SIR—Mant et al have expressed concern that the use of hospital controls, “inexact age matching and the loss of subjects from socially deprived areas”, may be responsible for our finding of a negative association between current cigarette smoking and the risk of benign breast disease. Since our results were not altered when age was included as a continuous variable in logistic regression models, we do not understand how differences in the age distribution of the cases and controls could have influenced our results. We are similarly unclear how the loss of subjects from areas designated by the local police department as unsafe for home interviews could have affected our results since there is no reason to believe that the cases who were excluded would be more likely to be current smokers than the controls who were excluded. Furthermore, this exclusion resulted in the loss of less than 2% of the cases and controls.

In our paper, we did express a similar concern to that of Mant et al regarding the use of hospital controls. However, we attempted to minimise potential selection biases by examining the influence of a large number of potential confounders, including indices of medical care utilisation and the practice of breast self-examination, but the odds ratios were not materially altered in these analyses. In addition, we reported that the inverse association with current smoking was evident for both inpatients and outpatients as well as when the cases were compared to a subgroup of controls with acute surgical conditions.

Since we found no evidence that former smokers were at a reduced risk of benign breast disease, we believe that it is important to ascertain smoking status at the time of diagnosis. At least in the United States, the proportion of ex-smokers among women aged 20 years and older has virtually doubled between 1965 and 1980. The proportion of ex-smokers (13%) among the cases in the data presented from the Oxford-FPA study is considerably lower than that obtained among our cases (23%). Since cigarette smoking has been found to alter the risk of several oestrogen-related disorders and since benign breast disease is believed to be hormonally related, the inverse association with current cigarette smoking that we observed appears to be biologically plausible.

However, in light of the difficulty of choosing an appropriate control group for studying benign breast diseases, we welcome further data to substantiate or refute our findings.

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References

Low tar means less tar

SIR—Dr MAH Russell et al (1986; 40:80–3) conclude, from the measurement of plasma nicotine, plasma cotinine, and COHb%, that despite “compensation”