Women with a personal history of breast cancer and women who were not resident in the state of Victoria at the time of screening were excluded. Women who report a breast lump and/or a blood-stained or watery nipple discharge are defined as having 'breast symptoms' and women who report any other symptom, such as breast tenderness or pain, are classified as having 'other symptoms'.

The sensitivity for asymptomatic women, women with 'other symptoms' and women with 'breast symptoms' were 75.6% (95% CI 72%–79%), 60.0% (95% CI 48%–72%) and 80.8% (95% CI 72%–90%) respectively. After controlling for age, women with 'other symptoms' were more likely to have a false negative screen (Odds Ratio 1.89, 95% CI 1.1–3.3) compared with asymptomatic women while women with 'breast symptoms' were half as likely to have a false negative screen (Odds Ratio 0.52, 95% CI 0.28–0.99) compared with asymptomatic women.

One possible explanation for the low sensitivity in the 'other symptoms' category is that some of the symptoms, such as breast pain and tenderness, may be due to the presence of glandular tissue in the breast and breasts with a high proportion of glandular tissue appear radiodense on mammography.

422 POSTER

Pre-operative diagnosis of screen detected cancers: Increasing the diagnostic rate

H.A. Bradpiece, U.P. Khot, A.R. Patel, M.W.E. Morgan. *Breast Unit, St. Margaret's Hospital, Epping, UK*

The recommended standard for the pre-operative diagnosis of screen detected cancers by the NHSBP is 70%. Our unit over the period 1 April 1996–31 March 1997 achieved a pre-operative diagnosis rate of 64.1%. (44.8% by fine needle aspiration cytology alone and 19.3% by 14G core biopsy).

Over the period 1 April 1997–27 March 1998 the pre-operative diagnosis rate is 75%. Fine needle aspiration cytology alone was the method in 67.5% and core biopsy in 7.5%.

The mammographic and pathological features of all these cancers presented.

It is recommended that fine needle aspiration cytology should be the prime modality for pre-operative diagnosis of screen detected abnormalities with core biopsy being recommended in selected cases.

423 POSTER

A model of elderly Latina's breast screening decisions

C. Veit, T. Clairice. *RAND, Behavioral Sciences, 1700 Main Street, Santa Monica 90401, USA*

Purpose: The present study was designed to develop a causal algebraic barrier model of poor elderly Latina, s breast screening decisions to increase our understanding of these decisions and inform breast screening policy.

Methods: The study combined traditional survey techniques with a controlled judgment experiment to test among alternative models. Fifty-two women judged the chance of having yearly mammograms in 79 situations that varied in cost, perceived risk, and source of the recommendation (none, a cancer institution, a doctor); they also completed a background-opinion questionnaire.

Results: All 3 factors significantly affected judged screening decisions; interactions ruled out the class of additive models (e.g., expected utility). An averaging model that weights the difference between women's highest- and lowest-valued feature of a screening situation predicted situations that could increase utilization by non-compliers and decrease utilization by compliers. With a recommendation (73% of compliers, 5% of non-compliers), non-compliers will comply if mammograms are free, even with a low perceived risk (77% of women); with a high perceived risk, non-compliers will likely pay up to $50 and compliers to $100. A recommendation from a cancer organization is as influential as from a doctor for non-compliers, in contrast to compliers. Without a recommendation, however, non-compliers will not comply.

Conclusion: Low costs and more effective information dissemination about risk and recommended screening frequencies should retain compliers and motivate non-compliers to comply.

424 POSTER

Effectiveness of mammographic screening for breast cancer in women aged over 50 years in Japan

T. Morimoto[1], M. Sasa[2], T. Yamaguchi[3], H. Kondo[3], Y. Sagara[3]. *[1]School of Medical Sciences, The University of Tokushima; [2]Tokushima Breast Care Clinic; [3]Tokushima Health Screening Center, Japan*

Purpose: The optimal age for effective screening of subjects for breast cancer by mammography was studied based on the results of two mammographic screening systems in Japan.

Method: Two screening systems were investigated in this study. System I consisted of visit screening using a bus equipped with a mammographic apparatus. System II consisted of central screening performed at Tokushima Health Screening Center.

Results: The examinees numbered 4,156 and 5,704 in system I and II, respectively. The detection rates of breast cancer were 0.55% and 0.26% in system I and II, respectively, which are 2–5 times higher than that (0.12%) obtained by conventional screening using physical examination alone. The proportion of stage I was 69.6% in system I and 73.3% in system II. The rates of no nodal involvement were high, being 78.8% and 75% in system I and II, respectively. Breast conserving therapy was applied to 26 of the 38 patients with breast cancer detected by the two screening systems. In Wolfe's classification of mammograms, the proportion of DY pattern was remarkably low, being 3.2% in the sixth decade and 0.8% in the seventh decade, compared with 16.6% in women aged 49 years.

Conclusion: These results indicate that mammographic screening is effective in women aged over 50 years in Japan, as well as in other countries.

425 POSTER

Factors influencing women's decisions to undergo genetic testing for breast cancer

M. Cappelli[1], L.D. Surh[1], S. Verma Logan[2], A. Hunter[1], L. Humphreys[1], J. Allanson[1]. *[1]Children's Hospital of Eastern Ontario; [2]Ottawa Regional Cancer Centre, General Division, Canada*

Purpose: This study examined the attitudes and preferences for BRCA1 testing among Canadian women with and without breast cancer. Factors predicting intentions to be tested were also assessed.

Methods: A face-to-face assessment was conducted with 102 women: 1) 52 women diagnosed with breast cancer under the age of 50 and 2) 50 unaffected women from the general population under the age of 50. Family history of breast and other cancers, demographic characteristics (including age, education, religion, number of children and family income), and knowledge and attitudes about breast cancer and genetic testing were assessed. Intended and actual uptake of BRCA1 testing was also determined.

Results: Overall, 59% of participants indicated a preference to undertake the test, and 41% either did not want it or were uncertain. While 71% of breast cancer patients wanted to be tested, only 52% had actually contacted a genetic counsellor about BRCA1 testing at follow-up 1–12 months later. In logistic regression analysis, independent predictors of "intent to be tested" were a diagnosis of breast cancer and fewer perceived costs of testing (including excessive worry, thinking it better not to know, and seeing testing as too much trouble).

Conclusion: There is a moderate level of demand for BRCA1 testing among women both with and without breast cancer, increasing significantly among breast cancer patients alone. Those who choose to be tested may perceive relatively few costs of utilizing this technological service. Other factors, such as socioeconomic and educational status, family history of breast cancer, and knowledge about breast cancer and gene testing were not associated with preference to be tested. This holds implications for genetic counsellors in terms of providing balanced and complete information to women considering genetic testing for breast cancer susceptibility.

426 POSTER

Improvements in survival from the NHS mammographic screening programme – A single centre study

H. Chan, L.A. Harris, B. Shepstone, R. English, M.J. Greenall. *University of Oxford/John Radcliffe Hosp., Dept. of Surgery, Headley Way, Oxford OX3 9DS, UK*

Introduction: There have been concerns about the value of the National Health Breast Screening Programme (NHBSP), as little outcome data