

ibogaine research update: phase 1 human study

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IBOGAINE is a psychoactive alkaloid extracted from the root bark of the rain forest shrub *Tabernanthe iboga*. Natives of Western Africa cultivate the shrub and use iboga preparations as a stimulant, aphrodisiac, hunting aid, and in higher doses, as part of religious rituals. After ibogaine was extracted and identified as the primary psychoactive agent of the bark in 1901, its central nervous system (CNS) and cardiovascular pharmacology was extensively investigated in the early part of this century. In the 1950s, ibogaine's anti-hypertensive properties were investigated by the pharmaceutical company CIBA.

Around this time, its potentiation of morphine analgesia was also explored. There was also some use of the drug by French mountaineers to allay fatigue and hunger during rigorous and demanding expeditions.

In the 1960s, the hallucinogenic properties of the drug were explored as an aid to psychotherapy by Naranjo and others. Ibogaine eventually found its way into the underground drug culture in the late 1960s. Based on the experience of these underground users and his own personal experience, Howard Lots of filed a use patent for ibogaine treatment of narcotic addiction in 1985. Since 1987, groups of addicts, such as the International Coalition

for Addict Self-Help (ICASH) have been providing treatment with ibogaine for "interruption" of opiate and stimulant dependence. As part of pre-clinical studies supported by NIDA to evaluate ibogaine's potential to treat drug dependence, ibogaine has been reported to induce Purkinje cell damage in the rat given 100 mg/kg i.p. However, work in the primate using 25 mg/kg p.o. for 4 days in a row failed to disclose neuronal toxicity. Observations of several subjects who received treatment in Holland with 25 mg/kg p.o. revealed a transient postural tremor and truncal ataxia.

Preliminary findings

We have recently received approval to begin Phase I studies to assess the safety, metabolism and pharmacokinetics of ibogaine in volunteers who have already experienced ibogaine. As of the moment, the effects of 1 mg/kg p.o. have been studied in three volunteers who had previously experienced ibogaine at much higher doses while in Holland. No tremor or ataxia was noted, and no hallucinogenic effects were noted. The subjects felt nothing at all other than perhaps being somewhat calmer than usual. Pharmacokinetic profiling is currently being done with samples of blood taken from these subjects. These results are to be reported to the FDA before commencing with the next dosage level, 2 mg/kg. •

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