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THE AUTHORS REPLY: In the large survey that led to the development of the International Staging System (ISS) in multiple myeloma, anemia was associated with a shorter survival time in univariate analysis but was not one of the most powerful prognostic indicators in multivariate analysis.[1] Anemia is currently considered part of the related organ and tissue impairment that separates smoldering myeloma from symptomatic myeloma.[2] In the ISS, the cutoff values for β_2-microglobulin are 3.5 mg per liter for stage II multiple myeloma and 5.5 mg per liter for stage III multiple myeloma. According to this widely accepted classification, our patient had stage I disease. The deletion of chromosome 13 is associated with a poorer outcome when it is detected with the use of conventional cytogenetic analysis.[3] The references cited by Louw et al. with respect to fluorescence in situ hybridization (FISH) are old. We now know that the negative prognostic effect of the chromosome 13 deletion, as detected with the use of FISH, is actually related to other associated abnormalities, such as a t(4;14) translocation and a partial deletion on chromosome 17p. Patients who have only a chromosome 13 deletion have the same prognosis as patients who do not have this abnormality.[4] The patient in our vignette had only a chromosome 13 deletion, as detected with the use of FISH, with no other adverse prognostic factors.

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Medical End-of-Life Practices under the Euthanasia Law in Belgium

TO THE EDITOR: The legalization of physician-assisted death for terminally ill patients is a controversial medical and societal issue.[1] In Belgium, where euthanasia was legalized in 2002, we conducted a follow-up study in 2007 to two large-scale nationwide surveys on medical end-of-life practices that had been conducted in 1998[2] and 2001.[3] This follow-up study enabled us to investigate differences in the frequency and characteristics of these practices before and after the enactment of the law.

We conducted the study with the use of data from death certificates in the Flemish-speaking part of Belgium, which has approximately 6 million inhabitants. A random sample of 6927 cases was drawn from all deaths that occurred from June 1, 2007, through November 30, 2007. The certifying physician in the case of each death was sent a five-page questionnaire about medical end-of-life practices that, according to their assessment, had a possible or certain life-shortening effect. The study protocol is described extensively elsewhere.[4]

The response rate was 58.4% (Table 1). In 2007, 1.9% of all deaths in Flanders were the result of euthanasia (ending of life at the patient's explicit request), a rate that was higher than that in 1998 (1.1%) and 2001 (0.3%). In 1.8% of all

Table 1. Frequency of Medical End-of-Life Practices in Flanders, Belgium, in 1998, 2001, and 2007.*

Variable	1998	2001	2007
Total annual deaths — no.	56,354	55,793	54,881
Deaths in study sample — no.	3,999	5,005	6,202†
Rate of response to survey — %	48.2	58.9	58.4
Deaths included in analyses — no.	1,925	2,950	3,623
Sudden death — % (95% CI)‡§	33.3 (31.2–35.5)	34.1 (32.2–36.1)	31.9 (30.0–33.8)
Medical end-of-life practice that possibly or certainly hastened death — % (95% CI)§	39.3 (37.0–41.6)¶	38.4 (36.6–40.3)¶	47.8 (45.9–49.8)
Use of life-ending drugs‖	4.4 (3.5–5.5)	1.8 (1.4–2.4) ¶	3.8 (3.2–4.5)
Ending of life at patient's explicit request (euthanasia)	1.1 (0.7–1.7)¶	0.3 (0.2–0.5)¶	1.9 (1.6–2.3)
Physician-assisted suicide	0.12 (0.04–0.36)	0.01 (0–0.1)	0.07 (0.02–0.2)
Ending of life without patient's explicit request	3.2 (2.4–4.1)¶	1.5 (1.1–2.0)	1.8 (1.3–2.4)
Intensified alleviation of pain and symptoms	18.4 (16.6–20.4)¶	22.0 (20.5–23.6)¶	26.7 (25.1–28.4)
Withholding or withdrawing life-prolonging treatment	16.4 (14.7–18.3)	14.6 (13.2–16.1)¶	17.4 (15.9–19.0)
Continuous deep sedation — % (95% CI)§	NA	8.2 (7.2–9.4)¶	14.5 (13.1–15.9)

* All percentages were adjusted for stratification (according to the underlying cause of death as indicated on the death certificate and the estimated corresponding likelihood of an end-of-life decision's having been made) and for characteristics of deaths (age and sex of the patient and place and cause of death). CI denotes confidence interval, and NA not available.

† From an analysis of nonresponse after the study, we found that a response was impossible in the case of 725 deaths (e.g., because the physician was deceased or had never received the questionnaire). Thus, of the 6927 deaths in the initial sample, 6202 were included in the final study sample. No such analysis of nonresponse was conducted in 1998 or 2001.

‡ The physician indicated in the questionnaire that the patient had died suddenly and unexpectedly, which precluded any medical end-of-life practice that hastened death.

§ The 95% CIs were calculated by means of a complex-samples procedure (Monte Carlo simulation) to account for the stratification.

¶ There was a significant difference in the frequency of this practice as compared with the frequency of the same practice in 2007 ($P<0.05$, with the use of the Fisher's exact test [Monte Carlo]).

‖ Ending of life at patient's explicit request (euthanasia) refers to the administration of lethal drugs with the explicit intention of ending the patient's life, at his or her explicit request; physician-assisted suicide refers to the prescription or supply of lethal drugs with the intention of enabling the patient to end his or her life; ending of life without patient's explicit request refers to the administration of lethal drugs with the explicit intention of ending the patient's life, without his or her explicit request.

deaths, lethal drugs were used without the patient's explicit request, a rate that was lower than that in 1998 (3.2%) but similar to that in 2001 (1.5%). The rate of intensified alleviation of pain increased from 18.4% in 1998 and 22.0% in 2001 to 26.7% in 2007, and the rate of withholding or withdrawing life-prolonging treatment increased from 14.6% in 2001 to 17.4% in 2007. In the case of 14.5% of all deaths, physicians reported using continuous and deep sedation until death, a rate that was substantially higher than that in 2001 (8.2%). Across the three studies, we found no shift in the characteristics of patients whose death was the result of euthanasia (mostly younger patients, patients with cancer, or patients dying at home) or in the characteristics of patients in whom lethal drugs were used without the patient's explicit request (mostly older, incompetent patients; patients with cardiovascular diseases or cancer; or patients dying in hospitals). The rate at which medical end-of-life practices were discussed between the physician and competent patients and their relatives was substantially higher in 2007 than in 1998 and was similar to the rate in 2001.

The 2007 survey had the same robust design and asked the same key questions as did the previous surveys. We found that the enactment of the Belgian euthanasia law was followed by an increase in all types of medical end-of-life practices, with the exception of the use of lethal drugs without the patient's explicit request. No shift toward the use of life-ending drugs in vulnerable patient groups was observed. However,

the substantial increase in the frequency of deep sedation demands more in-depth research. Different findings in a similar study in the Netherlands[5] show that the influence of similar euthanasia laws on medical end-of-life practices seems to vary substantially according to country-specific factors.

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Ruptured Abdominal Aortic Aneurysm Related to IgG4 Periaortitis

TO THE EDITOR: Periaortitis that is associated with immunoglobulin G4 (IgG4) plasma-cell infiltration is a rare condition with undefined incidence and clinical features. In a single-center study in Japan, the condition accounted for approximately 5% of all surgical abdominal aortic aneurysms and was depicted as generally asymptomatic and without rupture.[1]

A 63-year-old white woman with history of controlled diabetes, hypertension, and coronary artery disease and without any other systemic or inflammatory disease was admitted to the hospital because of recent-onset severe, sharp abdominal pain. During the previous 6 months, she had had mild-to-moderate lower back pain, decreased appetite, and weight loss of approximately 15%. Three weeks before admission, pain also developed in the lower abdomen; this pain acutely worsened on the day of admission and was associated with light-headedness.

Inpatient evaluation revealed anemia and a multilobulated, irregular juxtarenal and infrarenal saccular abdominal aortic aneurysm with thickening of the vessel wall and inflammation in the surrounding tissues, consistent with a contained rupture (Fig. 1A through 1D). Pancreatic enzymes and thyroid function were normal. After multiple blood transfusions, the patient underwent a semiemergent open repair of the aneurysm. Intraoperatively, the aneurysm was noted to be intensely inflammatory, and since it had adhered to the adjacent tissues (including the duodenum and visceral vessels), resection and repair were exceedingly difficult.

Histopathological and immunohistochemical analyses of the aneurysmal tissue showed vessel-wall rupture, marked adventitial fibrosis and inflammatory-cell infiltration, occasional eosinophils, obliterative phlebitis, lymphoid follicles, perineural inflammation, and IgG4 plasma-cell infiltration (64% of the overall IgG-positive cells) in both the intima and adventitia, consistent with a ruptured aneurysm associated with IgG4 periaortitis (Fig. 1E through 1I). Ten days after aneurysm repair, her serum IgG4 concentration (which had not been measured before surgery, since IgG4 disease was not suspected) was 60.8 mg per deciliter (normal range, 8.0 to 140.0).

IgG4-related diseases have been described primarily in glandular tissues. Since such diseases can be effectively treated with corticosteroids, surgery is seldom necessary.[2] Aortic aneu-