The issue with bioidentical hormones

In recent years, bioidentical hormones have gained popularity as a more ‘natural’ alternative to hormone replacement therapy (HRT) for treatment of menopausal symptoms such as hot flushes, vaginal dryness and difficulty concentrating.

Bioidentical hormones are based on extracts such as yam and soybean, hence their ‘natural’ appeal. However, claims that they are safer and more natural than HRT – also known as menopausal hormone therapy (MHT) – are misleading and not based on scientific evidence.

We spoke to Jean Hailes endocrinologist Dr Sonia Davison and specialist women’s health GP Dr Amanda Newman to find out the situation regarding bioidentical hormones – much of which may surprise you.

What is ‘bioidentical?’

The term ‘bioidentical’ refers to compounds that claim to be identical, in chemical make-up and molecular structure, to hormones that the human body produces. They are marketed as being gentler on the body because they are absorbed through the skin or the lining of the cheek, in the form of lozenges, troches or creams.

Not-so natural

Women who take bioidentical hormones often choose them over HRT/MHT because they believe they are made only from plant extracts and not synthesised in a laboratory. In reality though, just like vitamin supplements, these hormones are commercially processed.

“Bioidentical hormone therapy (BHT) is not more natural,” says Dr Davison. “In fact bioidentical hormones are made from synthesised substances, just like [HRT].

Also, just because a substance is derived from something natural, it doesn’t mean it is safe, says Dr Newman. “Tobacco is a beautiful green leafy plant!”

Science and safety

While medications used in HRT/MHT have been stringently studied in large clinical trials to ensure safety and to assess side effects and efficacy, similar long-term, high-quality research has not been conducted on BHT, says Dr Davison.

“HRT products are made in a very strict environment, and have undergone stringent testing and governmental approval before they are able to be used in women or allowed to be made available by prescription,” says Dr Davison.
“Bioidentical hormones bypass this process, and are not approved by the government’s Therapeutic Goods Administration, so there are no guarantees that bioidentical custom-compounded hormones are safe.”

Neither the Australian Menopause Society, the International Menopause Society or the United States Endocrine Society support the use of bioidentical HRT.

Dr Davison says an emerging problem with bioidentical hormones is due to the form of progestogen they might use, which is needed to protect the endometrium (lining of the womb, or uterus).

“It may not be protective of the lining of the womb and as a result, may lead to thickening of the endometrium and an increased risk of cancer,” Dr Davison explains.

**Custom compounding is misleading**

To buy bioidentical hormones, you can’t just go to any chemist. First, you see a health practitioner. They will often conduct a saliva test, or order a blood test to check your hormone levels. You then take their prescription for biodentical hormones to a compounding pharmacist, who makes up the hormones especially for you.

This customised compounding makes women think that bioidentical hormones are better suited to their specific hormonal imbalances, but this is untrue. In fact, saliva tests are not considered a reliable method for establishing hormone levels. Blood tests are also not necessarily reliable, as women’s hormones during perimenopause and menopause can change from day to day, or even hour to hour, says Dr Newman.

“There are not the same day to day or hour to hour changes seen with saliva tests,” she says. “Women respond in different ways to this hormonal chaos,” she says. “For some women it makes no difference to how they feel, whereas other women may suffer severe symptoms, despite having similar blood results.”

The cost of bioidentical hormones is also considerably higher than conventional HRT.

**Mistaken fears about HRT/MHT**

There have been reports in the media about the risks of HRT in relation to cancer, further illness and disease.

However, over the past few years, re-evaluation of the data from the Women’s Health Initiative, and recent comprehensive reviews of evidence on HRT, have found HRT is both an effective and a safe treatment for the relief of menopause symptoms, and prevention of osteoporosis, for healthy women.

Women who may be at risk if they take HRT – whether traditional or bioidentical – include those who:

- have previously been diagnosed with breast cancer
- have previously been diagnosed with cardiovascular disease
- had a venous thrombosis, or deep vein thrombosis (DVT – blood clot in the vein).

As bioidentical hormones have not undergone rigid long-term clinical trials, it is not clear whether long-term use may cause health issues. A Cochrane review stated that "no data are yet available about the safety of BHT with regard to long-term outcomes such as heart attack, stroke and breast cancer".

**New HRT options**

To ensure you are getting the right advice and information on HRT and BHT, it is important to get good-quality medical care. Your GP or women's health specialist can offer advice based on scientific studies and will also discuss the benefits and risks of hormone therapy for you. This discussion should take into account personal factors including health conditions you may have, or family history of health conditions such as heart disease or breast cancer.

"There are several different types of HRT available, and one type may be more suitable for you than another," says Dr Newman. "You can choose from tablets, skin patches or gel in a variety of doses and combinations."

**How long is it safe to use HRT?**

Dr Davison says there is "no correct time frame" for using HRT, as it depends on the woman's individual circumstances and the hormone therapy involved. But for the majority of women, this will be a few years.

Dr Newman says women aged under 60 generally benefitted from using HRT. "We certainly know that under the age of 60, women on HRT, compared to women who do not take HRT, have both better morbidity and mortality outcomes; that is, they're less likely to experience health problems," says Dr Newman.

"Overall the scientific studies are positive regarding women with menopausal symptoms taking HRT. The same cannot be said for bioidentical hormones because they have not been widely or appropriately researched."

Read more about menopause treatment options on our website here.

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