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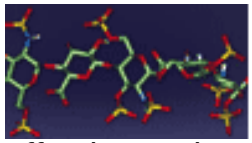


Fondaparinux for Pulmonary Embolism

This pentasaccharide was as effective and safe as heparin.

Ximelagatran vs. Warfarin

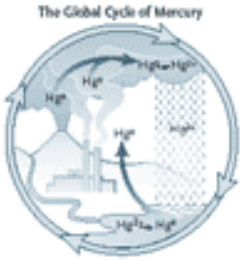
A thrombin inhibitor to prevent thrombosis.

Prevention of Venous Thromboembolism

Ximelagatran to prevent recurrent thromboembolism.

Mutations in Parathyroid Carcinoma

Germline mutations of *HRPT2* in sporadic cases.



The Toxicology of Mercury

The facts and the controversies.

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HRPT2 and Parathyroid Cancer

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IMAGE OF THE WEEK

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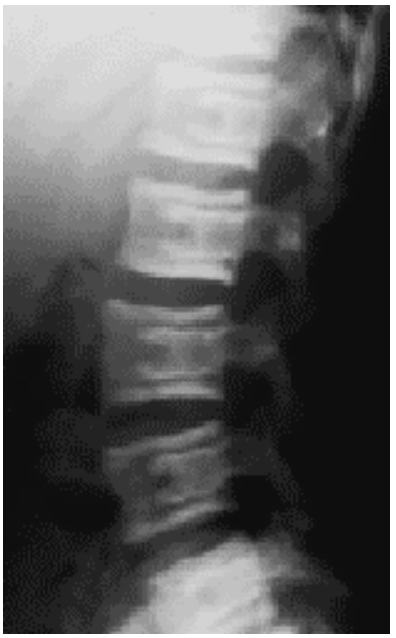

A 16-year-old boy with back pain and an unusual history.

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 Electronic ISSN 1533-4406 Print ISSN 0028-4793
Editorial Offices: 10 Shattuck Street, Boston, MA 02115-6094 Phone: (617) 734-9800 FAX: (617) 739-9864
Business Offices: 860 Winter Street, Waltham, MA 02451-1413 Phone: (781) 893-3800 (x5515) (800) 843-6356 FAX: (781) 893-0413

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Long-Term Outcomes after Successful Early Defibrillation

TO THE EDITOR: Bunch and colleagues (June 26 issue)[1] note that the quality of life of survivors after out-of-hospital cardiac arrest was, in most respects, similar to that of the general population. Patients who have undergone treatment after a life-threatening event or who have undergone major surgery may and often do have anxiety or depression months to years after the event.[2] Moreover, the effects of drugs on the quality of life of patients with cardiovascular diseases are important considerations for health care professionals.[3,4] One limitation of this study that should be addressed is the possible use by the patients of anxiolytic agents, antidepressants, or other medications, including antihypertensive drugs, which can affect their responses to the Medical Outcomes Study 36-Item Short-Form General Health Survey.

Nicola C. Ho, M.D.

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1. Bunch TJ, White RD, Gersh BJ, et al. Long-term outcomes of out-of-hospital cardiac arrest after successful early defibrillation. N Engl J Med 2003;348:2626-33.
2. Rymaszewska J, Kiejna A, Hadryg T. Depression and anxiety in coronary artery bypass grafting patients. Eur Psychiatry 2003;18:155-60.
3. Croog SH, Levine S, Testa MA, et al. The effects of antihypertensive therapy on the quality of life. N Engl J Med 1986;314:1657-64.
4. Wenger NK, Mattson ME, Furberg CD, Elinson J. Assessment of quality of life in clinical trials of cardiovascular therapies. Am J Cardiol 1984;54:508-13.

THE AUTHORS REPLY: We agree with Dr. Ho that both anxiety and depression are associated with an adversely affected quality of life after cardiac events.[1] In addition, depression is a long-term risk factor in patients with cardiac disease — in particular, after myocardial infarction — for recurrent cardiovascular events and death.[2,3] It is uncertain whether antidepressive therapy will improve cardiac outcomes in patients with depression after myocardial infarction.[3] Antihypertensive therapy may also have effects on the quality of life, which may vary within populations.[4,5]

In our study, 3 of 79 neurologically intact survivors of out-of-hospital cardiac arrest (4 percent) were discharged while receiving antidepressant therapy, and no patient was receiving an anxiolytic agent. The use of antihypertensive medications was prevalent at hospital discharge (beta-blockers in 43 patients [54 percent], angiotensin-converting–enzyme inhibitors in 37 patients [47 percent], angiotensin-receptor blockers in 2 patients [3 percent], calcium-channel blockers in 6 patients [8 percent], and diuretics in 16 patients [20 percent]). We do not have data on the frequency of use of these medications at the time that quality of life was evaluated. Careful assessment for depression and anxiety should be part of the evaluation of all patients with cardiovascular events. Potential side effects of therapy targeted to risk factors must be weighed in the context of the long-term benefits.

T. Jared Bunch, M.D.
Roger D. White, M.D.
Douglas L. Packer, M.D.

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1. Sullivan MD, LaCroix AZ, Spertus JA, Hecht J. Five-year prospective study of the effects of anxiety and depression in patients with coronary artery disease. Am J Cardiol 2000;86:1135-8.
2. Carney RM, Rich MW, Freedland KE, et al. Major depressive disorder predicts cardiac events in patients with coronary artery disease. Psychosom Med 1988;50:627-33.
3. van den Brink RH, van Melle JP, Honig A, et al. Treatment of depression after myocardial infarction and the effects on cardiac prognosis and quality of life: rationale and outline of the Myocardial INfarction and Depression-Intervention Trial (MIND-IT). Am Heart J 2002;144:219-25.
4. Fletcher AE, Bulpitt CJ, Thijs L, et al. Quality of life on randomized treatment for isolated systolic hypertension: results from the Syst-Eur Trial. J Hypertens 2002;20:2069-79.
5. Croog SH, Levine S, Testa MA, et al. The effects of antihypertensive therapy on the quality of life. N Engl J Med 1986;314:1657-64.

Patients Who Refuse Food and Fluids to Hasten Death

TO THE EDITOR: The results from the study by Ganzini et al. (July 24 issue)[1] were certainly thought provoking. However, it would have been interesting to learn how family members perceived the quality of the deaths of these patients. Physicians and nurses often underestimate the amount of pain that patients report[2] and may also underestimate the distress of the dying.

A recent article in the *New York Times* gave anecdotal evidence that family members may perceive these deaths differently.[3] Jane Gross describes the death of her mother in a nursing home after she had

refused food and hydration. She reports initially encountering obstacles to the effective relief of symptoms that were attributable primarily to restrictions on the dispensation of narcotics.

Supreme Court Justice John Paul Stevens, in a concurring opinion in *Vacco* v. *Quill*, found that although there was no constitutional right to assisted suicide, a person did have an interest in "choosing a final chapter that accords with her life story, rather than one that demeans her values and poisons memories of her."[4] It behooves us as medical professionals to work with patients and families to ensure that such choices can be made.

Rebecca A. Drayer, M.D.

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1. Ganzini L, Goy ER, Miller LL, Harvath TA, Jackson A, Delorit MA. Nurses' experience with hospice patients who refuse food and fluids to hasten death. N Engl J Med 2003;349:359-65.
2. Drayer RA, Henderson J, Reidenberg MM. Barriers to better pain control in hospitalized patients. J Pain Symptom Manage 1999; 17:434-40.
3. Gross J. Striving for a gentle farewell. New York Times. August 3, 2003 (Section 4):1.
4. Vacco v. Quill, 117 Sup. Ct. 2293 (1997).

TO THE EDITOR: "Freedom," the writer James Baldwin remarked in 1961, "is not something that anybody can be given; freedom is something people take." The freedom to take one's life, in this case through starvation and dehydration, is not something that a physician, nurse, or caregiver can give to a patient who wants to die. Moreover, a patient's reasons for wanting to die are private, not public.

A physician cannot give "permission" for a patient to live or die, despite what Peter Reagan says in the Perspective article by Jacobs that accompanies the report by Ganzini et al.[1] Ganzini et al. describe patients who want to die and note that "unbearable physical suffering did not appear to be an important reason for this choice." The authors qualify this "choice" as a possible symptom of depression.

These are ethical matters, not medical ones, and they lie beyond the physician's expertise as a medical practitioner.[2,3] A physician respects a patient's request for drugs to help him or her feel comfortable or disrespects and rejects such requests. The values and autonomy of the patient are the critical issues here, not the values and authority of the physician.

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1. Jacobs S. Death by voluntary dehydration — what the caregivers say. N Engl J Med 2003;349:325-6.
2. Schaler JA. Living and dying the state's way. Liberty 2003;17(8): 42-4.
3. Szasz TS. Fatal freedom: the ethics and politics of suicide. Westport, Conn.: Praeger, 1999.

THE AUTHORS REPLY: There are important exceptions to the statements made by Schaler. If a mental illness such as depression, delirium, or dementia renders a patient unable to understand and appreciate the risks, benefits, and alternatives to the choice to stop food and fluids, the choice may reflect the patient's incompetence. Decisions made during an episode of depression may not be autonomously made. Medical professionals are obligated to assess the patient's decision-making capacity and participate in legal interventions that may result in overriding the patient's choice.

Schaler may not agree with the legal, medical, or philosophical basis for the prevention of suicide, but most states have laws that allow, in some situations, the forcible and even public prevention of suicide, which may include at least the temporary hydration of a patient against his or her will.[1] Admittedly, clinicians should pause and seek knowledgeable counsel if they are ever considering taking legal steps to override the decision of a terminally ill patient to hasten death through the voluntary refusal of food and fluids, even if the patient is depressed. Furthermore, all will fare better if the clinician uses empathy and good clinical skills to address the patient's needs in a way that allows him or her to maintain an alliance with the patient.

We disagree with Schaler's opinion that these matters are not medical and are beyond the physician's expertise. Many patients avidly seek information about their options when faced with a poor prognosis. The physician is often the first and sometimes the only source of information about palliative treatments and other choices that may be pursued. Physicians must be well informed about these options, including the refusal of food and fluids, in order to provide optimal care for patients at the end of life.

We agree with Drayer that our study, an initial attempt to understand the voluntary refusal of food and fluids, is by no means definitive and should be followed by studies involving patients who are in the process of making these choices and examining the views and experiences of the families of patients who choose to hasten death in this manner.

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1. Gutheil TG, Appelbaum PS. Clinical handbook of psychiatry and the law. 3rd ed. Philadelphia: Lippincott Williams & Wilkins, 2000.

Hogwarts Headaches — Misery for Muggles

TO THE EDITOR: During the past several months, I have evaluated three children between 8 and 10 years of age who presented with a two-to-three-day history of generalized headaches. In each case, the headache was dull and the pain fluctuated throughout the day. One patient also reported neck and wrist pain. All the patients were afebrile and free of any symptoms suggesting an underlying infectious or neurologic cause. On further questioning, it was determined that each child had spent many hours reading J.K. Rowling's latest book in the Harry Potter series. Two patients read the book lying prone, and the third propped the book on her legs and rested her head on a pillow.

The presumed diagnosis for each child was a tension headache brought on by the effort required to plow through an 870-page book. The obvious cure for this malady — that is, taking a break from reading — was rejected by two of the patients, who preferred acetaminophen instead. In all cases, the pain resolved one to two days after the patient had finished the book.

It is worth noting that I did not witness this phenomenon with any of the previous Harry Potter tomes and that each of Rowling's successive books has been bigger than the last (Fig. 1). If this escalation continues as Rowling concludes the saga, there may be an epidemic of Hogwarts headaches in the years to come.

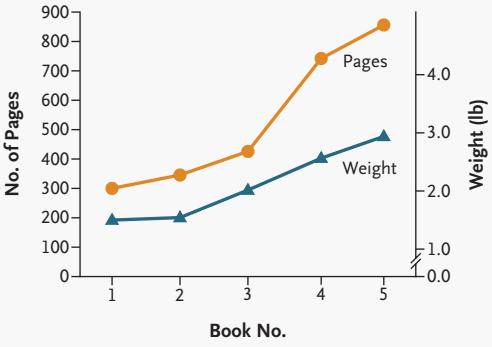

Figure 1. Page and Weight Inflation in the Harry Potter Series.
To convert values for weight to kilograms, multiply by 0.45.

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