SUPREME COURT OF THE UNITED STATES

No. 07–5439

RALPH BAZE AND THOMAS C. BOWLING, PETITIONERS *v.* JOHN D. REES, COMMISSIONER, KENTUCKY DEPARTMENT OF CORRECTIONS, ET AL.

ON WRIT OF CERTIORARI TO THE SUPREME COURT OF KENTUCKY

[April 16, 2008]

JUSTICE BREYER, concurring in the judgment.

Assuming the lawfulness of the death penalty itself, petitioners argue that Kentucky's method of execution, lethal injection, nonetheless constitutes a constitutionally forbidden, "cruel and usual punishmen[t]." U. S. Const., Amdt. 8. In respect to *how* a court should review such a claim, I agree with JUSTICE GINSBURG. She highlights the relevant question, whether the method creates an untoward, readily avoidable risk of inflicting severe and unnecessary suffering. *Post*, at 11 (dissenting opinion). I agree that the relevant factors—the "degree of risk," the "magnitude of pain," and the "availability of alternatives"—are interrelated and each must be considered. *Post*, at 4. At the same time, I believe that the legal merits of the kind of claim presented must inevitably turn not so much upon the wording of an intermediate standard of review as upon facts and evidence. And I cannot find, either in the record in this case or in the literature on the subject, sufficient evidence that Kentucky's execution method poses the "significant and unnecessary risk of inflicting severe pain" that petitioners assert. Brief for Petitioners 28.

In respect to the literature, I have examined the periodi-

cal article that seems first to have brought widespread legal attention to the claim that lethal injection might bring about unnecessary suffering. See *ante*, at 13, n. 2 (plurality opinion); Denno, The Lethal Injection Quandary: How Medicine Has Dismantled the Death Penalty, 76 Ford. L. Rev. 49, 105, n. 366 (2007) (collecting cases in which condemned inmates cited the Lancet study). The article, by Dr. Leonidas G. Koniaris, Teresa A. Zimmers (of the University of Miami School of Medicine), and others, appeared in the April 16, 2005, issue of the Lancet, an eminent, peer-reviewed medical journal. See Koniaris, Zimmers, Lubarsky, & Sheldon, Inadequate Anaesthesia in Lethal Injection for Execution, 365 Lancet 1412 (hereinafter Lancet Study). The authors examined "autopsy toxicology results from 49 executions in Arizona, Georgia, North Carolina, and South Carolina." *Id.*, at 1412–1413. The study noted that lethal injection usually consists of sequential administration of a barbiturate (sodium thiopental), followed by injection of a paralyzing agent (pancuronium bromide) and a heart-attack-inducing drug (potassium chloride). The study focused on the effectiveness of the first drug in anaesthetizing the inmate. See *id.*, at 1412. It noted that the four States used 2 grams of thiopental. *Id.*, at 1413. (Kentucky follows a similar system but currently uses 3 grams of sodium thiopental. See *ante*, at 5–6 (plurality opinion)). Although the sodium thiopental dose (of, say, 2 grams) was several times the dose used in ordinary surgical operations, the authors found that the level of barbiturate present in the bloodstream several hours (or more) after death was *lower* than the level one might expect to find during an operation. Lancet Study 1413–1414. With certain qualifications, they state that "21 (43%)" of the examined instances "had [thiopental] concentrations consistent with consciousness," *id.*, at 1413,—a fact that should create considerable concern given the related likelihood of unexpressed suffering.

The authors suggest that, among other things, inadequate training may help explain the results. *Id.*, at 1414.

The Lancet Study, however, may be seriously flawed. In its September 24, 2005, issue, the Lancet published three responses. The first, by one of the initial referees, Jonathan I. Groner of Children's Hospital, Columbus, Ohio, claimed that a low level of thiopental in the bloodstream does not necessarily mean that an inadequate dose was given, for, under circumstances likely common to lethal injections, thiopental can simply diffuse from the bloodstream into surrounding tissues. See Inadequate Anaesthesia in Lethal Injection for Execution, 366 Lancet 1073. And a long pause between death and measurement means that this kind of diffusion likely occurred. See *ibid.* For this reason and others, Groner, who said he had initially "expressed strong support for the article," had become "concerned" that its key finding "may be erroneous because of lack of equipoise in the study." *Ibid.*

The second correspondents, Mark J. S. Heath (petitioners' expert in their trial below), Donald R. Stanski, and Derrick J. Pounder, respectively of the Department of Anesthesiology, Columbia University, of Stanford University School of Medicine, and the University of Dundee, United Kingdom, concluded that "Koniaris and colleagues do not present scientifically convincing data to justify their conclusion that so large a proportion of inmates have experienced awareness during lethal injection." *Ibid.* These researchers noted that because the blood samples were taken "several hours to days after" the inmates' deaths, the postmortem concentrations of thiopental—a lipophilic drug that diffuses from blood into tissue—could not be relied on as accurate indicators for concentrations in the blood stream during life. *Ibid.* See also *ante*, at 12–13, n. 2 (plurality opinion).

The third correspondents, Robyn S. Weisman, Jeffrey N. Bernstein, and Richard S. Weisman, of the University of

Miami, School of Medicine, and Florida Poison Information Center, said that "[p]ost-mortem drug concentrations are extremely difficult to interpret and there is substantial variability in results depending on timing, anatomical origin of the specimen, and physical and chemical properties of the drug." 366 Lancet, at 1074. They believed that the original finding "requires further assessment." *Ibid.*

The authors of the original study replied, defending the accuracy of their findings. See *id.*, at 1074–1076. Yet, neither the petition for certiorari nor any of the briefs filed in this Court (including seven *amici curiae* briefs supporting the petitioners) make any mention of the Lancet Study, which was published during petitioners' trial. In light of that fact, and the responses to the original study, a judge, nonexpert in these matters, cannot give the Lancet Study significant weight.

The literature also contains a detailed article on the subject, which appeared in 2002 in the Ohio State Law Journal. The author, Professor Deborah W. Denno, examined executions by lethal injection in the 36 States where thiopental is used. See When Legislatures Delegate Death: The Troubling Paradox Behind State Uses of Electrocution and Lethal Injection and What It Says About Us, 63 Ohio St. L. J. 63. In Table 9, the author lists 31 "Botched Lethal Injection Executions" in the time from our decision in *Gregg* v. *Georgia*, 429 U. S. 1301 (1976), through 2001. See Denno, 63 Ohio St. L. J., at 139–141. Of these, 19 involved a problem of locating a suitable vein to administer the chemicals. *Ibid.* Eleven of the remaining 12 apparently involved strong, readily apparent physical reactions. *Ibid.* One, taking place in Illinois in 1990, is described as involving "some indication that, while appearing calm on the outside due to the paralyzing drugs, [the inmate] suffered excruciating pain." *Id.*, at 139. The author adds that "[t]here were reports of faulty equipment and inexperienced personnel." *Ibid.* This

article, about which Professor Denno testified at petitioners' trial and on which petitioners rely in this Court, may well provide cause for concern about the administration of the lethal injection. But it cannot materially aid the petitioners here. That is because, as far as the record here reveals, and as the Kentucky courts found, Kentucky's use of trained phlebotomists and the presence of observers should prevent the kind of "botched" executions that Denno's Table 9 documents.

The literature also casts a shadow of uncertainty upon the ready availability of some of the alternatives to lethal execution methods. Petitioners argued to the trial court, for example, that Kentucky should eliminate the use of a paralytic agent, such as pancuronium bromide, which could, by preventing any outcry, mask suffering an inmate might be experiencing because of inadequate administration of the anesthetic. See Brief for Petitioners 51–57; Reply Brief for Petitioners 18, and n. 6. And they point out that use of pancuronium bromide to euthanize animals is contrary to veterinary standards. See *id*., at 20 (citing Brief for Dr. Kevin Concannon et al. as *Amici Curiae* 17–18). See also the Concannon Brief 4, 18, n. 5 (noting that Kentucky, like 22 other States, prohibits the use of neuromuscular blocking agents in euthanizing animals). In the Netherlands, however, the use of pancuronium bromide is recommended for purposes of lawful assisted suicide. See *ante*, at 19–20 (plurality opinion) (discussing the Royal Dutch Society for the Advancement of Pharmacy recommendation of the use of a muscle relaxant such as pancuronium in addition to thiopental). See also Kimsma, Euthanasia and Euthanizing Drugs in The Netherlands, reprinted in Drug Use in Assisted Suicide and Euthanasia 193, 199–202 (M. Battin & A. Lipman eds. 1996) (discussing use of neuromuscular relaxants). Why, one might ask, if the use of pancuronium bromide is undesirable, would those in the Netherlands, interested in practices designed

to bring about a humane death, recommend the use of that, or similar, drugs? Petitioners pointed out that in the Netherlands, physicians trained in anesthesiology are involved in assisted suicide, while that is not the case in Kentucky. See Tr. of Oral Arg. 55. While important, that difference does not resolve the apparently conflicting views about the inherent propriety or impropriety of use of this drug to extinguish human life humanely.

Similarly, petitioners argue for better trained personnel. But it is clear that both the American Medical Association (AMA) and the American Nursing Association (ANA) have rules of ethics that strongly oppose their members' participation in executions. See Brief for American Society of Anesthesiologists as *Amicus Curiae* 2–3 (citing AMA, Code of Medical Ethics, Policy E–2.06 Capital Punishment (2000), online at http://www.ama-assn.org/ama1/pub/upload/mm/369/e206capitalpunish.pdf (all Internet materials as visited Apr. 10, 2008, and available in Clerk of Court's case file)); ANA, Position Statement: Nurses' Participation in Capital Punishment (1994), http://nursingworld.org/MainMenuCategories/HealthcareandPolicyIssues/ANAPositionStatements/EthicsandHumanRights.aspx (noting that nurses' participation in executions "is viewed as contrary to the fundamental goals and ethical traditions of the profession"). Cf. Ky. Rev. Stat. Ann. §431.220(3) (West 2006) (Kentucky prohibiting a physician from participating in the "conduct of an execution," except to certify the cause of death). And these facts suggest that finding better trained personnel may be more difficult than might, at first blush, appear.

Nor can I find in the record in this case any stronger evidence in petitioners' favor than the literature itself provides of an untoward, readily avoidable risk of severe pain. Indeed, JUSTICE GINSBURG has accepted what I believe is petitioners' strongest claim, namely, Kentucky

should require more thorough testing as to unconsciousness. See *post*, at 5–11. In respect to this matter, however, I must agree with the plurality and JUSTICE STEVENS. The record provides too little reason to believe that such measures, if adopted in Kentucky, would make a significant difference.

The upshot is that I cannot find, either in the record or in the readily available literature that I have seen, sufficient grounds to believe that Kentucky's method of lethal injection creates a significant risk of unnecessary suffering. The death penalty itself, of course, brings with it serious risks, for example, risks of executing the wrong person, see, *e.g.*, *ante*, at 16–17 (STEVENS, J., concurring in judgment), risks that unwarranted animus (in respect, *e.g.*, to the race of victims), may play a role, see, *e.g.*, *ante*, at 16, risks that those convicted will find themselves on death row for many years, perhaps decades, to come, see *Smith* v. *Arizona*, 552 U. S. ___ (2007) (BREYER, J., dissenting from denial of certiorari). These risks in part explain why that penalty is so controversial. But the lawfulness of the death penalty is not before us. And petitioners' proof and evidence, while giving rise to legitimate concern, do not show that Kentucky's method of applying the death penalty amounts to "cruel and unusual punishmen[t]."

For these reasons, I concur in the judgment.