As I see it

Ten reasons to be happy about hormone replacement therapy: a guide for patients

John Studd

London PMS and Menopause Clinic, London, UK

Correspondence: Professor John Studd, London PMS & Menopause Clinic, 46 Wimpole Street, London W1G8SD, UK. Email: harley@studd.co.uk

Abstract

In spite of the negative press reports following the 2002 Women's Health Initiative (WHI) publication, women can be reassured that in the correct circumstances, hormone replacement therapy (HRT) is beneficial and safe, particularly if treatment is started below the age of 60. Transdermal oestradiol is probably safer than oral estrogens as coagulation factors are not induced in the liver and HRT is safer if a minimal duration and dose of progestogen is used. HRT is effective for the treatment of estrogen-deficiency symptoms of flushes, sweats and vaginal dryness. Estrogens prevent osteoporotic fractures and should be first-choice therapy, rather than bisphosphonates. Similarly, HRT protects the intervertebral discs in a way that non-hormonal preparations do not. Estrogens perhaps with the addition of testosterone help certain sorts of reproductive depression as well as improve energy and libido. There is new evidence to support the previous observational studies that HRT reduces the incidence of heart attacks. Estrogen therapy has a beneficial effect upon collagen, thus improving the texture of the skin, the nails, the intervertebral discs and bone matrix. Discussion of side-effects should not be avoided, particularly the 1% extra lifetime risk of breast cancer. This should be balanced against the fewer heart attacks, fewer deaths and less osteoporotic fractures in those who start HRT below the age of 60.

(1) HRT will stop your hot flushes and sweats

Troublesome hot flushes, severe night sweats and headaches causing chronic insomnia are characteristic symptoms of the menopause. These symptoms may last for many years. Apart from being socially embarrassing they result in tiredness and depression because of lack of sleep. These symptoms can almost invariably be cured with the correct small dose of estrogen. Although selective serotonergic reuptake inhibitor antidepressants have been suggested for the treatment of vasomotor symptoms, no other treatment is nearly as effective as estrogens. Women who still have a uterus should still have 7–12 days of progestogen in order to produce a withdrawal bleed and prevent endometrial hyperplasia.

(2) Estrogens will treat vaginal dryness and many causes of painful intercourse and lack of libido

Thinning of the pelvic tissues producing vaginal dryness and occasionally bleeding is another characteristic result of estrogen deficiency that occurs after the menopause. This also can be successfully treated with estrogen either by tablets or through the skin by patches or gels or implants. Transdermal estrogen therapy is probably the safest and most effective route as hepatic coagulation factors are not stimulated. Local estrogens can also be given for this symptom using local vaginal applications of weak estrogens such as oestradiol that are hardly absorbed. Other related problems of painful intercourse, loss of libido and recurrent ‘cystitis’, if due to pelvic atrophy are also effectively treated by systemic or long-term local vaginal estrogens.

(3) HRT increases bone density and prevents osteoporotic fractures

Every study confirms that estrogens are the most effective way of increasing bone density and preventing osteoporotic fractures even in low-risk women. This treatment is very safe when started in women under the age of 60. It is more effective and beneficial than the bisphosphonates that are frequently used by bone physicians as first choice and by general practitioners unsure about the safety of estrogen therapy. These non-hormonal drugs with their
considerable long-term complications should have no place in maintaining bone density in women under the age of 60. For the recently menopausal women receiving estrogen therapy for climacteric symptoms such as flushes, sweats or vaginal dryness, there will be a considerable increase, up to 15% in 10 years to such an extent that osteoporotic fractures 20 years later in the older women are much less likely to occur. If these women have low bone density, even without typical menopausal symptoms, estrogens must be seen as first-choice therapy. For those younger women with severe osteopenia or osteoporosis due to premature menopause, early hysterectomy and oophorectomy or anorexia with amenorrhoea, estrogens are an essential long-term treatment.

(4) HRT protects the intervertebral discs

Important recent studies from several centres have shown conclusively that estrogens prevent collagen being lost from the intervertebral discs, thus maintaining their strength and function. These discs make up one-quarter of the length of the spinal column and act as cushions preventing crush fractures of the vertebral bodies. It is these crush fractures that lead to loss of height and the lordosis of the upper spine known as the Dowager's hump. This important protective effect of estrogens seems to be unique as bisphosphonates and the other non-hormonal treatments of low bone density do not have any beneficial effect upon the discs.

(5) HRT does reduce the number of heart attacks

There are about 30 years of evidence from many observational trials that estrogens reduce the incidence of coronary heart disease. This has subsequently been questioned by the 2002 WHI Study, which showed an increase in heart attacks. However, this study looked at patients of the wrong age and who were using the wrong dose of estrogen and progestogen. Subsequent reports from the same investigators have shown a very much reduced incidence of heart attacks in women who start HRT below the age of 60. This is particularly apparent in women who have had a hysterectomy and can have estrogens without progestogen. The view now is that HRT, particularly estrogen alone, is very safe and is associated with a reduced number of heart attacks if started below the age of 60. Thus there is primary prevention of coronary heart disease, but there is no evidence of protection in women with established coronary damage.

It would appear that the factor that is associated with the apparent increase in severe side-effects such as breast cancer and heart attacks and possibly stroke is the progestogen component of HRT. As progestogen also produces unwanted PMS-type side-effects in patients who are progestogen intolerant, it is sensible to keep the dose of oral gestogen to a minimum. The alternative is to insert a Mirena intrauterine system, which produces amenorrhoea and avoids the use of oral progestogen with its side-effects for five years or more.

(6) Estrogens help depression in many women

Estrogens are more effective in the treatment of depression in pre- or postmenopausal women than postmenopausal women. However there is no doubt that depression is helped in postmenopausal women who have been suffering from night sweats, insomnia or vaginal dryness, painful intercourse and marital problems in that most of these problems can be effectively treated and removed. However, it is true that the most impressive effect on mood is seen in younger perimenopausal women in the 2–3 years before the period cease in the menopausal transition. This cannot be diagnosed by blood tests but by a careful history. This depression often occurs in women who are sensitive to abrupt changes in their hormones, either endogenous oestradiol or progesterone. These women had previously had postnatal depression and premenstrual depression in what should be known as reproductive depression. They often also have cyclical headaches/migraines that occur with the cyclical hormonal fluctuations at menstruation. As premenstrual depression becomes worse with age, it blends into the more severe depression of the transition phase and is very effectively treated by moderately high-dose transdermal estrogens used by patches, gels or implants.

(7) HRT improves libido

HRT certainly improves libido if estrogens are used to cure vaginal dryness and painful intercourse. Even without these characteristic symptoms, estrogens can improve sexual desire. However, if necessary, the addition of testosterone has a more dramatic effect upon libido, frequency of intercourse and intensity of orgasm. Testosterone patches licensed in women after hysterectomy and testosterone gels in the appropriate dose are often and should be used ‘off license’ with full consent and explanation.

Women must be aware that testosterone is not only a male hormone but it is an essential female hormone present in women in about 10 times the blood levels as estrogen. It is an essential hormone, important for energy, mood and sexuality.

(8) HRT improves the texture of the skin

After the menopause, women lose about 25% of their body collagen, which is manifested by thin inelastic skin, brittle nails, loss of hair and loss of the collagenous bone matrix. This latter loss is an essential cause of osteoporosis and osteoporotic fractures. Estrogen therapy replaces the lost collagen in the skin and the bone. Its affect on the facial skin is a very obvious useful cosmetic effect.

(9) ‘I am a nicer person to live with’

This is a quote from a patient. Many women say that when estrogen therapy stops their depression, their loss of...
libido and their irritability, they become more agreeable people for their partners to live with. The depression, irritability, grumpiness and loss of energy and disinterest in sex can usually be improved considerably by the appropriate doses of the appropriate hormones that may include testosterone as well as estrogen.

**10) HRT is safe**

In spite of the press reports stressing bad news, virtually all claims of major adverse effects from the WHI study have been reconsidered even by the investigators. It seems quite clear that the reported major side-effects of breast cancer, stroke and heart attacks occurred in women who started the wrong dose of HRT over the age of 60. In women who started below the age of 60 there were fewer heart attacks, fewer deaths, fewer osteoporotic fractures and even less breast cancer in this study. It is probable that the one residual side-effect is a small 1% extra lifetime risk of developing breast cancer, but this is no more than the breast cancer risk of being overweight, drinking wine, having no children or even taking statins.
AUTHOR: The following queries have arisen during the editing of your manuscript. Please answer the queries by making the requisite corrections at the appropriate positions in the text.

<table>
<thead>
<tr>
<th>Query No.</th>
<th>Nature of Query</th>
<th>Author’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Please provide up to five keywords.</td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>Please confirm the change of “woman” to “women” in the sentence “For the recently menopausal women receiving estrogen.…….”</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>Please provide the expansion of PMS.</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>Please check the portion of the sentence “…….. in pre- or postmenopausal women than postmenopausal women.” is not clear.</td>
<td></td>
</tr>
</tbody>
</table>