Younger women might benefit from breast cancer screening

Jacqui Wise, *London*

Regular mammography in women in their late 40s may reduce breast cancer mortality, according to two long term UK trials published last week. The national breast cancer screening programme in Britain, however, will not be extended to younger women until the results of a more definitive trial are known.

The UK trial of early detection of breast cancer, a non-randomised study, followed up women for 16 years who attended eight centres in England and Scotland. Mortality from breast cancer was 27% lower in the two centres (combined) that offered screening than in the six centres that offered no intervention or only educated the women about breast self examination (*Lancet* 1999;353:1909-14).

The researchers, from the Institute of Cancer Research in Sutton, Surrey, found that the decrease in mortality did not differ between age groups, indicating that there is a benefit in screening women at a younger

age. For women aged 45-46 years when they entered the trial, a difference in mortality began to emerge after three to four years. The researchers said that the results "suggest that screening of women aged 45-49 is at least as effective as that for women over 50 years."

Julietta Patnick, coordinator of the UK breast cancer screening programme, said that the results were interesting but that the trial was not specifically designed to look at the benefits of screening women aged under 50 and there were not sufficient numbers of women in the 45-49 age group. "To get a definitive answer we need to wait for the results of the UK age trial," she said. That trial, also organised by the Institute of Cancer Research, is still recruiting women, who will then be followed up for at least seven years.

"As with all screening, you have to look at the costs versus the benefits. There is the cost of irradiating lots of healthy women as well as the financial costs of

Mammography may benefit women in their late 40s

extending the programme," said Ms Patnick.

A second trial also suggested screening could benefit younger women. The Edinburgh randomised trial of breast cancer screening included more than 54 000 women aged 45-64 from general practice who were followed up for 14 years. The

women were offered either screening or routine health care (*Lancet* 1999;353:1903-8). Initial results showed a difference of 13% in breast cancer mortality between the screening group and controls. After adjustment for socioeconomic status breast cancer mortality was found to be 21% lower in the screening group. □

Neural stem cells successfully transplanted

Abi Berger, *BMJ*

Replacement of neural stem cells may be a feasible option for treating conditions that lead to global neurological degeneration.

Scientists from Harvard Medical School in Boston have shown that when neurological stem cells are injected into the brains of mice with a degenerative brain disorder, a large number of abnormal cells are replaced by normal ones (*Proceedings of the National Academy of Sciences of the United States of America* 1999;96:7029-34).

Evan Snyder, an assistant professor in neurology, and co-workers have been working on the hypothesis that transplantation of neural stem cells could compensate for defective neurones.

They worked with mutant

mice whose oligodendrocytes lack basic myelin protein, and whose demyelination causes severe tremors from a young age.

A simple intracerebroventricular injection technique was used to introduce a clone of neural stem cells into the mice's brains. Like haemopoietic stem cells, these stem cells have the potential to mature into any cells of the central nervous system.

The stem cells migrated throughout the brain and seemed to integrate well. In addition, a higher proportion of the stem cells matured into oligodendrocytes in the mutant mice than in the healthy control group.

Up to two thirds of the treated mutant mice showed a reduction of at least 50% in their tremors, proving that the engrafted cells also worked.

"In the future, this sort of technique may well prove useful in the treatment of multiple sclerosis and other leucodystrophies, but it will be just one approach," said Dr Snyder. □

Bristol manager argues patient care was a matter for clinicians

Clare Dyer, *legal correspondent, BMJ*

The NHS trust manager struck off for his role in the Bristol children's heart surgery case told the public inquiry into the children's care this week that patient care at the time was seen as a matter for clinicians, not managers.

John Roylance, former chief executive of United Bristol Healthcare Trust, said the "reality" was that health care was in the hands of clinicians. It was for the royal colleges to maintain standards and for other clinicians to alert management if a doctor's performance was not up to scratch. That was not just his view, he insisted; it was the view in the health service at the time. Dr Roylance and two surgeons, James Wisheart and Janardan Dhasmana, were found guilty of serious professional misconduct after an investigation last year by

the General Medical Council into the cases of 53 babies, 29 of whom died after open heart surgery at Bristol Royal Infirmary. The GMC found that Dr Roylance had failed to act on concerns expressed to him about high mortality. A former consultant radiologist, he was chief executive at the hospital for four years until his retirement in 1995.

Dr Roylance's evidence this week was limited to the general management of services in Bristol. He said: "A manager can only seek the appropriate professional advice, and if an individual is not performing to the standard which was expected following the appointment, that fact firstly has to be established. If there is a difference of opinion, one seeks the advice of the Royal College of Surgeons." □