

that what he does as a urologist is routine, he has made painstaking efforts to avoid question.

The process begins before the exam. He always arrives in a tie and white coat. He is courtly. Although he often knows patients socially and doesn't hesitate to speak with them about personal matters (the subjects can range from impotence to sexual affairs), he keeps his language strictly medical. If a female patient must put on a gown, he steps out while she undresses. He makes a point of explaining what he is going to do during the examination and why. If the patient lies down and needs further unzipping or unbuttoning, he is careful not to help. He wears gloves even for abdominal examinations. If the patient is female or under 18 years of age, then he brings in a nurse as a chaperone, whether the exam is "intimate" or not.

His approach has succeeded. I grew up knowing many of his

patients, and they trust him completely. I find, however, that some of his practices do not seem quite right for me. My patients are as likely to have problems above the waist as below, and having a chaperone present for a routine abdominal exam or a check of groin pulses feels to me absurd. I don't don gloves for nongenital exams. Nonetheless, I have tried to emulate the spirit of my father's visits — the decorum in language and attire, the respect for modesty, the precision of examination. As I think further about his example, it has also led me to make some changes: I now uniformly use an assistant not just for pelvic exams but also for rectal exams of female patients and as patients desire, for breast exams as well. For the comfort and reassurance of patients, these seem to be reasonable customs, even expectations, for more of us to accept.

A professor once told my medical school class that patients can

tell when you've seen a thousand naked patients and when you haven't. I now know that's true. But I have also come to recognize that no patient has seen a thousand doctors. They therefore have little idea, coming to a doctor's office, of what is "normal" and what is not. This we can change.

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1. Intimate examinations. London: General Medical Council Standards Committee, December 2001.
2. Gynaecological examinations: guidelines for specialist practice. London: Royal College of Obstetricians and Gynaecologists, July 2002.
3. Ad Hoc Committee on Physician Impairment. Report on sexual boundary issues. Dallas: Federation of State Medical Boards of the United States, April 1996.
4. Dehlendorf CE, Wolfe SM. Physicians disciplined for sex-related offenses. *JAMA* 1998; 279:1883-8.
5. Enborn JA, Thomas CD. Evaluation of sexual misconduct complaints: the Oregon Board of Medical Examiners, 1991 to 1995. *Am J Obstet Gynecol* 1997;176:1340-8.

Medical Marijuana and the Supreme Court

Susan Okie, M.D.

Angel McClary Raich, a California woman at the center of the recent Supreme Court case on medical marijuana, hasn't changed her treatment regimen since the Court ruled in June that patients who take the drug in states where its medicinal use is legal are not shielded from federal prosecution. A thin woman with long, dark hair and an intense gaze, Raich takes marijuana, or cannabis as she prefers to call it, about every two waking hours — by smoking it, by inhaling it as a vapor, by eating it in foods, or by applying it topically as a balm. She says that

it relieves her chronic pain and boosts her appetite, preventing her from becoming emaciated because of a mysterious wasting syndrome. Raich and her doctor maintain that without access to the eight or nine pounds of privately grown cannabis that she consumes each year, she would die.

Although Raich has embraced a public role advocating the medicinal use of marijuana, she says that her health suffered during the hectic days following the announcement of the Court's decision, when a whirlwind schedule of press conferences and congress-

sional meetings in Washington prevented her from medicating herself with cannabis as regularly as she needed to. "My body was shutting down on me," she said in an interview from her Oakland home last month. "I'm scared of my health failing. I'm scared of the federal government coming in and doing more harm. [Recently,] the city of Oakland warned there were going to be some raids" on marijuana dispensaries. "We're all just waiting. Sitting on the frontline is extremely stressful."

In the Supreme Court case

Gonzales v. Raich, the justices ruled 6 to 3 that the federal government has the power to arrest and prosecute patients and their suppliers even if the marijuana use is permitted under state law, because of its authority under the federal Controlled Substances Act to regulate interstate commerce in illegal drugs. In practical terms, it is not yet clear what effect the Court's decision will have on patients. An estimated 115,000 people have obtained recommendations for marijuana from doctors in the 10 states that have legalized the cultivation, possession, and use of marijuana for medicinal purposes. Besides California, those states are Alaska, Colorado, Hawaii, Maine, Montana, Nevada, Oregon, Vermont, and Washington. (Three weeks after the decision was announced, Rhode Island's legislature passed a similar law and soon afterward overrode a veto by the state's governor.)

Immediately after the news of the high court's ruling, attorneys general in the states that have approved the use of medical marijuana emphasized that the practice remained legal under their state laws, and a telephone survey of a random national sample of registered voters, commissioned by the Washington-based Marijuana Policy Project, indicated that 68 percent of respondents opposed federal prosecution of patients who use marijuana for medical reasons. Nationally, most marijuana arrests are made by state and local law-enforcement agencies, with federal arrests accounting for only about 1 percent of cases. However, soon after the

decision was announced, federal agents raided 3 of San Francisco's more than 40 medical marijuana dispensaries. Nineteen people were charged with running an international drug ring; they allegedly were using the dispensaries as a front for trafficking in marijuana and in the illegal amphetamine "ecstasy."

In California, the raids were widely viewed as a signal that fed-



Vaporizer System for the Administration of Marijuana.

The cannabis is placed in the chamber and heated to a temperature below that required for combustion. The balloon fills with vapor that contains the active ingredients without the tar or particulates thought to be responsible for most of the drug's adverse effects on the respiratory tract. The patient inhales the vapor from the balloon.

eral drug-enforcement agents intended to crack down on abuse of the state's medical marijuana program. California has an estimated 100,000 medical marijuana users. Its 1996 law grants doctors much greater latitude in recommending the drug than do similar laws in other states, and the U.S. District Court for the Northern District of California ruled in 2000 that doctors who prescribe marijuana are protected from federal prosecution under the First Amendment, provided that they do not help their patients obtain the drug. In San Francisco, some journalists or investigators who posed as patients have reported that they had little

difficulty obtaining a recommendation for medical marijuana, which allows the holder to purchase the drug from a dispensary. "We're empathetic to the sick," the Drug Enforcement Administration's Javier Pena told reporters after the raids, "but we can't disregard the federal law."¹¹

Even before the Supreme Court decision, many Californians had been calling for stricter state regulation of medical marijuana. Some cities have banned marijuana dispensaries, and many counties and cities — including San Francisco — have imposed moratoriums on the opening of new ones. Some local jurisdictions register and issue identification cards to patients who use marijuana for medical reasons, and state officials have been working on a voluntary statewide registration program. However, the officials recently put the program on hold, citing concern that the issuance of identification cards to patients might put state health officials

at risk of prosecution for aiding a federal crime and that federal drug-enforcement agents might seek state records in order to identify medical marijuana users. Registration of patients and the issuance of identification cards by the state are required in seven other states that have legalized the medical use of marijuana; patients can show the card as a defense against arrest by local or state police for possession of the drug. Maine and Washington do not issue identification cards to patients.

Conditions for which marijuana is commonly recommended include nausea caused by cancer

chemotherapy; anorexia or wasting due to cancer, AIDS, or other diseases; chronic pain; spasticity caused by multiple sclerosis or other neurologic disorders; and glaucoma. Frank Lucido, a Berkeley family practitioner who is Raich's doctor, said that so far, the Court ruling appears to have had little effect on his patients who use medical marijuana. About 30 percent of Lucido's practice consists of evaluating patients who want a recommendation for the drug. He said in an interview that he will not issue such a recommendation unless a patient has a primary care physician and has a condition serious enough to require follow-up at least annually. About 80 percent of his patients who use medical cannabis have chronic pain; a smaller number take the drug for muscle spasms, mood disorders, migraine, AIDS, or cancer. "My patients probably average in their 30s," Lucido said. "I have had probably five patients who are under 18. These are people with serious illnesses, where parents were very clear that this would be a good medication for them."

Peter A. Rasmussen, an oncologist in Salem, Oregon, said he discusses the option of trying marijuana with about 1 in 10 patients in his practice. "It's not my first choice for any symptom," he said in an interview. "I only talk about it with people if my first-line treatment doesn't work." Rasmussen said marijuana has helped stimulate appetite or reduce nausea in a number of his patients with cancer, but others have been distressed by its psychological effects. Some express interest in trying marijuana but have difficulty getting the drug. "Most of my patients who use it, I think, just buy the drug illegally," he said. "But a lot of my patients,

they're older, they don't know any kids, they don't hang out on the street. They just don't know how to get it."

Clinical research on marijuana has been hampered by the fact that the plant, which contains dozens of active substances, is an illegal drug classified as having no legitimate medical use. Researchers wishing to do clinical studies must first get government permission and obtain a supply of the drug from the National Institute on Drug Abuse. In a report published in 1999, an expert committee of the Institute of Medicine expressed concern about the adverse health effects of smoking marijuana, particularly on the respiratory tract. The report called for expanded research on marijuana's active components, known as cannabinoids, including studies to explore the chemicals' potential therapeutic effects and to develop safe, reliable, rapid-onset delivery systems. It also recommended short-term clinical trials of marijuana "in patients with conditions for which there is reasonable expectation of efficacy."²

There has been some progress toward those goals. The Center for Medicinal Cannabis Research (CMCR), a three-year research initiative established in 1999 by the California state legislature, has funded several placebo-controlled clinical trials of smoked marijuana to treat neuropathic pain, pain from other causes, and spasticity in multiple sclerosis, and the results are likely to be available soon. The National Institute on Drug Abuse provided both the active marijuana and the "placebo," a smokable version of the drug from which dronabinol (Δ^9 -tetrahydrocannabinol, or THC) and certain other active constituents had

been removed. "It's like decaf coffee or nicotine-free cigarettes, and it tastes the same [as marijuana]," said Igor Grant, a professor of psychiatry at the University of California, San Diego, and director of the CMCR. He said additional studies of the whole plant, as well as its individual components, are still needed. "It's still the case that we don't know which components of botanical marijuana have beneficial effects, if any," he said.

In an open-label trial, oncologist Donald I. Abrams of the University of California, San Francisco, found evidence of marijuana's effectiveness in the treatment of neuropathic pain among HIV-infected patients and has just finished a placebo-controlled trial that he intends to publish soon. Abrams has also shown that cannabinoids that are smoked or taken orally do not adversely affect drug treatment of HIV,³ and he is completing a study that compares blood levels of cannabinoids among volunteers who inhaled vaporized marijuana with similar levels among volunteers who smoked the drug. Vaporizers heat the drug to a temperature below that required for combustion, producing vapor that contains the active ingredients without the tar or particulates thought to be responsible for most of the drug's adverse effects on the respiratory tract.

Meanwhile, a new marijuana-derived drug is on the Canadian market and may soon be considered for approval by the Food and Drug Administration. Sativex, a liquid cannabis extract that is sprayed under the tongue, was approved in Canada in June for the treatment of neuropathic pain in multiple sclerosis. Its principal active ingredients are dronabi-

nol and cannabidiol, which are believed to be the primary active components of marijuana. The drug's manufacturer, GW Pharmaceuticals of Britain, is also testing it for cancer pain, rheumatoid arthritis, postoperative pain, and other indications. Marinol, a synthetic version of dronabinol supplied in capsules, is approved in the United States for chemotherapy-associated nausea and for anorexia and wasting among patients with AIDS.

On the day the Supreme Court ruling was announced, John Walters, President George W. Bush's "drug czar," issued a statement declaring, "Today's decision marks the end of medical marijuana as a political issue. . . . We have a responsibility as a civilized society to ensure that the medicine Americans receive from their doctors is effective, safe, and free from the pro-drug politics that are being promoted in America under the guise of medicine." Nine days later, the House of Representatives, for the third year in a row, defeated a measure that would have prevented the Justice Department from spending mon-

ey to prosecute medical marijuana cases under federal law.

Nevertheless, marijuana advocates insist that the long-running battle between federal and state governments over the medicinal use of marijuana is far from over. Activists next plan to focus on getting more states to pass laws legalizing medical marijuana, according to Steve Fox, former director of government relations for the Marijuana Policy Project.

It is surprising that the Supreme Court decision does not necessarily spell the end even of Angel Raich's legal case. Raich and another California patient, Diane Monson, who initially sued to prevent the Justice Department from prosecuting them or their suppliers, won a favorable ruling in 2003 from California's Court of Appeals for the Ninth Circuit. The Supreme Court's reversal now sends their case back to that court. Raich said that she, Monson, and their attorneys will ask the appeals court judges to consider other legal arguments, such as whether prosecuting patients who use marijuana to relieve pain violates their right to due process

of law. "Previous decisions have established that there is a fundamental right to preserve one's life and avoid needless pain and suffering," explained Boston University's Randy Barnett, a constitutional lawyer who argued the women's case before the Supreme Court. "Federal restriction on accessibility to medical cannabis is an infringement" on that right, he said.

Raich vowed to continue her personal battle. "I'm stubborn as heck, so I don't plan to give it up that easily. I plan to fight until I can't fight anymore," she said.

Dr. Okie is a contributing editor of the *Journal*.

An interview with Dr. Donald Abrams can be heard at www.nejm.org.

1. Finz S. 19 Named in medicinal pot indictment. *San Francisco Chronicle*. June 24, 2005:B4.
2. Joy JE, Watson SJ, Benson JA, eds. *Marijuana and medicine: assessing the science base*. Washington, D.C.: National Academy Press, 1999.
3. Abrams DI, Hilton JF, Leiser RJ, et al. Short-term effects of cannabinoids in patients with HIV-1 infection: a randomized, placebo-controlled clinical trial. *Ann Intern Med* 2003;139:258-66.