



Aging

and the practice of surgery

by Lazar J. Greenfield, MD, FACS, Ann Arbor, MI

Editor's note: This article is based on Dr. Greenfield's editorial in the May issue of *Surgery News*, the College's monthly newspaper.

The February issue of *Annals of Internal Medicine* carried an article and an editorial about the failure of older physicians to stay abreast of medical advances and "to practice according to the latest medical standards." As expected, the press picked up the topic and asked questions about how it should influence the selection of a physician. It would be naïve to assume that similar questions will not be raised about the performance of aging surgeons.

Although we all know we are getting better as we accumulate birthdays, some mental and physiological changes with aging are inescapable. The question has always been, at what point do the changes of senescence begin to affect performance?

Retirement survey

In the early 1990s, members of the American Surgical Association participated in a survey on surgeons' attitudes toward retirement. I learned that many surgeons fail to prepare for a life after surgery, and although some have a predetermined age of retirement, others plan to evaluate themselves or wait for some event to force the issue. The danger of the latter attitude is obvious in terms of risk to patient care and to the surgeon's reputation. Diminished endurance and strength prompt most surgeons entering their 50s to begin reducing the frequency and complexity of their cases. But what should determine how long a surgeon should continue to operate?

What the survey lacked was an objective measure of the effects of aging in surgeons. The rationale for such a study is to provide objective feedback to surgeons and to let outside agencies know that we are aware of the potential problem and are addressing it on the basis of objective data analysis.

CANTAB

After some experimentation, my colleagues who had assisted with the retirement survey and I found a sensitive and highly reproducible test of cognition, reaction, and movement times that could be administered in 20 minutes. This Cambridge Neuropsychological Test Automated Battery (CANTAB) has been validated in all age groups and in thousands of people. With the support of the College, we began administering it to volunteers over age 45 attending the Clinical Congress in 2001. Over the past four years, we have tested a total of 303 surgeons, and look forward to completing the five-year study this year by retesting as many of them as possible.


Test results are provided only to each surgeon's private physician so that it becomes a part of his or her medical record.

We also have some idea of surgeons' preparation for and attitudes toward retirement, based on a survey instrument completed by all age groups who have visited the CANTAB booth each year. Our preliminary findings indicate that surgeons are not immune to the cognitive decline that affects everyone with advancing age. Cognitive losses were most evident in surgeons who had already retired, but it's impossible to determine

whether this deterioration is the cause or the effect of retirement. The self-evaluation data drawn from the survey indicate that surgeons often inaccurately estimate their own cognitive status.

Completely unexpected was the finding that surgeons as a group have much faster reaction and movement times than age-matched controls and that this ability is preserved with age. Whether this is a feature of selection or training is a fascinating question that deserves further study. We are also anxious to learn how surgeons will use the information provided by the tests.

Retest

At the 2005 Clinical Congress, and possibly at the 2006 Spring Meeting, we will retest all volunteers from previous years to measure any changes in performance and to determine whether these differences in ability relate to the surgeon's assessment of his or her practice. Surgeons who have been tested previously are asked to return to the CANTAB booth for retesting at the upcoming Clinical Congress in San Francisco, CA, or at the next Spring Meeting in Dallas, TX. Surgeons who have not been tested but would like to participate are encouraged to contact me at surgerynews@fac.org. 

Dr. Greenfield is professor and chair emeritus, department of surgery, University of Michigan, Ann Arbor, MI. He is Editor-in-Chief of Surgery News.

