Many studies have reported an increased risk for a diagnosis of cancer with an episode of venous thromboembolism (VTE). This article reported the results of a population-based study that investigated whether the presence of VTE affects the prognosis of cancer. The authors were able to demonstrate that cancer diagnosed within 1 year of the diagnosis of an episode of VTE has a poor prognosis and is associated with an advanced stage of cancer.

Population-based data from the Danish National Registry of Patients, the Danish Cancer Registry, and the Danish Mortality Files were used. Initial selection included deep VTE and pulmonary embolism during at least 1 hospitalization. Excluded were those cases thought to have other reasons for VTE: for example, diagnosis of cancer (excluding non-melanotic skin cancer), prior surgery (within 6 months), pregnancy (including up to 9 months postpartum), or a secondary diagnosis of VTE. This method was used to exclude all but primary VTE. The time period used for entry was 1977 to 1992. Of the 63,196 entrants with VTE found, 43.2% (27,321) were remaining after the exclusion criteria. Prior surgery excluded the largest number (13,735). The Danish Cancer Registry has records of all malignant neoplasms. The tumor stage is classified as localized, regional, metastatic, or unknown. This registry was used to determine how many of the 13,735 cases described above were diagnosed with cancer at the time of or after an episode of VTE. A total of 3135 individuals were identified and used for the study.

The authors divided the study population...
into 3 cohorts: those diagnosed with cancer while hospitalized for the VTE (668 patients), those diagnosed with cancer within 1 year of the diagnosis of VTE (560 patients), and those patients with a diagnosis of cancer 1 to 17 years after a diagnosis of VTE (1907 patients). A control group was selected for each of the 3 cohorts by randomly selecting a patient from the cancer registry, using for the match the type of cancer, sex, age at diagnosis of cancer (in 10-year age groups), and year of the diagnosis of cancer (using 5-year calendar groups). This was successful in creating a sufficient control population for all but 10 patients.

All patients were followed through 1995 (or death if sooner). Males and females were equally represented in all 3 cohorts. The average ages were essentially the same (69–72 years) with wide ranges (15–97 years). The most common cancers were lung, prostate, colon and rectum, breast, and pancreas. For those patients diagnosed with cancer while hospitalized with VTE, 44.0% had distant metastasis compared to 35.1% of controls (relative risk [RR] 1.26; 95% CI 1.13–1.40). For the cohort in which cancer was diagnosed within 1 year of a VTE, 39.6% had distant metastases relative to 32.1% of the controls (RR 1.23; CI 1.08–1.40). In the cohort in which cancer was diagnosed later than 1 year of the VTE, the prevalence was not statistically different from the control population (RR 1.04, CI 0.94–1.14).

The article includes a survival curve for patients in whom cancer was diagnosed at the time of the VTE versus that for the control population that clearly shows the much increased early mortality of the VTE cohort. Only 12% of the VTE cohort survived 1 year compared to 36% of the controls. The mortality ratio (cohort versus control) was 2.46 (CI 2.25–2.68) for the first year and 2.20 (CI 2.05–2.40) for the entire follow-up.

The mortality ratio for the cohort with cancer diagnosed within 1 year of VTE versus controls was also significantly elevated at 1.35 (CI 1.20–1.50), in which 38% of the cohort was alive at 1 year versus 47% of the controls. The authors remarked that the mortality ratio for the third cohort (cancer diagnosed >1 year after VTE) was “slightly though significantly different” than controls: the mortality ratio, while 1.08, had a CI of 1.00–1.15 for the first year, and for the entire period, the mortality ratio was 1.10 (CI 1.04–1.16).

To further illustrate the difference in survival of 2 of the cohorts, the reader is referred to the 2 survival curves in the article. One survival curve is for cancer found at the time of the diagnosis of the VTE, and the other survival curve is for cancer found within 1 year of the diagnosis of VTE. Both are plotted relative to their control. There is an apparent difference in the shape of the curves. For cancer diagnosed at the time of the diagnosis of the VTE, the increase in mortality is early (the first couple of years). The reader is reminded that confidence intervals are not included in the graph and inference must be limited.

The authors identified no other prognostic factors, including age, sex, type, or extent of cancer. The article has an insightful review of its limitations. One interesting suggestion is that clinicians may have increased their search for a malignancy with the diagnosis of a VTE. However, this would likely have had the bias of diagnosing cancer earlier rather than later. That would have resulted in a decrease in observed mortality rather than an increase.
Thoughts of losing your memory and senior moments are certainly disconcerting. The significance of self-perceived memory loss has been evaluated in previous studies with mixed results. The ability to estimate one’s own memory, often referred to as metamemory, has been judged as “accurate” and “mostly accurate.” This study attempts to evaluate the accuracy of this self-perception.

This study used Asset and Health Dynamics Among the Oldest Old (AHEAD) enrollment. Eligible patients were >70 years old and living in a community dwelling. Spouses who were <70 years old were excluded. People 70–79 years old were interviewed on the telephone and those >80 were interviewed in person. Self-perception of memory was based on asking “How would you rate your memory at the present time? Would you say it was excellent, very good, good, fair or poor?” An additional question was added at the 2-year follow-up: “Compared to 2 years ago, would you say that it is better now, about the same, or worse than it was then?” Cognitive measures administered were derived from the original telephone interview for cognitive status (TICS) and the standard Mini-Mental Status Exam (MMSE). This included serial 7s, immediate and delayed 10-word recall, and a modified MMSE. Questions were also used to determine the presence of major depression, medical illnesses, and their functional status [activities of daily living (ADL), instrumental activities of daily living (IADL)].

There was an association between self-perception of memory and the actual cognitive testing scores. Respondents who rated their memory as excellent tended to have higher scores. Similarly, those who self-reported fair or poor memories scored lower. Of those who scored in the highest quartile in cognitive testing, 82% responded that their memories
were “good,” “very good,” or “excellent.” In the lowest quartile, however, 57% self-reported “good,” “very good,” or “excellent” memory function.

In evaluating perception of cognitive decline, people were asked to compare their current memory with their memory 2 years before. Memory changes tended to be underreported. Of those who showed the most memory decline on testing, 76% reported stable or improved memory. The group with the most memory decline on testing was divided into those who perceived the change and those who did not appreciate decline. The subset of people with memory decline who did not acknowledge the loss was evaluated for significant factors as compared with those who did not lose memory function. Multiple factors were not significant statistically, including gender, marital status, education, and the presence of medical illnesses. The loss of ADL or IADL functions was significant. Those in whom ADLs and IADLs were not affected also did not acknowledge their memory decline. In addition, those who did not acknowledge memory loss had fewer depressive symptoms.

The study looked at whether self-perception of memory impairment in any way predicts future deterioration. The subset of people who perceived memory loss tended to have a significant decline in cognitive function over the 2-year study period. Self-perception of decline was a significant predictor of cognitive decline.

This study attempts to emphasize that people’s assessment of their memory (metamemory) correlates to actual cognitive performance. However, in those with the lowest performance, only 40% acknowledged poor memory function. The remaining 60% thought that they had good, very good, or excellent memory. At least one third of those with the greatest memory decline within the 2-year period did not appreciate their decline. Confounding the negative perception of memory function is the fact that those with depressive symptoms are far more likely to report problems. One of the most interesting observations of this study was the subset of people who initially reported impairment in memory but who scored above average in the cognitive testing. These individuals had significant decline within the study period on cognitive testing. It is certainly possible that they were sensitive to impairments not appreciated on the initial standardized cognitive evaluation. One does not doubt that on initial evaluation metamemory correlates with higher cognitive testing scores. However, almost 60% of the lowest performers did not appreciate their impairment. Considering loss of memory was not appreciated by most and was overreported in some depressive patients, the usefulness of metamemory as a predictive tool is questionable at best.
LITERATURE REVIEW

Relation of Nonobstructive Aortic Valve Calcium to Carotid Arterial Atherosclerosis

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Key words: Aortic valve calcium, carotid atherosclerosis, carotid stenosis, atherosclerotic risk factors.

Received: January 4, 2001
Accepted: January 10, 2001

A common finding in about 25% of adults >65 years is aortic valve calcium (AVC) and aortic valve thickening without obstruction of the ventricular outflow. AVC has been noted to be associated with an increased risk of cardiovascular events, including stroke. This current study hypothesized AVC was associated with the underlying atherosclerosis process in general, including carotid artery atherosclerosis.

METHODS

Between 1995 and 1999, the study laboratory diagnosed AVC without stenosis in 3949 patients. Of these, the study group was formed from 279 patients who had carotid artery duplex ultrasound for various reasons. A total of 277 age- and sex-matched controls were found during the same period of time who underwent carotid duplex ultrasound but did not have AVC. Patients were excluded who had rheumatic valvular disease, prosthetic valves, congenital heart disease, bacterial endocarditis, hypertrophic obstructive cardiomyopathy, and those on hemodialysis. Complete 2-dimensional and Doppler color flow transthoracic echocardiography examinations were performed in all patients. Focal areas of increased echogenicity and thickening of the aortic valve leaflets without motion restriction defined AVC. The carotid vessels were imaged with duplex ultrasound and carotid artery stenosis was graded. There were no significant differences between the AVC and control groups regarding indications for referral for carotid duplex ultrasound. The atherosclerotic risk factors considered were diabetes mellitus, hypertension, and cigarette smoking. Hypertension as a risk factor in-
cluded ongoing antihypertensive pharmacologic therapy.

The statistical analysis included the following variables: age, sex, AVC, diabetes mellitus, hypertension, and smoking history. The AVC group included 279 patients (148 men and 131 women; mean age 73 ± 9 years). The control group included 277 patients (148 men and 129 women; mean age 74 ± 9 years). There were no differences in the rates of risk factors for atherosclerosis.

RESULTS

Carotid artery stenosis of >40%–60% was found in 247 of 279 patients with AVC (89%). In all categories of carotid artery stenosis (>20%–40%, >40%–60%, >60%–80%, and 100%), for both unilateral and bilateral disease, carotid stenosis was significantly more prevalent in the AVC group. In multivariate analysis, the only independent predictor of severe carotid atherosclerotic disease was AVC (stenosis ≥80%, P = .0001).

DISCUSSION

This study shows a significant association between the presence of aortic valve calcium and carotid atherosclerotic disease. It would be reasonable to assume that the cause of aortic valve cuspal calcium in the elderly is a form of atherosclerosis and suggests generalized atherosclerosis. AVC was the only independent predictor for severe carotid artery atherosclerosis and the finding may represent a summation of atherosclerotic risk factors such as diabetes mellitus, hypertension, and smoking history. The finding of aortic valve calcium on chest X-ray or an otherwise normal echocardiogram is not uncommon for us to see in our proposed insureds. It would appear that it is not a benign finding and deserves close evaluation.
LITERATURE REVIEW

Depression, Hopelessness, and Desire for Hastened Death in Terminally Ill Patients With Cancer—Does Insurance Medicine Have a Role to Play?

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Received: January 4, 2001
Accepted: January 10, 2001

It makes headlines: "Physician assists terminally ill patient end life." Certainly Dr Kevorkian has had more than his 15 minutes of fame as he has forced this issue into the public domain. While still a hot topic, if not outright taboo in America, not all of the world has such black-and-white approaches to this topic. This article explores who among terminally ill patients are more likely to be accepting (if not outright desirous) of hastened death when terminally ill.

METHODS

In this study of 92 patients admitted with terminal cancer to a palliative care hospital in New York, a series of questionnaires were administered to assess the state of mind of the patient in regard to depression, hopelessness, social supports, pain, and acceptance of hastened death. Patients had a life expectancy of 6 months, and the average time until death was 28 days.

RESULTS

Not surprisingly, there was a high rate of depression (17%) within this patient population. This was associated with a desire for hastened death. In fact, depressed patients were 4 times more likely to desire hastened death than those not depressed (47% versus 12%).

Hopelessness (a pessimistic outlook rather than a medical assessment of prognosis), was also an independent factor for acceptance of hastened death. Among the patients who were neither depressed nor hopeless, there was no indication of a high desire for hastened death. However, in those patients who
had either hopelessness or depression, approximately a quarter of the patients expressed the desire for hastened death. In those cases in which both hopelessness and depression were present, two thirds had a high desire for hastened death.

A number of other variables influenced the desire for hastened death to a lesser degree. These included spiritual well-being, quality of life, physical functioning, and a perception of being a burden to others. Interestingly, neither pain nor pain intensity was a significant factor in desire for hastened death.

DISCUSSION

Some of the findings of this article seemed obvious. Patients with terminal cancer who are depressed and feel hopeless are more accepting, even desirous, of hastening their death. I was surprised, however, that neither pain nor the intensity of pain seemed to play a role in that acceptance. This seems counterintuitive to the general notion of “at least they’re not in pain anymore” as justification for hastened death.

The reason I chose this article to review is that I believe it spurs some discussion that is unique to insurance medicine. Whereas the difference in timing of death may be a serious ethical issue for our clinical counterparts, hastened death becomes a potentially serious financial issue for us. We all know the financial difference that 12 months can make in a life insurance contract. A policy payout that could be a financial loss at age 81 may become breakeven at 81½ and profitable at age 82.

This study was conducted in end-stage cancer patients; however, I suspect the results are transferable to other terminal diseases. Whereas the demise of most of the participants occurred quickly, in other terminal diseases, the end may not come so swiftly. Several of the patients that chose to hasten their death with the help of Dr Kevorkian had neurological disorders that may not have claimed their lives for several months if not years later.

Whereas medically assisted hastened death is still ethically unacceptable in the United States, there may come a time in which that may not be the case. In those instances when it may occur, the act of hastening death by months or years may have serious impact on the financial performance of a life insurance contract. Insurers should begin to contemplate what action, if any, they should take to anticipate this practice.