Hormones and Psoriasis

by ANGELA FINLAY

The link between prominent hormones and chronic skin problems

Psoriasis is an inflammatory disease, and hormones are notoriously taxing – combine the two and you could have an unhappy mixture of burning pain, itching, scaly, and downright frustrating symptoms. The relationship between psoriasis and hormonal fluctuations isn't completely understood, but there's strong evidence to suggest a link, and it's important to learn how your skin can react to different phases in order to limit the damage and discomfort.

How Psoriasis Behaves in Times of Hormonal Fluctuation

Female hormones can have a big effect on how psoriasis manifests, so although just as many men suffer from psoriasis as women, they may not experience symptom variations in the same way. Researchers have found that psoriasis symptoms tend to spike more often during puberty, after pregnancy, and during menopause.

The results indicate that sex hormones are partly to blame for psoriasis flares, but it's difficult to tell just how they interfere with the body's inflammatory response. However, there are a few promising theories to explain the link:

- **Sex hormone levels alter immune response after the first period**. When young women experience menarche (their first menstrual period), estrogen and other sex hormone levels increase, which may activate certain T-cells in the body. These T-cells trigger an immune response, which can manifest as psoriasis flare-ups during puberty.
- **More estrogen during pregnancy reduces inflammation**. Experts believe that estrogen's anti-inflammatory effect is responsible for the reduction of psoriasis symptoms during pregnancy. Over half of women with psoriasis notice improvement in their skin while they're pregnant, and 65% see their condition worsen after they give birth – when estrogen levels fall again.
- **Less estrogen after menopause leads to exacerbations.** As if the regular range of menopausal discomforts weren't enough, women with psoriasis often see a marked increase in symptoms. Almost 50% of women find the intensity and coverage of their psoriasis plaques and scales get worse, and since estrogen therapy comes with some alarming risks, it's not easy to counter this spike in skin symptoms.

There certainly seems to be a connection between estrogen and psoriasis flares, but the interactions of sex hormones aren't always so straightforward. After all, more estrogen may mean less skin problems for the majority of women, but around one quarter of pregnant psoriasis sufferers find their skin actually gets worse during pregnancy, and 10% even notice improvement in the postpartum period. Since many sex hormones occur in different ratios and work in different ways, it's nearly impossible to predict how their specific interactions will affect your autoimmune response.

Psoriasis and Leptin

Leptin is a naturally-occurring hormone in the body, responsible for regulating food intake and fat stores. High leptin levels are associated with weight gain and inflammation – two processes that often go hand in hand. In fact,

psoriasis patients (who live with chronic inflammation) are more than twice as likely to be obese or suffer from high blood pressure, which also puts them at risk for other chronic diseases.

Recent research shows that people with psoriasis have elevated leptin levels, whether or not they are overweight. This excess of leptin in the blood may contribute to risk of heart disease, diabetes, and hypertension that comes with psoriasis. On the bright side, weight loss has been found to significantly decrease leptin levels, and reduce the risk of metabolic and cardiovascular diseases.

Understanding Patterns to Improve Treatment

Many patients and doctors are frustrated by the foggy relationship between hormones and psoriasis, especially since hormone therapy and contraception often don't correct the issue. Although complex hormone interactions are difficult to follow, there are a few other factors that may play a role in psoriasis flares during volatile times, which may be easier to control than hormones:

Stress

Perhaps the most intrusive enemy – and certainly the most common – is stress, whether it's physical or psychological. Stress is a top trigger for psoriasis flares in patients of each gender and of all ages, and it comes in big doses during times of hormonal change.

The stress of childbirth may bring on a psoriasis flare, but so can the stress of dealing with menopausal discomforts and emotional challenges. Although pharmaceutical relief may not be an option, getting better quality sleep, practicing relaxation exercises, and cognitive behavioural therapy can help you keep your cortisol levels under control and get a handle on your stress – and in turn, relieve some of the strain on your skin.

Environmental changes

Changes in surroundings can coincide with changes in life phases, and that can have a profound effect on your psoriasis. Combine dry, dark winter atmosphere with the dips and spikes of estrogen in perimenopause, for example, and your autoimmune response can go into defense mode.

UV light therapy can be helpful when sunlight is scarce, and most topical and systemic treatments are fine for menopausal women. If you're planning a big move, job change, or another major life upheaval is in the works, talk to your doctor about sorting out a plan of attack in case your skin flares up. Pregnancy can complicate treatment, so be especially cautious when dealing with psoriasis while you're pregnant, or even postpartum.

Psoriasis is almost as mysterious as hormonal interactions and the chain of events they trigger, which means you shouldn't tackle the problem on your own. However, you can begin to take some control with regular exercise: not only is it the easiest route to weight management (and lower leptin levels), but it can have swift and profound effects on stress, too. Talk to your doctor about upping your activity level in combination with some targeted treatment tactics, and you can counteract some of the hormonal issues that may be interfering with your skin health.