Laws hamper study of ecstasy

ECSTASY, from Page 1C banned ecstasy in 1985, the federal government has considered it as dangerous as heroin or LSD. This has ensured ecstasy in a "Catch-22," said Dr. George Ricaurte, a neurosurgeon at the Institute for Medical Research.

"How can you gauge the risk in humans if you can't give it to humans?" he asked.

The federal restrictions are so tight that only animals can legally be injected with the drug. But as one Harvard psychiatrist noted, "When it comes to neurological phenomena, you can't use dogs.

Ecstasy is at the middle of a complicated legal battle that someday may allow it to become a prescription drug.

In the meantime, the research in San Jose and at Stanford is "extremely important," said Dr. Mark Molliver, a researcher at Johns Hopkins School of Medicine in Baltimore. "It would be very important to establish that the drug is safe or not safe."

In San Jose, Ricaurte is attempting to prove whether ecstasy is actually that dangerous. Private donors are funding the research, along with $80,000 from the state.

He has started at one extreme, by testing some of the nation's heaviest ecstasy users, flying them in from as far away as Florida. The 23 subjects have used the drug an average of 40 times; 15 of them acknowledge using other illegal drugs as well.

Through contacts he has developed during his five years of researching the drug, he found volunteers willing to undergo a painful procedure in which samples of spinal fluid are removed.

A person's spinal fluid contains "markers" that indicate the level of various brain transmitters, the chemicals that carry messages from one nerve cell to another. If the spinal fluid in the ecstasy users shows a decrease in the markers, that is evidence of a decrease in brain transmitters, Ricaurte said.

Ricaurte refused to comment publicly on the results of his human research until a scientific journal has reviewed his work.

All medical research on people infected monkeys with the drug.

Two weeks later, researchers killed the monkeys and examined their brains.

"According to Ricaurte, the monkeys' brains lost 90 percent of a neurotransmitter called serotonin, and showed signs of damage to nerve tissue.

"That could lead to permanent brain damage," he said. "But that is an open question."

Although scientists aren't sure exactly what serotonin does, they believe that it may regulate mood, said Molliver of Johns Hopkins. The study at Stanford, where Ricaurte will soon join other serotonin researchers. A lower-than-normal level of serotonin, he said, may cause depression.

Meanwhile, at Stanford, researchers Dr. Stephen Peroutka has conducted spinal taps on five showed a significant loss of serotonin. However, Peroutka said he would have to study more patients before reaching any conclusions.

Although the federal government's position on ecstasy is clear, its stance on brain transmitters is not. Since 1973, the Food and Drug Administration has allowed the use of at least one drug, an appetite suppressant, that depletes serotonin.

"It's for that reason I can't get too concerned about (Ricaurte's) findings," said Dr. George Greer, a New Mexico psychiatrist who treated patients with ecstasy until it was banned. "There is no evidence I heard of a patient dying to somebody who didn't think it was useful and safe."

The Drug Enforcement Administration feels otherwise.

"As far as we're concerned, it's just a street drug, a hallucinogenic street drug," said DEA spokesman Larry Galliana.

But the extent of ecstasy's popularity is unknown, largely because narcotics investigators can't track its use the way they can with addictive drugs, such as heroin, whose users frequently end up in emergency rooms, rehabilitation programs or jail.

Dr. Lester Grinspoon, a prominent Harvard psychiatrist in 1985 challenged the DEA in court to prove its medical case against the drug.

So far, the feds have failed. An administrative law judge ruled against the agency. So has a federal appellate judge, whose decision last fall may be appealed to the DEA.

If the toxic effects and benefit of ecstasy ever becomes clear, scientists still face a dilemma on whether to use it.

"How do you compare the benefits of improved psychological and brain levels to changes in serotonin levels?" asked Greer. "It's like trying to compare oranges to..."