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Cover: Scientists are using new microscopy techniques to study the leading edge of cells during migration, a process important to functions like wound healing and nerve growth. With low light level fluorescence microscopy, this mouse fibroblast cell glows with computer-enhanced colors. Blue outlines the cells, green marks structures called mitochondria and red indicates ingested particles. The green pages of the blust leading adapticates ingested particles. The area nearest the blunt leading edge (lower right), devoid of such structures, appears dark. (Photo: Luby-Phelps/Taylor)

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Letters

Alzheimer deaths overstated?

I question the ranking of Alzheimer's disease as the fourth and possibly the third leading cause of death in the United States ("Alzheimer's: A cancer-like mechanism?" SN: 11/28/87, p.348). I have seen no evidence supporting that ranking.

I looked into the question of the relative

ranking of Alzheimer's disease as a cause of death over a year ago. I did some research at that time on mortality data for selected causes in 1983, the most recent available data when I did the research. At that time 4,434 deaths in the United States were reported as having Alzheimer's disease as the underlying cause of death. On an additional 5,305 certificates it was reported as a contributing or associated condition, but not as the underlying cause, resulting in a total of 9,743 deaths for which Alzheimer's was mentioned somewhere on the death certificate as a factor contributing to death. One can plausibly assume that some Alzheimer deaths might

have been attributed to dementia or senility. If one makes the extremely generous assumption that all [deaths involving senility] were Alzheimer deaths, then the total would be just over 30,000 (31,941) in 1983; this would put the ranking of Alzheimer's disease just ahead of suicide, ranked eighth. However, Alzheimer's is probably less frequent than this assumption warrants, because many of the large number of deaths for which senility was mentioned on the death record were due to other conditions (atherosclerosis, cancer, stroke) as an underlying cause of death.

The intent of this letter is not to belittle the seriousness of this national health problem, which I recognize. It is rather to provide a sound quantitative basis for assessing the scope of the problem.

Harry M. Rosenberg Chief, Mortality Statistics Branch Department of Health and Human Services Hyattsville, Md.

According to Peter Davies, the researcher quoted in the article, approximately 120,000 Alzheimer patients die each year. It is difficult to pinpoint the cause of death in many of these older, demented patients. If Alzheimer's is considered the major underlying cause of death in these patients, an assumption that Dr. Rosenberg correctly labels "extremely generous," then Alzheimer's would rank just below stroke, currently the third leading cause of death in the United States. In fact, the ranking is probably lower.

I once had a teacher who insisted that the leading cause of death is birth. Until a better measure of Alzheimer's role in death can be determined, it would probably be best to avoid ranking the disease. – R. Weiss

Address communications to Editor, Science News, 1719 N Street, N.W. Washington, D.C. 20036 Please limit letters to 250 words.

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