EDITORIALS

Physicians and Execution

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This spring the U.S. Supreme Court in *Baze v. Rees*[1] will rule on the constitutionality of the three-drug regimen currently used for lethal injection in most state executions. The Eighth Amendment to the U.S. Constitution prohibits punishment that is "cruel and unusual." The central question before the Court in *Baze* is whether the use of sodium thiopental, pancuronium bromide, and potassium chloride violates that constitutional prohibition.

The heinous nature of the crimes committed by Ralph Baze and his coplaintiff, Thomas Bowling, is not in doubt. What the Court will decide is whether the current lethal-injection protocol does or does not meet an acceptable constitutional standard of human decency.

Lethal injection was introduced in the United States in 1977 explicitly to sanitize executions, since the older methods — hanging, electrocution, and chemical gassing — were considered to be inhumane. The three-drug regimen that is commonly used was proposed by an Oklahoma forensic pathologist, Dr. A. Jay Chapman, and adopted by the state legislature without any scientific or medical testing. Injected drugs, now used in all but 1 of the 37 states in which capital punishment is legal, have been part of the increasing medicalization of executions and the enlistment of medical personnel to lend them apparent moral legitimacy.

Since 1977 the Oklahoma regimen has been used in approximately 900 executions, several dozen of which have been botched because of infiltration of intravenous lines, inadequate anesthesia, drug precipitation when solutions of sodium thiopental and pancuronium bromide are mixed, and other problems. In a vivid example, an inmate in Ohio in 2006 raised his head repeatedly during the execution and said, "It don't work."

The use of a neuromuscular blocker, pancuronium bromide, as part of the protocol has been especially controversial, since it has no anesthetic properties and only paralyzes the person, which can mask inadequate anesthesia if a sufficient dose of sodium thiopental has not been administered. The person may be alert and aware and may suffocate owing to paralysis of respiratory muscles, but there will be no way to know it. Also, the subsequent intravenous administration of potassium chloride would cause excruciating pain in a conscious person, but this too would be concealed by paralysis.

As a consequence of botched executions, the assistance of physicians and other health care professionals has increasingly been sought to provide consultation, place intravenous lines, mix and administer drugs, and monitor the results. This fact is not widely appreciated because such physicians often choose to remain anonymous. Still, many physicians and medical societies, including the American Medical Association and the American Society of Anesthesiology, have taken strong stands against the involvement of medical professionals in capital punishment. Although some states have forbidden medical boards to reprimand physicians who participate in executions, few medical professionals have agreed to assist in lethal injection. For example, in response to a federal court order in 2006, the State of California required the presence of qualified medical personnel at the execution of Michael Morales. Prison officials found two anesthesiologists who were willing to participate, but when informed in detail of the role they would play, they withdrew hours

before the scheduled lethal injection, which was then halted.

Since the Morales case, there is evidence of a growing sentiment in the country against executions: only 42 executions took place in 2007 (as compared with 98 in 1999), New Jersey decided in December 2007 to abolish capital punishment, and the U.S. Supreme Court agreed to hear *Baze v. Rees*, marking the first time the Court has examined the constitutionality of lethal injection as a means of execution. But the people's unease over the death penalty is not new. In his 1972 concurring opinion in *Furman v. Georgia*,[2] in which the Supreme Court ruled capital punishment to be cruel and unusual because of arbitrary and capricious application, Justice William Brennan wrote, "The progressive decline in, and the current rarity of, the infliction of death demonstrate that our society seriously questions the appropriateness of this punishment today." Although *Furman* was reversed in 1976 in *Gregg v. Georgia*,[3] and executions resumed in the United States, the Court subsequently ruled unconstitutional the execution of the mentally retarded (in *Atkins v. Virginia*, 2002)[4] and juveniles (in *Roper v. Simmons*, 2005).[5] In both cases, Justice Anthony Kennedy, the current swing-vote justice, was in the majority, and he wrote the Court's opinion in *Roper*. If the Court's opinion in *Baze* is decided by a 5-to-4 majority, Justice Kennedy may again be at center stage, and his vote may prove decisive.

We are concerned that, regardless of its decision in *Baze v. Rees*, the Court may include language in its opinion that will turn again to the medical profession to legitimize a form of lethal injection that, meeting an appropriate constitutional standard, will not be considered "cruel and unusual punishment." On the surface, lethal injection is a deceptively simple procedure, but its practical application has been fraught with numerous technical difficulties. Without the involvement of physicians and other medical professionals with special training in the use of anesthetic drugs and related agents, it is unlikely that lethal injection will ever meet a constitutional standard of decency. But do we as a society want the nation's physicians to do this? We believe not.

Physicians and other health care providers should not be involved in capital punishment, even in an advisory capacity. A profession dedicated to healing the sick has no place in the process of execution. On January 7 in oral arguments in *Baze v. Rees*, the justices asked many important and thoughtful questions about a potential role for physicians and other health care professionals in executions. In their fuller examination of *Baze v. Rees*, the justices should not presume that the medical profession will be available to assist in the taking of human lives. We believe that, like the anesthesiologists in the Morales case, all responsible members of the medical profession, when asked to assist in a state-ordered execution, will remember the Hippocratic Oath and refuse to participate. The future of capital punishment in the United States will be up to the justices, but the involvement of physicians in executions will be up to the medical profession.

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1. Baze v. Rees, No. 07-5439.
2. Furman v. Georgia, 408 U.S. 238 (1972).
3. Gregg v. Georgia, 428 U.S. 153 (1976).
4. Atkins v. Virginia, 536 U.S. 304 (2002).
5. Roper v. Simmons, 543. U.S. 551 (2005).

Perspective ROUNDTABLE

Physicians and Execution

On January 23 in the *Journal* online, we will publish a video roundtable, "Physicians and Execution." The roundtable is moderated by Atul Gawande, and panelists include Robert Truog, Deborah Denno, and David Waisel. The video can be viewed at www.nejm.org, and we hope that it will inform readers about the important implications of *Baze v. Rees*. Readers can also vote online on whether they believe physicians and other health care professionals should be involved in executions and whether they themselves would choose to participate in executions.