**Therapeutics**

**Review: limited evidence on regular breast examination does not support its effectiveness for reducing breast cancer deaths**


**QUESTION:** Does screening for breast cancer by regular self examination or clinical examination (or both) reduce the incidence of breast cancer and death?

<table>
<thead>
<tr>
<th>Outcomes at 10–15 years</th>
<th>Number of studies</th>
<th>Weighted event rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Screening</td>
<td>Control</td>
</tr>
<tr>
<td>Breast cancer mortality</td>
<td>2</td>
<td>0.16%</td>
</tr>
<tr>
<td>Biopsies with benign results</td>
<td>2</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Abbreviations defined in glossary; weighted event rates, RRI, NNH, and CI calculated from data in article.

**COMMENTARY**

Breast self examination appears to be finished as a means of decreasing breast cancer mortality, based on this summary by Kosters and Gøtsche of data from 2 large non-Western studies. Neither showed a hint of benefit in breast cancer mortality, despite long term follow-up and a higher rate of biopsies in the women randomised to self examination instruction.

Both trials had some methodological problems. In the Shanghai study, which appears to be of higher overall quality, 519 factories were randomised to self examination instruction or to a control group. The randomisation may have been problematic since the intervention group had 16% lower overall mortality. In the St Petersburg trial, 28 clinics were randomised to screening or to a control group. The final report of this trial has not yet been published, but the Cochrane review suggests that large numbers of women were misclassified or lost to analysis.

It is worth looking at a study not included in this summary—the UK Trial of Early Detection of Breast Cancer. The UK trial was not included in the Cochrane analysis because the allocation of 8 towns to screening or to a control group was not randomised. Results were presented with and without controlling for baseline differences in breast cancer mortality rates. Two towns were allocated to self examination, 2 to mammography, and 4 to comparison. Overall, allocation to self examination generated no improvement in breast cancer mortality (RR 0.99, CI 0.87 to 1.12). However, the town in which yearly self examination calendars were sent to women showed a significant decrease in breast cancer mortality (RR 0.79, CI 0.65 to 0.96).

In summary, the Shanghai study, where breast cancer incidence and mortality rates are much lower than in the West, was a high quality, but perhaps poorly randomised, trial. No evidence of benefit and some evidence of harm were shown. The comparability of the St Petersburg population to Western populations is difficult to gauge from the review. This perhaps poor quality trial also showed no benefit and some harm. A subgroup in a moderate quality trial in a Western population may have received some benefit, the magnitude of which is similar to mammography. This is scarcely definitive, but suggests that dialogue on this issue should continue.

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