Effects of hormone therapy on health related quality of life in postmenopausal women with CAD differed according to presence of menopausal symptoms


QUESTION: Does hormone therapy (HT) improve health related quality of life (HRQL) in postmenopausal women with coronary artery disease (CAD)?

Design
Randomised (allocation concealed), blinded (patients, clinicians, data collectors, and outcome assessors), placebo controlled trial with follow up to 3 years.

Setting
Outpatient and community settings at 20 US clinical centres.

Outcome at 3 years

<table>
<thead>
<tr>
<th>Outcome at 3 years</th>
<th>Mean change in scores (hormone therapy v placebo, p value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients</td>
<td>Women with flushing</td>
</tr>
<tr>
<td>Physical function</td>
<td>–4.4 v –3.1§</td>
</tr>
<tr>
<td>Energy/fatigue</td>
<td>–4.6 v –3.0§</td>
</tr>
<tr>
<td>Mental health</td>
<td>–0.2 v –0.9§</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td>No data available†</td>
</tr>
</tbody>
</table>

§ Values not reported.

COMMENTARY

The study by Hlatky et al is important because of its large sample size and the paucity of existing research on quality of life in postmenopausal women, especially as it pertains to HT. All participants had documented heart disease, which limits the generalisability of the findings. The results suggest that HT improves quality of life only for women with menopausal symptoms and does not have a general benefit for postmenopausal women with heart disease. Presence or absence of hot flushing seemed to be the defining factor in improvement of depressive symptoms. It should be noted that women with flushing who received HT also had lower quality of life scores at baseline. Other factors such as physical illness, chest pain, and education level had an even greater negative effect on quality of life than did HT.

Other factors need to be considered before applying these results to other patients. Participants apparently were not screened for smoking, which is known to interact with HT. Participants had a mean age of 67 years, which is older than that in previous studies. The detrimental effects of menopause are known to occur within the first few years after cessation of menstruation. Hlatky et al noted that women with flushing symptoms who improved on HT tended to be much younger. Progesterone is sometimes said to be an "anti-oestrogen", so it would be interesting to see if similar results would be obtained in a study of unopposed oestrogen or of HT in women having surgical menopause. Some clinicians also claim that oral and transdermal treatments may have different effects, in a study showing that women with flushing (n = 434) who received HT had improved mental health and depressive symptoms over 3 years but did not differ from those who received placebo for physical function or energy/fatigue (table). The groups did not differ for mental health (table).

Subgroup analysis based on presence of flushing symptoms at baseline showed that women with flushing symptoms at baseline (n = 2325) who received HT had greater declines in physical function and energy/fatigue, but had greater improvements in depressive symptoms than women who received placebo (table). The groups did not differ for mental health (table).

CONCLUSIONS

In postmenopausal women with coronary artery disease, hormone therapy reduced physical function and energy but improved depressive symptoms overall. Hormone therapy improved emotional quality of life in women with flushing symptoms, but reduced physical quality of life in women with no flushing symptoms.

*See glossary.
‡Information provided by author.