<td>D19: Alcohol abuse?</td>
<td>0/0</td>
</tr>
<tr>
<td>D20: Drug abuse?</td>
<td>0/0</td>
</tr>
<tr>
<td>D22: Drugs?</td>
<td>0/0</td>
</tr>
<tr>
<td>D23: Alcohol?</td>
<td>0/0</td>
</tr>
<tr>
<td>D24: Drugs?</td>
<td>2/0/2</td>
</tr>
<tr>
<td>D25: How many days have you been treated as an outpatient for alcohol or drugs in the past 30 days?</td>
<td>0/10</td>
</tr>
<tr>
<td>D26: Alcohol problems?</td>
<td>0/0</td>
</tr>
<tr>
<td>D28: Alcohol problems?</td>
<td>0</td>
</tr>
<tr>
<td>D30: Alcohol problems?</td>
<td>0</td>
</tr>
<tr>
<td>D32: Drug problems?</td>
<td>3/0</td>
</tr>
<tr>
<td>D34: Patient's misrepresentation?</td>
<td>0/0-1/Yes</td>
</tr>
<tr>
<td>D35: Patient's inability to understand?</td>
<td>0/0-1/Yes</td>
</tr>
</tbody>
</table>

CONFIDENCE RATINGS

Is the above information significantly distorted by:

- D14: Patient's misrepresentation?
  - 0: No, 1: Yes

- D35: Patient's inability to understand?
  - 0: No, 1: Yes
ASI –Lite Sections

1. Medical Status
2. Employment / Support Status
3. Drug/Alcohol Use
4. Legal Status
5. Family/Social Relationships
6. Psychiatric Status
Secondary Objectives:

1) to investigate: are changes in ASI scores after treatment related to subjective intensity of the experience? (States of Consciousness Questionnaire)

2) using Subjective Opiate Withdrawal Scale (SOWS), to see if ibogaine treatment reduces withdrawal symptoms
Looking back on your extended session you have just experienced, please rate the degree to which at any time during the session, you have experienced the following phenomena. In making each of your ratings, use the following scale:

0 - none; not at all
1 - so slight cannot decide
2 - slight
3 - moderate
4 - strong (equivalent in degree to any previous strong experience or expectation of this description)
5 - extreme, (more than ever before in my life and stronger than 4)

Please feel free to write informative or clarifying after any of the items in this questionnaire. If part of an item applies more to your experience than another part, please underline the part that applies.

4 1. Visions of abstract geometric patterns of colored lines.
3 2. Loss of your usual sense of time.
3 3. Feeling that the consciousness experienced during part of the session was more real than your normal awareness of everyday reality.
0 4. Feelings of anger or aggression.
5 5. Experience of amazement.
5 6. Sense that the experience cannot be described adequately in words.
5 7. Sense of passing through stages in evolution.
5 8. Sense of the limitations and smallness of your everyday personality in contrast to the Infinite.
5 9. Gain of insightful knowledge experienced at an intuitive level.
5 10. Experience of overflowing energy.
0 11. Visions of sexual organs (genitalia, breasts)
5 12. Feelings that you experienced eternity or infinity.
4 13. Emotional and/or physical suffering.
1 14. Experience of oneness or unity with objects and/or persons perceived in your everyday life.
### Assessment of Withdrawal from Opioids

The Subjective Opiate Withdrawal Scale (SOWS)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Not at All</th>
<th>A Little</th>
<th>Moderately</th>
<th>Quite a Bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel anxious</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel like yawning</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3&gt;</td>
<td>4</td>
</tr>
<tr>
<td>I am perspiring</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My eyes are teary</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My nose is running</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have goosebumps</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am shaking</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have hot flushes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have cold flushes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My bones and muscles ache</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3&gt;</td>
<td>4</td>
</tr>
<tr>
<td>I feel restless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel nauseous</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel like vomiting</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>My muscles twitch</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I have stomach cramps</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel like using now</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Secondary Objectives:

3) to determine the effectiveness of ibogaine-assisted therapy in producing extended periods of relief from depression using the Beck Depression Inventory.

4) to track changes in Emotional Intelligence (using the Trait Emotional Intelligence Questionnaire, Short Form (TEIQue-SF) to observe concomitants of possible relapse into substance use.
Study Design

*Enroll and Follow 30 subjects for one year post-treatment (ASI before treatment + monthly for 12 months after treatment)

*Clinics in Baja California, Mexico

*Initial (enrollment / baseline) interview in person or video Skype, additional interviews by phone

*Inclusion/Exclusion Criteria
Study Design

*Secondary measures:
  > SOWS 1x before and 1x after treatment
  > SOCQ and Brief Description after treatment

*Control group of people who come to clinic but are denied treatment for medical reasons
Study Design

*Compensation--$10 per monthly “visit”

*Calls with Significant Other (monthly)
*Drug Testing (2x hair (preferred) or 3x urine)
  (subject compensated $55 / $35 per test)

Other Secondary Measures: baseline and monthly
*Beck Depression Inventory
*Test of Emotional Intelligence Questionnaire, Short Form (TEIQuie-SF)
**Current Status**

- 30th and final subject enrolled late August, 2011

- Final follow-up call completed last month

- Patient Screening: 67 patients treated during enrollment period (37 did not enroll)

- No control group
Eligible-Enrolled, 30
Eligible-Declined, 4
Eligible-Treatment Begun Prior to Enrollment, 9
Not Eligible-Unable/ Unfit to Consent, 4
Not Eligible-Ibogaine Experienced, 4
Not Eligible-Non-Opiate Addiction, 9
Not Eligible-Lacking Contact Information, 1
Eligible-Foreign, 8
Not Eligible-Ibogaine Experienced, 4
Eligible-Declined, 4
Preliminary Results

- Safety: no adverse events directly related to ibogaine treatment (n=67)
- Several patients (n = 7) treated multiply
- n = 12 subjects declared “Lost to Follow-up”
- Aftercare: N = 5 (3 residential rehab, 2 halfway house)
Preliminary Results

• ASI scores, secondary measure scores not yet analyzed

• Duration until first relapse (opiates) post-treatment

• Baseline opiate use (frequency) vs. opiate use at 1, 2, and 3 months post-treatment
> 1/3 relapse within first months

60% relapse within first 2 months

80% relapse within first 6 months
> 1/3 relapse within first months

60% relapse within first 2 months

80% relapse within first 6 months

20% make it more than 6 months (5 of 6 without any “aftercare” at all)

4 out of 30 (>1/8) “clean” for > 1 year following a single treatment
Reflections

• Confirmation that Ibogaine is an addiction interrupter -- not a cure, not a “magic bullet”

• What are the determinants of long-term outcomes?

• The importance of patient’s expectations
Strengths and Limitations of IOA-3

- Small “n”
- Many subjects unreachable month to month (⇒ LTFU)
- Some subjects reluctant to talk about relapses
- Strictly observational and so not affecting outcomes
- Standardly used measures (legitimacy, ease of comparison)
- Careful record-keeping
- 1st of its kind
New Zealand Ibogaine Study
Geoff Noller, PhD

- Ibogaine approved as prescription medicine in NZ (2010)
- Study began early 2012
- Aims to enroll 30 patients
A Call to Collective Research

• More data = better!

• Why collect data and make it public?
  1 Scientific studies can demonstrate efficacy beyond doubt
  2 Providers and patients can better assess efficacy and risks and determine best practices based on collective, shared data
What to Measure and Track?

Minimally
1. Substance use at baseline
2. Dosing schedule (iboga(ine) and other)
3. Previous treatments (iboga and other)

Recommended
1. EKG and other physical data related to safety, dosage
2. SOWS, QOL, any aftercare
3. Follow-up measures
What Instruments to Use?

- Severity of addiction: ASI-Lite or Severity of Dependence Scale (5 items)
- SOWS (available for free online)
- Beck Depression Inventory (or for free: Zung self-rating Depression Scale, also widely used)
- Ferrans and Powers QLI – generic – or WHO Quality of Life (“open-source”)
- Self-reported craving scale (PhenX Toolkit)
Who’s going to do this?

- Who will collect the data? (Clinicians? Interns?)
- Who will compile (and analyze) the data from various clinics?
- How can it be made available publicly?

→ Global (online) clearinghouse for shared data?
Continuing the Conversation

My email: kingsley@ucsd.edu