Mammography is no better than physical examination, study shows

Deborah Josefson *San Francisco*

Careful physical breast examination is as effective as screening mammography in reducing mortality from breast cancer in women aged over 50, according to a new study (*Journal of the National Cancer Institute* 2000;92:1490-9).

The second Canadian national breast screening study found that mammography detected breast cancers earlier than physical breast examination, but surprisingly, earlier detection did not translate into a survival advantage.

The Canadian study, led by Dr Anthony Miller and colleagues at the University of Toronto, followed 39 405 women

aged 50-59. Only women who were not pregnant, had no history of breast cancer, and had not had mammography within the previous 12 months were eligible for enrolment.

The women were recruited from six provinces and 15 medical centres between 1980 and 1985 and were randomised into two arms: 19 711 women received both mammography and physical breast examination by nurses or doctors, and 19 694 women received physical breast examinations alone.

All the women were taught to examine their breasts and were followed via record linkage with the Canadian national cancer

registry and the national mortality database to 31 December 1993. Additionally, women with breast cancer were actively followed up until 30 June 1996. The follow up period averaged 13 years, with a range of 11-16 years.

The researchers found that, although mammography clearly detected cancers earlier than physical examination alone and was more sensitive in finding smaller cancers and in situ carcinomas, some of these advantages disappeared with longer screening.

Moreover, early detection did not translate into a reduction in mortality. At the initial screening, mammography plus physical examination found almost twice the number of cancers compared with physical examination alone (267 v 148)—7.2 breast cancers per 1000 patients compared with 3.45 breast

cancers per 1000 with physical examination alone.

Overall, mammography plus physical examination yielded a 2.1 year lead time advantage over physical examination alone. However, this advantage disappeared with longer follow up, by which time 622 invasive breast cancers were found in the mammography group and 610 in the physical examination group.

By the end of the study, 107 women had died of breast cancer in the group receiving mammography plus physical examination, compared with 105 in the group receiving physical examination alone. This represented a mortality rate ratio of 1.02 (95% confidence interval of 0.78 to 1.33). □

Full story, including criticism of the study, in News Extra at bmj.com

Public criticism makes paediatric surgeon's job too difficult

Clare Dyer *legal correspondent, BMJ*

A paediatric heart surgeon at Alder Hey Children's Hospital in Liverpool has decided not to carry out any more operations on children's hearts because of public criticism of his work.

Roger Franks, aged 55, and Alder Hey Hospital issued a joint statement last week blaming a campaign against him for his decision to withdraw voluntarily from children's heart surgery. The hospital is at the centre of an inquiry ordered by the health secretary, Alan Milburn, into the retention of 893 children's organs without parents' permission.

Parents have attacked Mr Franks's performance as a surgeon in the local media. The Royal Liverpool Children's NHS Trust, which runs the hospital, has carried out an internal review into surgical mortality, which it says shows that Mr Franks's figures compare favourably with national average rates.

A more detailed analysis, undertaken in conjunction with the regional director of public health, is expected to be made public next month. The trust said that it was confident this

exercise would confirm its own findings.

Mr Franks, one of two paediatric cardiac surgeons at the hospital, said: "It has become increasingly difficult for me to operate on children's hearts while facing increasing public attacks on my work. This has affected both my professional and personal life and I feel the time is right for me to concentrate on other areas of work."

Tony Bell, acting chief executive of Alder Hey Hospital, said: "Roger Franks has made a significant contribution to the hospital since his appointment in 1988, and I regret that he feels he must stop all children's cardiac surgery, particularly as the internal review showed that we have below average mortality rates. Mr Franks will continue with lung and chest surgery, in which he has particular expertise. In the meantime we have advertised for a locum paediatric cardiac surgeon, and we have made temporary arrangements to provide out of hours emergency cover to the team." □

Fat is a European issue: Almost one in five Europeans had followed a diet during the previous 12 months, according to a European Commission survey based on 1996 data. Greece (36.7%) and the United Kingdom (35%) had the highest proportion of women dieters, and Luxembourg (19.7%) and the United Kingdom (18.4%) led the men. The most reluctant dieters among men were the Irish (8.2%), the Germans (9.1%), and the Belgians (9.8%), and among women the Swedes (17.8%) and the Germans (18.2%). The highest proportion of women who had dieted was in the 25-34 age group, while for men it was in the 55-64 category. The same health survey (*Key Data on Health 2000*, from the European Commission, price £29.50) shows that the heaviest men in the European Union are German (average weight 80.4 kg); the heaviest women are Dutch (68.3 kg), closely followed by Greek women (67 kg).