Thrombolytic agents no benefit to those over 75

Scott Gottlieb *New York*

Thrombolytic agents, currently promoted as the best emergency treatment for patients with myocardial infarction, do not benefit those who are aged 75 years and over and may actually increase their risk of adverse reactions and death, according to a new study.

The study, by a research team at Johns Hopkins University, Baltimore, Maryland, looked at almost 8000 Medicare patients aged 65 to 86 years who had had heart attacks. Those aged under 75 receiving thrombolysis had a 6.8% death rate 30 days after the heart attack, compared with nearly 10% in the patients who did not receive the drugs. But in patients aged 75 and over, those getting thrombolytic agents were 40% more likely to die within 30 days of treatment (*Circulation* 2000;101:2224-6.)

Some of those who died had conditions that may have made the drugs especially dangerous (such as prior strokes or high blood pressure); their doctors either did not know that they had these conditions or decided to use the drugs anyway.

Many of the patients in the study also experienced a substantial delay in receiving the drugs, which tends to make

them less effective. However, even in the group of "perfect" candidates for the drug who got it promptly, the risk of dying after taking it rose significantly with each year of age.

The data are especially surprising given that the patients in the study who received the agents were generally healthier than those who did not.

"We confirmed in this very large, nationwide study that patients younger than 75 years clearly do benefit from these drugs," said the lead author, Dr Neil Powe, professor of medicine and health policy at the Johns Hopkins University School of Medicine.

"However, our study raises concerns that thrombolytic therapy may not offer any benefit to older patients, and, in fact, may do harm."

While the research team did not gather data on causes for the increased death rate, Dr Powe speculates that it may be due to adverse drug reactions, such as excessive bleeding or arrhythmias.

Doctors have long known that thrombolytic drugs pose risks to elderly people, but many believe that those risks are outweighed by the benefits. □

Medical historian Roy Porter used this cartoon, *An insensitive surgeon* by Carl Joseff, to show how surgeons have often been portrayed as men of the flesh, "beefy, strong, handy with the knife and saw, someone with the qualities at best of John Bull, at worst of the butcher." Speaking last week at the Wellcome Institute for the History of Medicine on the "Changing image of the doctor, a view from the cartoonist," he said that physicians, by contrast, were often shown as "sublimated, almost disembodied, marked out by mind not body, brains not brawn."

Deaths from breast cancer fall dramatically in UK and US

Zosia Kmietowicz *London*

Deaths from breast cancer in Britain have fallen by nearly a third in the past 10 years thanks largely to wider and more prolonged use of the antioestrogen drug tamoxifen. A similar but smaller decline in deaths from the disease—about 25%—has been observed among US women since 1990.

"This is the best decrease in national death rates that has ever been seen with any common cancer that has been produced by treatment," commented Pro-

fessor Sir Richard Peto from the Imperial Cancer Research Fund's cancer trials unit at the University of Oxford, who helped to compile the figures, which are published in the *Lancet* (2000;355:1822).

He added, "During the 1990s, 20 000 breast cancer deaths that could have happened in Britain didn't, and this year we will have 13 000 rather than 17 000 deaths from the disease." Earlier diagnosis, better surgery, chemotherapy, and radiotherapy have all contributed to the improved survival, but the most important influence on outcome has been the widespread and prolonged use of tamoxifen, he said.

Deaths from breast cancer soared by 26% in the United Kingdom between 1950 and 1989, giving one of the worst

death rates from the disease in western Europe. But between 1989 and 1999 deaths from the disease declined from 51 per 100 000 women to 35 per 100 000.

This drop is more significant than in the rest of western Europe, where tamoxifen was not as readily adopted as in the United Kingdom.

In the United States, where mortality remained fairly steady at around 40 per 100 000 women throughout the 1970s and '80s, wider use of tamoxifen since the late 1980s has reduced the death rate to about 32 per 100 000 in 1998.

Data from 55 randomised trials involving the use of tamoxifen after surgery show that five years of treatment with tamoxifen reduces the 10 year risk of relapse from 42% to 26% and

halves the risk of developing a new tumour in the other breast.

These beneficial effects of tamoxifen are seen in women of all ages with hormone sensitive breast cancer—about 80% of older women and 50% of younger women.

About one million women worldwide are taking tamoxifen, and, although the five year regimen has been used in the United Kingdom for a long time, it is still being underused in many countries, according to Dr Christina Davies, tamoxifen trial coordinator at the Clinical Trial Service Unit in Oxford.

Two trials (ATLAS and ATTOM) are currently investigating whether giving tamoxifen for longer than five years has any additional benefits; the results will not be known, however, until 2010. □