



EUROPEAN ACADEMY OF  
DERMATOLOGY AND VENEREOLOGY

# Information Leaflet for Patients

## **PSORIASIS AND COMORBIDITIES**

### **The aim of this leaflet**

*This leaflet is designed to help you understand more about the most common comorbidities of psoriasis as well as how to prevent them from occurring.*

# PSORIASIS AND COMORBIDITIES

## Comorbidities: what to do?

Initially, psoriasis was regarded as merely a skin disease. But recently, an ever-increasing body of evidence links other diseases to psoriasis, suggesting it's a systemic disease. In other words, the entire body is affected. Presumably, this is caused by the low yet constant presence of inflammation throughout the body. These linked diseases, also called comorbidities, usually aren't diagnosed or treated by a dermatologist, but require the care of another specialist. Ask your general practitioner or dermatologist to check up on your overall health regularly and to refer you to other specialists if needed. If required, ask to be referred to a specialist who your clinician is familiar with; this will facilitate communication between them and will benefit you as a patient.

Various comorbidities have been linked to psoriasis, but here we will only discuss the most common ones.

## What is psoriatic arthritis (or arthritis psoriatica)?

Around 25-30% of people with psoriasis will also develop inflamed joints. This is called *psoriatic arthritis* (abbreviation PsA), which is a special form of arthritis. Usually, one will initially develop skin symptoms, the typical psoriasis *plaques*, and afterwards inflamed joints, although the reverse occasionally happens as well (joint complaints followed by psoriatic skin lesions). Joint complaints include pain, swelling, and stiffness (usually in the morning). In the past, deformities occurred as well, but with currently available treatments, this only happens in very severe cases.

The main difference with classic *rheumatoid arthritis* is that the psoriatic form cannot be confirmed by blood tests. Usually, your description of clinical symptoms will form the main basis for a diagnosis, so that's why it is important to pay careful attention to your body. A thorough examination by a rheumatologist will be needed to confirm the diagnosis and initiate treatment.

There are various subtypes of *psoriatic arthritis*:

### **Poly-articular psoriatic arthritis**

(inflammation of many joints, usually more than 4 affected)

This subtype strongly resembles classic *rheumatoid arthritis*, where mainly the small joints of the hands, feet, wrists, and elbows are affected. Usually, the pattern is symmetrical (both sides of the body). Bigger joints may be affected as well, such as the shoulders, knees, and hips. The rheumatologist will distinguish between this subtype and rheumatoid arthritis by looking at your distal interphalangeal ("DIP") joints (between your second and third distal phalanges near the end of your finger); in rheumatoid arthritis these are NEVER affected.

### **Oligo-articular psoriatic arthritis**

(inflammation of fewer joints, typically maximum 4)

Here, the larger joints are attacked by your immune system (shoulders, knees, and hips). It is possible for the smaller joints to be affected as well, resembling the poly-articular subtype. Generally, the oligo-articular form is asymmetrical, or not affecting both sides of the body (e.g. one knee, one shoulder, and one elbow are affected).

The following subtypes are typically characterised:

### 1. *Dactylitis*

The so-called “sausage digit” (finger/toe). In this case, your entire finger/toe may be swollen and painful from swelling of the joints and tendon structures. This painful inflammation can be difficult to control. *Dactylitis* in itself represents a diagnosis for *psoriatic arthritis*.

### 2. *Enthesitis*

Inflammation of the *enthesis*, the sites where tendons and ligaments insert into the bone, is very typical of spondyloarthritis. The primary *entheses* involved is at the heel, particularly the Achilles tendon, although all *entheses* can be involved.

### 3. *Nail psoriasis*

This includes affected finger- and toenails, and is generally characterized by discolouration and loosening of the nail(s). It is usually associated with severe inflammation of the joints in people with *psoriatic arthritis*.

### 4. *Uveitis*

*Uveitis* is inflammation of the eye which can threaten your eyesight. Symptoms include blurred vision, floaters, sensitivity to light (*photophobia*), pain, and irritation or redness in the affected eye. It requires a specialized treatment by an ophthalmologist (in consultation with your rheumatologist).

### 5. *Spondylitis*

*Spondylitis* is inflammation of the vertebra that usually presents in people with Bechterew’s disease (*ankylosing spondylitis*) and is related to *psoriatic arthritis*. It is possible to exhibit similar symptoms when affected by *psoriatic arthritis*.

If you’re experiencing one of these symptoms, but you haven’t been diagnosed with arthritis yet, talk to your clinician about it. They can refer you to a rheumatologist for confirmation and diagnosis. Make sure to inform your rheumatologist about all other symptoms as well, such as your skin lesions; this will impact their treatment decision for you. Moreover, if possible, ask your dermatologist if they are already in close collaboration with a rheumatologist (or vice versa), to ensure that you’ll get the most optimal treatment(s) for both your arthritis and skin symptoms.

Some treatments for *psoriatic arthritis* simultaneously tackle the psoriatic skin *plaques*, but not all. Make sure to discuss your treatment(s) with both specialists.

Besides the joints, the low chronic inflammation may also affect other tissues in your body, such as the vascular system. This may lead to other comorbidities explained hereafter.

## Talk to your dermatologist if you experience:

- Chronic lower back pain
- Chronic joint complaints
- Swelling of joints or fingers/toes (take pictures to show your clinician if your appointment isn’t scheduled at the time of the symptoms)
- Disturbed night’s sleep due to pain
- Inexplicable (morning) stiffness.

## Disabled card

If you suffer from PsA and you experience daily impairment, ask your clinician if you are eligible for a disabled card.

# PSORIASIS AND COMORBIDITIES

## How is obesity (excessive fat) related to psoriasis?

People with psoriasis are at increased risk of being obese. For instance, the severity of psoriasis and obesity are correlated; the more severe your skin lesions, the higher the obesity, and vice versa. Generally, it was assumed that this was due to the low self-esteem of people with psoriasis, making maintaining a healthy weight more difficult (e.g. shame to exercise due to visible skin lesions). However, it doesn't seem to be the only explanation, as evidence suggests that obesity is associated with a low chronic inflammatory state. In essence, fat can stimulate the production of "attack" signals of our immune system (such as *TNF* and *interleukin-6*). Unfortunately, there isn't sufficient evidence that a diet or surgery to remove fat is directly correlated with treatment and psoriasis improvement. However, we do observe a trend that obese people require higher doses of anti-psoriasis medication, and that being obese in itself is a risk factor to developing psoriasis and other diseases (such as cardiovascular diseases).

## What is diabetes mellitus type II and how is it related to psoriasis?

Having psoriasis increases your risk of developing diabetes mellitus type II (also known as type 2 or adult-onset diabetes), but we can't explain why. It may be partially explained by the increased prevalence of obesity amongst people with psoriasis. However, further research is warranted to discover the association between type 2 diabetes and psoriasis. Type 2 diabetes is caused by the diminished activity of insulin, a hormone produced by your body to regulate the sugar levels in your bloodstream. This form of diabetes is often a result of obesity and lack of exercise, and can be partially prevented by maintaining a healthy lifestyle. The tricky part is that not all symptoms are easily recognized: it is possible to suffer from type 2 diabetes for years undiagnosed. Occasionally, genital

issues (male and female) and urinary infections may indicate the presence of type 2 diabetes. A healthy lifestyle is key to prevent the development of type 2 diabetes.

## How are cardiovascular diseases related to psoriasis?

Similarly to obesity and diabetes, people with psoriasis are at higher risk to develop arterial hypertension. This in itself increases the risk of having heart attacks and strokes (i.e. *myocardial* and *cerebral infarctions*), and vascular diseases in general. It seems that the chronic inflammatory state associated with psoriasis plays a significant role herein. On the other hand, obesity, diabetes, and high blood pressure (*arterial hypertension*) are risk factors for "metabolic syndrome," an encompassing collection of risk factors. It also includes a disturbed "fat" profile (cholesterol and triglycerides). If the latter are in imbalance, your risk for cardiovascular diseases increases significantly. A healthy lifestyle will help you to prevent many of these risk factors, but sometimes you may require timely treatment by medication. Therefore, it is important to have regular check-ups with your clinician to prevent and treat risk factors and comorbidities.

## How are malignancies (e.g. malignant tumours, cancer) related to psoriasis?

### 1. *Non-melanoma skin cancer (all skin cancers except melanomas)*

People with psoriasis who are treated with psoralen and PUVA have an increased risk of developing *non-melanoma skin cancer*. However, this is countered by strict monitoring from your dermatologist by keeping the number of sessions limited, and performing regular body checks for potential lesions.

### 2. *Lymphoma*

Psoriasis also increases the risk of developing *lymphomas* (malignant tumours of lymph nodes). It is still unclear whether this is due to the low chronic inflammation in your

## How can comorbidities be prevented?

Although we don't yet understand precisely how and why these comorbidities develop, it is essential to acknowledge the risk, especially for cardiovascular diseases.

Many aspects of your lifestyle may contribute to this risk, but can be reversed by changing your habits and living a healthy lifestyle. If needed, medication can help to prevent worsening (e.g. statins for high cholesterol).

Here are some valuable lifestyle tips to counter the development of comorbidities:

- Keep moving: try to get 30 minutes of exercise every day.
- Aim for a healthy balance between work, efforts, and relaxation to handle your stress.
- Aim for a healthy lifestyle, keeping your cholesterol and body weight in check. Involve a dietitian if necessary.
- Don't smoke, as this will not only improve your overall health but also your psoriasis.
- Perform yearly check-ups on cholesterol, diabetes, and cardiovascular diseases.

body due to psoriasis, or whether some anti-psoriasis therapies are suppressing your body's ability to halt the development of lymphomas. Despite the latter, the beneficial effects of anti-psoriasis therapies in the long run outweigh the potential risk of *lymphoma*.

### So what's next?

Although psoriasis is a chronic disease, it shouldn't chronically stop you from living your life. In fact, it should only be a small facet of who you are as a human being; it doesn't define you. It partially defines your health, and if left untreated, may

control your health as a whole, but this leaflet has shown you many ways to tackle it. Don't let it control you, your health or your life. Wear funny sunglasses, find new ways of exercising, connect with your doctor, talk about it to your neighbour who complains about going bald, check out the patient association in your area, have some 'me-time' when you're taking care of your skin, when taking care of you. Whatever you do, don't let it define you. Instead, define how you want to live with it.

Make everyday worth living, with or without psoriasis. ■