# What is a psoriasis flare up?

Psoriasis affects around 2% of the Western population, and is a systemic disease with red, thick and silvery scaly skin with severity ranging from only limited disease to involvement of the entire body's skin with severe psychological and physical implications. A psoriasis "flare-up" is the layman term of an exacerbation of psoriasis: patients with psoriasis sometimes experience a flare-up in their disease, ranging from mild worsening of the psoriasis to dramatically worsened skin over a short time period - often within a few days. Psoriasis patients experiencing a psoriasis flare-up suffer from increased pain, itching, scales and redness from the skin, often resulting in the skin cracking, which make the patients more prone to skin infections. In the severe cases, psoriasis flare-ups might necessitate a hospital admission for intense treatment.

The frequency of psoriasis flare-ups is individual varying from patient to patient. Some psoriasis patients only experience a few flare-ups during their lifetime, while others have to endure flare-ups up to several times a year. Some patients psoriasis progress slowly from one lesion to over years develop more lesions, while others go from one single lesion to rapidly develop more lesions. While ongoing, intensive (local or systemic) treatment is often necessary to treat the flare-up. The duration of flare-ups depends on the individual patient's condition, comorbidities and treatment, varying from days to weeks.

# What causes a flare up?

What triggers psoriasis varies from patient to patient with different individual perceptions of important possible causes of flare-ups. In general, the following triggers are known and widely accepted as likely triggers of psoriasis flare-ups:

### Certain changes of behaviour

Certain changes of behaviour might either induce or improve psoriasis symptoms. Knowing that psoriasis is a chronic inflammatory disease, there has been increased focus on linking inflammatory environmental factors, with the development and/or worsening of psoriasis (flare-ups). These include dietary inflammatory components, lack of exercise and nutritional status. Some psoriasis patients report certain food intolerances or food allergies to cause a worsening of their psoriasis. However, people with psoriasis are overall less sensitive to contact allergens. Further, regular exercise might improve patients psoriasis symptoms. Finally, weight loss for obese psoriasis patients often have a beneficial effect on their psoriasis.

## Stress and strong emotions

Stress is known to be able to cause psoriasis for the first time or aggravate existing psoriasis, sometimes resulting in a psoriasis flare-up. The stress threshold causing an aggravation of psoriasis is individual. If psoriasis is aggravated by stress, relaxation and stress prevention often reduces psoriasis and limits future psoriasis flare-ups. Lack of sleep is also known to be able to provoke psoriasis, while sufficient sleep might be protective against developing psoriasis.

Unexpressed anger and emotional disorders, including depression and anxiety are also known to be able to trigger psoriasis. The facts are that 30-58% are diagnosed with depression and/or anxiety disorders

#### Infections

As psoriasis in a disease caused by a dysfunction in the immune system, anything that affects the immune system can provoque psoriasis. It is known, that bacterial streptococcus infection in the throat is associated with guttate psoriasis - a subform of psoriasis. Especially in children streptococcus can cause onset of guttate psoriasis. Further, disease factors are known, which can cause a flare-up. These include different kinds of respiratory and ear infections.

### Injury to skin

For up to 25 % of all psoriasis patients, new psoriasis rashes occur in places where the skin has suffered a 'skin-trauma' (the so called Koebner phenomenon). Skin traumas include any kind of irritation to the skin including scratching, sunburn or other disturbances. The following skin trauma can cause psoriasis: animal and insect bites, burns, scratching or abrasion of the skin, friction or pressure to the skin, poorly fitting shoes, shaving, Tattoos, allergic and irritant reactions, vaccinations etc. Psoriasis does not appear immediately after stimulation. Usually, it appears after 10 to 20 days, but have been observed from after 3 days to 2 years after stimulation. Trauma-induced psoriasis can occur in any anatomic location, but has been reported more frequently in scar tissue, during emotional stress and in the winter.

### Other possible triggers

Cold, dry weather is reported as a psoriasis trigger by many psoriasis patients. Sunny weather often relieves psoriasis damaged skin in most patients. Hormones might also play a role in causing psoriasis, as pregnancy often improves (or worsens) symptoms of psoriasis. Other factors considered to worsen psoriasis smoking and certain drugs: Among others, an association between psoriasis and beta-blockers, NSAIDs, antimalaria medication and certain drugs for depression and bipolar diseases (fluoxetin and litheum) have been found.

# Which consequences does it have for the patient in the period?

In general, psoriasis patients have lowered quality of life compared to the general population, with some studies reporting quality of life lowered to levels comparable with living with certain cancers. This is partly due to the physical symptoms of the disease, but further associated with a psychological burden of the disease. It is known, that psoriasis patients are less likely to engage in social events. Additionally, psoriasis patients often report shame and embarrassment due to the way their skin looks resulting in a lowered self esteem.

During a psoriasis flare-up, the previously mentioned implications of psoriasis is further enhanced. Pain, itch and skin inflammation is increased along with skin scaling which make it hard for psoriasis patients to engage in social events.

Physical symptoms of psoriasis (itch and pain) make it hard for psoriasis patients to sleep properly resulting in increased physiological stress during the day which might worsen the flare-up further. The enhanced urge to itch the skin together with the increased inflammation and redness results in skin cracking and an increased risk of skin infections, which further worsens the of psoriasis and further complicates the flare-up.