

# TESTING TREATMENTS

## Chapter 2, 2.4

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and the woman were in no doubt that DES should again be given, and the pregnancies both ended with liveborn babies. Both the obstetrician and the woman concluded that DES was a useful drug. Unfortunately, this conclusion based on anecdote was never shown to be correct in fair tests. Over the same period of time that the woman was receiving care, unbiased studies were actually being conducted and reported and they found no evidence that DES was beneficial.<sup>5</sup>

Although there was no evidence from fair tests that DES was helpful in preventing stillbirths, the DES story did not end there. Twenty years later evidence of harmful side-effects began to emerge when the mother of a young woman with a rare cancer of the vagina made a very important observation. The mother had been prescribed DES during pregnancy and she suggested that her

daughter's cancer might have been caused by the drug.<sup>6</sup> This time the observation was correct, but most importantly it was *shown* to be correct. Since then, numerous studies have shown a range of serious side-effects of DES in both men and women who had been exposed to DES before they were born. These side-effects included not only an increased frequency of rare cancers but also other abnormalities of the reproductive system.

By the time it was officially declared that DES should not be used in pregnancy, several million people had been exposed to the drug. Knowing what we know now, if doctors had used the most reliable research evidence on DES available in the 1950s, many fewer would have prescribed it, because DES was never actually proved to be effective for the condition for which it had been prescribed in the first place. Tragically, this lack of evidence of benefit was widely overlooked.<sup>7</sup>

## HORMONE REPLACEMENT THERAPY (HRT)

In women going through the menopause, hormone replacement therapy (HRT) is very effective in reducing the distressing hot flushes that are commonly experienced, and there is some evidence that it may help to prevent osteoporosis (bone thinning). Gradually, more and more beneficial effects were claimed for HRT, including prevention of heart attacks and stroke. And millions of

## **NO WONDER SHE WAS CONFUSED**

In January 2004, a hysterectomy patient wrote this letter to *The Lancet*:

'In 1986 I had a hysterectomy because of fibroids. The surgeon also removed my ovaries and found that I had endometriosis as well. Because I was then only 45 years old and would have had an immediate menopause, I was put onto hormone replacement therapy (HRT). The first year I took conjugated oestrogens (Premarin), but from 1988 until 2001 I had oestrogen implants every 6 months, given to me privately by the surgeon who did the operation. I was always a little dubious about having the treatment, since I felt I just did not have control over things once the implant was done, and also after several years had many headaches. Apart from that I felt very fit.

However, my surgeon assured me that HRT had so many advantages and that it suited me, which I agreed with. As time went on, HRT was reported to have more and more benefits and was not just the cosmetic drug it seemed to have been used for in its early years. It was now good for the heart, osteoporosis, and part defence against strokes. Every time I visited my surgeon, he seemed to have more evidence about the advantages of taking HRT.

My surgeon retired in 2001 and I went to my National Health Service doctor. What a shock! He told me the exact opposite of my private surgeon – that it would be a good idea to come off HRT: it could increase the risk of heart disease, strokes, and breast cancer, and be the cause of headaches. I did have one more implant and then went onto Premarin for a short while, but since then I have not used HRT for about 8 months. My doctor said it would be my decision whether to stay on it or not. I was so confused . . .

I cannot understand how HRT and all its wonderful advantages can be reversed in such a short space of time. How can a layman like myself come to a clear decision? I have spent many hours discussing and thinking about whether I should have stayed on HRT, although so far I have not suffered many ill effects. I am very confused about the whole issue and I am sure other women feel the same.'

Huntingford CA. Confusion over benefits of hormone replacement therapy. *Lancet* 2004;363:332.

women, advised by their doctors, began using HRT for longer because of claims of these and other extra benefits. However, the basis of these claims was very shaky.

Take heart attacks alone. For over 20 years, women were told that HRT would reduce their risk of this serious condition – in fact the advice was based on the results of biased (unfair) studies (see Chapter 1 and Chapter 6). Then, in 1997, there was a warning that the advice might be wrong: researchers from Finland and the UK reviewed, systematically, the results of well-conducted studies.<sup>8</sup> They found that, far from reducing heart disease, HRT might actually increase it. Some prominent commentators dismissed this conclusion, but its tentative result has now been confirmed by two large well-conducted trials. Had the effects of HRT been assessed properly when it was first introduced, women would not have been misinformed and many of them would not have died prematurely. To make matters worse, we now know that HRT increases the risk of stroke and of developing breast cancer.<sup>9</sup>

Overall, HRT continues to be a valuable treatment for women with menopausal symptoms.<sup>10</sup> However, it is tragic that it was so heavily promoted specifically as a way of reducing heart attacks and stroke. Although the increased chance of these serious conditions is modest, the total number of women affected is very large indeed because HRT has been so widely prescribed.

## EVENING PRIMROSE OIL FOR ECZEMA

Even if inadequately assessed treatments do not kill or harm, they can waste money. Eczema is a distressing skin complaint affecting both children and adults. The skin lesions are both unsightly and very itchy. Although the use of steroid creams helps in this condition, there were concerns about the side-effects of these treatments, such as thinning of the skin. In the early 1980s a natural plant oil extract – evening primrose oil – emerged as a possible alternative with few side-effects.<sup>11</sup> Evening primrose oil contains an essential fatty acid called gamma-linolenic acid (GLA) and there were plausible reasons for using it. One suggestion, for example, was that the way in which GLA was transformed within