

IMAGINE A WORLD in which the following scenario could unfold: When a new drug appears on the street, the Food and Drug Administration convenes a blue-ribbon panel to investigate its properties. They weigh the drug's effects on the body and mind, and after due consideration, they license the drug or prohibit its use.

That's precisely what's supposed to happen. But the response to 3,4-methylenedioxymethamphetamine—known as MDMA, or by its street name, "Ecstasy"—suggests there's nothing rational about our drug classification system. Last year, the Drug Enforcement Administration and the FDA declared MDMA a Schedule 1 Controlled Substance. This designation is reserved for drugs with a high potential for abuse and no known medical use. Heroin, LSD, and marijuana (but not cocaine) are all in Schedule 1. Possessing these drugs in any amount is a criminal act. In New York State, a 125-milligram dose of MDMA could get you up to 15 years in jail on a first offense.

What riles some psychotherapists who prescribed MDMA before it was prohibited is that it's all but impossible to conduct research on humans using a Schedule 1 drug. "It's like a black hole," says Dr. Lester Grinspoon, professor of psychiatry at Harvard Medical School, who sued to force the government to reclassify MDMA. An appeals court judge agreed with Grinspoon that MDMA had therapeutic potential, and for several months last year, Ecstasy was legal. Then, the DEA restored its Schedule 1 status, and Grinspoon says he had "neither the money nor the energy" to take his case to the Supreme Court.

Grinspoon thinks the history of MDMA has much to do with the government's response. The drug was invented in 1914 by E. Merck & Company, which hoped to market it as an appetite suppressant. When the psychotropic effects became evident, Merck dropped its interest in MDMA, and after 17 years, the patent passed into the public domain. That severely limited the drug's profitability. "If a new chemical were thought by a pharmaceutical to have the therapeutic application MDMA clearly has, it wouldn't be in Schedule 1," Grinspoon says. "There's a drug called fenfluramine, which has the same effect as MDMA and causes the same neurotoxicity. It's been on the market for years."

As for that neurotoxicity: Several studies on animals, given MDMA twice daily at three times the average human dose, show damage to serotonin receptors in the brain. The animals were apparently able to function despite the damage, and within several months, there was partial regeneration. But these experiments indicate a possibly dangerous side effect of MDMA. In addition, the drug is known to cause constriction of blood vessels, making it dangerous for people with high blood pressure and heart disease. And some frequent users have reported highly unpleasant side effects. "It's not a drug that is acutely toxic," says Howard McClain, chief of the DEA's drug control section. "One dose is not likely to kill you. But it will affect motor coordination, driving, walking. And though it's not physically addicting, like an amphetamine, MDMA may be habituating."

Dr. George Ricaurte, at the Johns Hopkins School of Medicine, is attempting to measure serotonin function in people who have used MDMA. (Those who would like to join this study, which involves a spinal tap, can call Ricaurte at 301-550-0588.) If no significant damage is shown, Rick Doblin, who describes himself as "an advocate" of MDMA, plans to sue the government again to get the drug reclassified so that it can be put to therapeutic use. But that wouldn't alter its use on the street, where MDMA is often combined with other drugs and taken in megadoses. It wouldn't be the first time a substance considered safe when used



KEITH LARSEN

THE FACTS ABOUT 'ECSTASY'

A Talk With Andrew Weil

carefully collided with the American propensity for both repression and hedonism, and proved to be a dangerous drug.

To get at the facts about MDMA, we talked to Dr. Andrew Weil, author of *The Natural Mind and Chocolate to Morphine: Understanding Mind-Active Drugs*. Weil is associate director of the Division of Social Perspectives in Medicine at the University of Arizona.

RICHARD GOLDSTEIN: Why is the government so reluctant to authorize research on this drug?

ANDREW WEIL: I think the psychology that operates here is that MDMA is a prohibited substance and one that causes great pleasure, and it's very difficult for the government to admit that substances of this sort can have redeeming therapeutic effects. The thinking is that drugs are either evil or good, and MDMA is in the evil category. Therefore, we don't allow or encourage research on its beneficial effects, and instead strongly encourage researchers to find damaging effects.

GOLDSTEIN: What about the evidence that MDMA causes neurological damage?

WEIL: There certainly is an effect in animals, but it's not clear that this happens to humans who take ordinary doses of MDMA, or that long-term use creates any damage. Furthermore the signifi-

cance of the effect is unclear. What does it mean if some serotonin nerve-endings are damaged? Let's say that the effect does occur and have clinical relevance. With any drug we use in medicine, we do a kind of risk/benefit analysis. And the question is: is the risk posed by this drug of such a degree that we should close all the doors on investigations of its possible therapeutic effects? I don't think so, based on what I've seen so far.

GOLDSTEIN: What are the benefits of Ecstasy?

WEIL: First of all, I don't think "Ecstasy" is a good name for MDMA, because the state it produces is not ecstatic. It's a state of great tranquility, relaxation, self-acceptance, and nondefensiveness.

GOLDSTEIN: How is that different from psychedelics?

WEIL: MDMA is not a true psychedelic in the sense that it doesn't change sensory perception very much. It's in a class by itself. Even drugs that have fairly similar chemical structures do not produce this state of quiet, open relaxation, without major hallucinations, and with such uniformity. Taken in its proper dose, the incidence of bad reactions is much lower than with most psychoactive drugs.

GOLDSTEIN: I understand that, in Switzerland, some therapists use this drug.

WEIL: I've known a lot of therapists

who've used it over the years, and the reports have been overwhelmingly positive. They mention results in one session that are greater than in years of therapy, particularly in dealing with past traumas and repressed feelings. I don't think it should be looked upon as instant therapy, but MDMA can be a catalyst for change.

GOLDSTEIN: What are the dangers, especially in casual use?

WEIL: Most of the ill effects I've seen have been the result of taking too much. High doses of MDMA can cause anxiety, muscle tension, and insomnia. They can also leave people feeling hung over the next day. It's possible to become dependent on MDMA, though I've rarely seen that, since if you take it frequently, MDMA behaves more like amphetamine and the interesting effects disappear.

GOLDSTEIN: What's the safest way to use this drug?

WEIL: I think it's important to take it orally, not nasally or by injection. And the dosage is very important. A hundred twenty-five milligrams is appropriate, though some people need less than that. If you push the dose up, you get more side effects and not more of the state you want. The people I know who've gotten the most out of MDMA have usually taken it on special occasions, out in some place they like with someone they like, and they devote a whole day to it.

GOLDSTEIN: That's very different from the way this drug is typically used.

WEIL: It's mostly being used as a recreational drug today. I think that's a waste, because MDMA's most interesting effect is the possibility it shows people for behaving in a different way. I don't think you experience that if you take it in higher doses, in combination with alcohol or pot, and use it to go dancing.

GOLDSTEIN: Why is this becoming the drug of choice among college students?

WEIL: I assume that has to do with who first got hold of the drug. MDMA was in the hands of psychedelic professionals for a long time, and it was passed around through that network. But I do think different sorts of people prefer different drugs. Those who become dependent on alcohol seem to want to screen out internal stuff; they want to turn down their internal radio, whereas people who use pot a lot are fascinated by their internal dialogue. The cocaine experience for a lot of people is a feeling of power and control. You could argue that one reason cocaine has become so popular is that it's more consistent with the current values of our society than pot, which tends to produce passivity and receptiveness.

GOLDSTEIN: How would cocaine users deal with MDMA?

WEIL: They would probably be more interested in high doses to get something like the amphetamine effect.

GOLDSTEIN: If this drug became popular among crack users, it might be more toxic.

WEIL: Right. They might be inclined to snort it or shoot it, and used in those ways, MDMA would be much more toxic.

GOLDSTEIN: So you can't speak about the properties of a drug without considering the way people use it. Prohibition might be based on a real fear that many people would use MDMA in a toxic way.

WEIL: You're always going to have that problem, and the only way to deal with it is to stop the prohibition, which backfires by stimulating the growth of huge black markets and encouraging reckless use by very young people and those inclined to be antisocial. My thesis has always been that prohibition creates demand.

GOLDSTEIN: Is there an alternative?

WEIL: First of all, not to glorify drugs in any way. And then, to educate people so those who use a drug know how to do so in ways that won't hurt them. But it's very difficult to teach people about drugs in the current climate. What we call drug education is mostly designed to scare people away from drugs; we don't like by exaggerating their dangers while minimizing the dangers of drugs we promote, such as alcohol and caffeine. In that situation, people tend to disbelieve anything they hear from the authorities.

BY RICHARD GOLDSTEIN