

tion of the eye by using povidone-iodine 5% solution, 2 drops in the conjunctival sac, and 10% solution to the eyelid margin, lashes, and skin,⁵ maintaining a sterile operative field and attention to proper surgical technique, have helped ophthalmic surgeons to reduce the likelihood of this potentially devastating complication to approximately 0.13%.⁶ There is no evidence, however, to support the use of fourth-generation quinolones, which add considerable expense but no obvious additional benefit.

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In Reply: We agree with Dr Sauer that topical fourth-generation fluoroquinolones have not been shown in controlled studies to be better than existing agents. To our knowledge, however, there have been no controlled studies in the medical literature that support the use of any topical antibiotic before or after cataract surgery. Given the anticipated very small benefit of topical antibiotics in terms of absolute risk, the sample would need to be prohibitively large to achieve sufficient statistical power and thus such a trial is unlikely ever to be performed. The original study documenting the efficacy of prophylactic antibiotics was poorly controlled, used older-generation antibiotics, and the cataract surgical procedure was very different from today.¹ However, this study demonstrated a reduction in the incidence of endophthalmitis (from 1 in 446 to 1 in 4384) with the use of combination antibiotic therapy, including chloramphenicol.

The incidence of endophthalmitis has been increasing during the past decade,^{2,3} and Leaming⁴ reported that 99% of ophthalmologists use prophylactic antibiotics with cataract surgery. Although the cause of endophthalmitis is multifactorial, the increasing bacterial resistance to fluoroquinolones may play a role in its increasing incidence.⁵ For example, 43% of endophthalmitis specimens were recently found to be resistant to ofloxacin and ciprofloxacin.⁶

As Sauer points out, gram-positive bacteria are responsible for as many as 94% of cases of endophthalmitis.⁷ One theoretical advantage of the topically available fourth-generation fluoroquinolones is their increased in vitro efficacy against these gram-positive bacteria.⁸

We agree with Sauer that controlling external disease conditions, such as blepharitis by using preoperative povidone-iodine

solution, and practicing aseptic techniques are important in preventing endophthalmitis following cataract surgery. Although we did not state or mean to imply that fourth-generation fluoroquinolones are the "standard of care" for antibiotic prophylaxis in cataract surgery, we believe they are a reasonable choice for prophylaxis of endophthalmitis in cataract surgery.

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End-of-Life Practices in European Intensive Care Units

To the Editor: In their study of end-of-life practices in European intensive care units (ICUs), Dr Sprung and colleagues¹ describe a shortening of the dying process as a result of the administration of opiates and benzodiazepines. The authors stated that the majority of cases of shortening of the dying process can be equated with euthanasia, because physicians generally intended these actions to cause death.

In the Netherlands the term "euthanasia" is restricted to the intention and action of the physician to cause death on the voluntary and well-considered request of a patient. In most cases the basis of the patient's request is unbearable suffering and deterioration. The actual death of the patient is effected by the administration of specific drugs, which are collectively referred to as "euthanatica." A combination of thiopental sodium and pancuroniumbromide is often used with the intention is to cause death. By contrast, morphine and benzodiazepines such as diazepam are not euthanatica, because they will not acutely kill the patient.² Thorns and Sykes^{3,4} and Morita et al² have reported that patients who received increased opioids and sedatives at the end of their lives did not

demonstrate shorter survival than those who received no increases or no opioids at all. Physicians may believe they can shorten life, but this is not an evidence-based effect of opioids and sedatives. Terminal sedation differs from active euthanasia. The use of opioids and sedatives in end-of-life care is good-quality care and should not be mistaken for euthanasia.

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1. Sprung CL, Cohen SL, Sjøkvist P, et al, for the Ethicus Study Group. End-of-life practices in European intensive care units: the Ethicus study. *JAMA*. 2003;290:790-797.
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To the Editor: Dr Sprung and colleagues¹ stated that “active shortening of the dying process” was rare in their sample and affected only 2% of patients who died after life-sustaining treatment was withheld or withdrawn.

A recent European survey,² on the other hand, has indicated that 40% of ICU physicians admitted that they sometimes administered drugs to hasten death. Likewise, physicians at neonatal ICUs in 2 European countries admitted with significant frequency (in France, 73% of respondents; in the Netherlands, 47%) that they had decided to administer drugs with the purpose of ending the patient’s life.³ In Italy, a survey found that the deliberate use of lethal doses of drugs was admitted by about 4% of ICU physicians and was considered ethically acceptable by about 16%.⁴

Although prospective studies cannot be compared with questionnaire-based surveys, overall these results imply that this practice is not as uncommon as Sprung et al concluded. Furthermore, some think that “because the end-result is the same, it is hypocritical to consider the withdrawal of life support as acceptable but drug injection as unacceptable.”⁵

I believe it is necessary to open a debate on the ethical acceptability of individual actions. Merely observing the existence of a practice does not in itself make it ethically acceptable. Thus, I agree with Cuttini et al³ that “unless ethics becomes a merely reactive and adaptive mechanism to a changing reality, ethical and legal norms—what ought to be done—should not be deduced from observed behaviours—what is done. Instead, they need to be elaborated from moral principles and values.”

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1. Sprung CL, Cohen SL, Sjøkvist P, et al, for the Ethicus Study Group. End-of-life practices in European intensive care units: the Ethicus Study. *JAMA*. 2003;290:790-797.
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of-life decisions in neonatal intensive care: physicians’ self-reported practices in seven European countries. *Lancet*. 2000;355:2112-2118.

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In Reply: Dr Kompanje states that morphine and benzodiazepines do not acutely kill patients. We disagree. Although it may be difficult at times to determine whether death was caused by a patient’s underlying disease or by the administration of drugs, very large doses (200 mg) of opiates or benzodiazepines given as intravenous boluses can in fact cause death in patients who have not previously been receiving large doses. The opiate would seem to be most likely the cause of death if the patient dies within 1 minute of the injection. We agree that physicians should not be afraid to use sufficient doses of medications for palliation even if it may shorten the patient’s life, although in most palliative-care circumstances it does not. This is good-quality end-of-life palliative care and not euthanasia. When physicians use massive doses of opiates in excess of patient needs for palliation to hasten death, we consider this to be active shortening of the dying process or euthanasia, and not palliative care. As we noted, the term “active shortening of the dying process” was used rather than “active euthanasia,” as most terminally ill patients could not request the action. Some of the patients in the “active shortening of the dying process” category did in fact request the action.

Dr Giannini, on the other hand, believes that the practice of hastening patients’ death after withdrawing therapy is not so rare or is limited only to a few ICUs based on physician surveys. Surveys of what physicians say they do may be different than what they actually do. In fact, differences between previous surveys and our findings may be related to the fact that responses in surveys relate to actions over a long period of time whereas our study occurred over an 18-month period. Also, the physicians in our study might have had different opinions and actions than those interviewed in the surveys. A recent descriptive study confirmed lower numbers for the administration of drugs with the explicit intention of hastening death: about 1% or less in Denmark, Italy, Sweden, and Switzerland; 1.8% in Belgium; and 3.4% in the Netherlands.¹ Our study provides a snapshot of what is occurring in European ICUs. We never suggested that what was observed in the study should become ethically or legally accepted norms. In fact, the Ethicus investigators comprise a diverse group of physicians who certainly agree that they disagree as to what should be considered ethical and legal physician behavior.

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