celecoxib in preventing the recurrence of sporadic adenomatous polyps after polypectomy, with a planned recruitment of more than 1000 subjects. A randomized French study of two doses of aspirin (160 mg and 300 mg) in a similar setting has finished recruiting subjects. Combination therapy with NSAIDs and folate, eflornithine, angiotensin-converting–enzyme inhibitors, statins, or calcium is also under investigation. Cyclooxygenase-2 inhibitors may become the preferred chemopreventive agent owing to their favorable gastrointestinal safety profile, but a recent report that pooled the results of four randomized studies aroused concern about the risk of cardiovascular events and the prothrombotic potential of cyclooxygenase-2 inhibitors.10

Cyclooxygenase-2 inhibitors are being evaluated both as adjuvant therapy for patients with established cancer and as a treatment for advanced disease. A placebo-controlled, randomized study of adjuvant rofecoxib is about to begin that is scheduled to enroll 7000 patients who have undergone resection to cure colorectal cancer. Current studies are also evaluating cyclooxygenase-2 inhibitors combined with cytotoxic drugs in patients with recurrent colorectal cancer, non–small-cell lung cancer, and cervical cancer.

We have now entered the era of molecular-targeted drug therapy for malignant disease, and the inhibition of cyclooxygenase is a good example of this approach. However, determining the optimal dose, schedule, and duration of treatment in the appropriate clinical context is a major challenge. With these imperatives in mind and despite the relatively disappointing results with respect to their ability to prevent adenomatous polyps after polypectomy, NSAIDs and cyclooxygenase-2 inhibitors may yet be shown to have a role in the primary prevention or treatment of established colorectal cancer.

IAN CHAU, M.R.C.P.
DAVID CUNNINGHAM, M.D., F.R.C.P.
Royal Marsden Hospital
Sutton, Surrey SM2 5PT, United Kingdom

REFERENCES

Copyright © 2002 Massachusetts Medical Society.

AUTONOMY RECONSIDERED

IN 2001, 50 percent of deaths of Medicare beneficiaries occurred in hospitals, often after stays in intensive care units, visits to multiple physicians in the months before death, and enormous expenditures for treatments intended to prolong life.1 Many argue that it is ethical to provide marginally effective treatments if sick patients want them, regardless of the resulting quality of life. However, this approach entails substantial trade-offs — expensive procedures are reimbursed under Medicare, whereas prescription medications, nursing home care, and home care services are not. We have done little to address these trade-offs in the United States, since a long legal and cultural tradition emphasizes the autonomy of patients as the predominant principle guiding medical decision making.

The utility of the autonomy principle rests on several assumptions that limit its applicability at the bedside. Incentives created by our system of health care reimbursement strongly constrain the choices that are actually available to patients. For example, the supply of hospital beds, not patients’ preferences, has been shown to be the key determinant of whether terminally ill patients die at home or in the hospital.2 Despite more than 25 years of experience with advance directives, all too often, treatment decisions are made on the basis of insurance coverage, not the needs or desires of patients.

Advance directives are also based on the assumption that patients can anticipate their choices under future circumstances in which death is imminent. There is little evidence that the decisions patients make when they are relatively healthy predict their choices when death is imminent. Preferences for life-sustaining treatments appear to be only moderately stable, and the likelihood of choosing such treatments increases with worsening health.3,4 The fact that less than 0.1 percent of terminally ill patients in Oregon have opted for assisted suicide further suggests that the preferences of the worried electorate contrast sharply with those of persons who are seriously ill.5

Finally, the difficult process of balancing the un-
certain benefits and burdens of many complex medical decisions can tax the emotional and cognitive capacities of seriously ill persons. In practice, advance care planning typically focuses on patients’ preferences with regard to specific treatments in the context of narrow clinical conditions and treatment settings. Consideration is seldom given to the goals of medical care and to the probability of adverse outcomes other than death. In this issue of the Journal, Fried and colleagues contribute to the process of advance care planning by demonstrating that patients modify their preferences with regard to life-sustaining treatment on the basis of the likelihood that it will result in functional or cognitive impairment. The subjects in the study by Fried et al. were 60 years of age or older and were seriously ill. When asked about their preferences in hypothetical scenarios, they often preferred death over survival with severe functional or cognitive impairment.

The results of this research are reassuring. They show that patients vary their choices when informed about important outcomes besides life or death. The study suggests that discussions of advance care planning should shift from whether patients would accept or reject specific treatments to what they consider acceptable in terms of the quality of life, the burdens of treatment, and the probability of a successful outcome. Unfortunately, however, it is difficult for very sick persons to engage in the graded, probabilistic thinking that is necessary to make the kinds of trade-offs that the scenarios in the study by Fried and colleagues require.

Consider the case of a 78-year-old woman with congestive heart failure and severe left ventricular dysfunction due to aortic stenosis. She will die if aortic-valve replacement is not performed, but the outcome of surgery will be compromised by the degree of left ventricular dysfunction. How can this patient make a rational choice? Can we expect her to weigh the probabilities of functional and cognitive impairment associated with major surgery against the certainty of imminent death without surgery? How does she weigh the impact that her death would have on her husband and children against the burdens imposed on them, including the financial burden, should she undergo surgery and survive but with limited function?

When the choice is certain death or the possibility of prolonged life of uncertain quality, many will opt for treatment and let hope, luck, and fate determine the rest. Our patient makes this choice and has a complicated two-month hospitalization and a stroke — outcomes that are not uncommon but that could not have been foreseen with certainty. She survives but again faces difficult choices. Who will pay for the personal care and medications she needs at home, since they are not covered by Medicare? Should her husband “spend down” their life savings until they are eligible for Medicaid? Our health care system paid for the surgery and the doctors’ bills, and the hospital absorbed the costs of the prolonged hospital stay. But at the point of discharge, our system in effect abandons this patient and her family to their own inadequate resources. Now they are facing the burdens that are seldom considered in the process of advance care planning.

What, then, are doctors, patients, and families to do? Certainly, advance care planning should include the consideration of outcomes beyond life and death on the basis of probabilities of risks, as described by Fried and colleagues. When desperately ill patients and their families opt for desperate treatments, they should also be asked under what circumstances death would be preferable to life with severe impairment and whether treatments should be discontinued if these circumstances occur. Patients, families, and doctors need an escape route like that provided by a time-limited trial of therapy. If the worst happens, life-sustaining treatment can be stopped according to the patient’s wishes.

But what is it that patients really want? Several studies have documented that what seriously ill patients want from medical care is relief of suffering, help in minimizing the burden on families, closer relationships with family members, and a sense of control. Physicians can help their patients achieve these goals, despite limitations in reimbursement for care at home and the complexity of respecting autonomy when patients are extremely ill. Physicians should solicit patients’ preferences with respect to the goals of care, including the circumstances in which death would be preferable to the burdens of illness. Physicians should also ask themselves several questions: Am I helping to reduce my patients’ physical and psychological suffering? Am I maximizing their sense of control? Am I helping to reduce the strains on their families? What can I do to help patients spend meaningful time at home with their families?

Application of the principles of palliative care, advocacy for home care and hospice services, and attention to the practical and emotional support of families are genuine expressions of respect for patients’ autonomy. As physicians committed to both the best interests of each patient and the health of the public, we should work toward a health care system that respects patients’ choices and uses resources to pay for the kind of care that makes these choices possible. Such a health care system would truly serve the autonomy of patients.
REFERENCES