The dermatologist informs about

Psoriasis

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PSORIASIS

Psoriasis is a chronic disease. It is benign and not contagious. The cause of psoriasis is unknown.

Psoriasis is a chronic disease with an unknown cause. It is not contagious, but often occurs in certain families. In Denmark, around 2% of the population, i.e. 100,000 Danes, have psoriasis. The disease typically appears for the first time in young adulthood with red, thickened skin areas covered with white scales. Commonly, the knees and elbows are affected, but psoriasis can appear anywhere on the skin.

What causes psoriasis?

In psoriasis skin, the cells of the epidermis divide approximately 7 times faster than normal, but psoriasis has nothing to do with cancer. The rapid cell division is accompanied by a decreased cell maturation. This entails a heavy scale formation. The rapid cell division and insufficient cell maturation is caused by signal substances released from white blood cells (lymphocytes). The activation of lymphocytes is probably essential for the development of psoriasis.

What aggravates psoriasis?

Psoriasis can occur on areas of skin that is damaged by scratching, rubbing or severe sunburns. Similarly, certain infections, particularly streptococcal throat infection, can cause a new outbreak or aggravate an existing outbreak. Stress and alcohol consumption are also common aggravating factors. Certain medications such as lithium, beta blockers and anti-malarial drugs can sometimes induce an aggravation.
The disease is also influenced by climate. It is common for the disease to worsen during winter and improve during summer.

Different types of Psoriasis

Psoriasis appears as thickened, red, scaly areas of skin.

Nails and joints can be attacked.

Psoriasis appears in a variety of forms. The most common form appears with red, thickened areas that are covered with thick, white scales. These areas are well-demarcated in relation to the normal skin, but the affected areas can flow together. All skin areas can be attacked, but many patients experience affection of knees and elbows. It is common for both right and left side to be attacked at the same time. The disease is also commonly apparent in the scalp area

causing annoying dandruff formation. For some, especially overweight, patients, the disease can occur in the skin folds. The heavy scale formation is rarely seen in the skin folds.
When the nails are attacked, it manifests itself with small indentations in the nail plate (called 'pittings') or partial loosening of the nail. This loosening causes a yellow discolouration. In the most severe cases, the nail plate thickens or crumbles.
Especially with young people, a certain form of psoriasis can occur following a throat infection. This form appears with large drop-shaped, red bumps which can attack large areas of the skin. It is common for such acute outbreaks to disappear after a few weeks.
In addition to these common forms of psoriasis, a rare pustular psoriasis also exists. It is characterised with red skin areas dotted with yellow pus-filled blisters. This form of psoriasis is not contagious either.
About 20% of patients with psoriasis suffer from a special form of psoriatic arthritis. Psoriatic arthritis can usually be diagnosed by examining its distribution in the joints and on the x-rays changes.

How is it diagnosed?
A doctor can usually diagnose psoriasis by examining the skin. In case of doubt, a skin sample is taken which is then examined under a microscope. The diagnosis cannot be made based on a blood sample.

How is the disease treated?
Psoriasis cannot be cured. Topical treatment, systemic treatment (tablet or injections) and phototherapy can be used to keep the psoriasis at rest.
Since the disease has many different degrees of severity, treatment of psoriasis is carried out according to the individual patient's needs. In addition, the disease sometimes varies to such an extent that each individual patient may need to be given different treatments at different times.
There is no treatment able to cure the disease. The purpose of the treatment is therefore to make current outbreaks disappear.
A distinction is made between topical treatment, phototherapy, tablet treatment and biological treatment.
In addition, these treatments can be given in different combinations. In most cases, the treatment is carried out at home, while there is rarely a need for hospitalisation.

Steroids (adrenocortical hormone preparations)
Steroids come in various strengths both as an ointment, cream, gel and solution. The strong preparations have a rapid effect; but they also have side effects including thin skin, enlarged blood vessels and tendency of superficial skin hematomas after prolonged use.
By following the doctor's treatment instructions, side effects can most often be avoided. The side effects are most often visible in the face and on skin folds. Be aware that a sudden cessation, especially with the strong preparations, may cause a transient aggravation of the disease.

Combination of vitamin D and steroids

An ointment containing both a steroid and calcipotriol (Daivobet®) is more effective than each drug alone. Treatment with this kind of combination is suitable for many patients.

Tar

Tar is one of the oldest known preparations used for treating psoriasis. Tar smells and discolours, and it can increase the skin's sensitivity to sunlight, but the tar treatment is without major side effects.

It is a well-known fact that tar in certain contexts can be carcinogenic, but numerous studies have shown that tar treatment of psoriasis patients do not result in an increased risk of developing skin cancer.

Tar can be used in both ointments and pastes, but pure tar can also be smeared on the skin. This treatment can be combined with a hot shower. Tar baths are especially used during hospitalisation at a dermatology department.

Phototherapy

Different types of ultraviolet light, sometimes in combination with tablets (PUVA), can improve psoriasis.

The ultraviolet rays in sunlight can improve psoriasis. The same ultraviolet rays can be formed in fluorescent tubes of different types. Some tubes produce ultraviolet light of type B (UVB). This kind of ultraviolet light improves psoriasis after approx. 30 treatments given 2-3 times weekly. During the treatment period, the amount of light is gradually increased in order to accustom the skin to the ultraviolet rays. UVB treatment can be given by practising dermatologists and at dermatology departments.

PUVA is another kind of phototherapy. P stands for psoralen which is a substance that increases the skin's sensitivity to ultraviolet light. UVA stands for ultraviolet light of type A. When receiving PUVA treatment, the patient should take psoralen tablets prior to UVA irradiation. Psoralen accumulates in the lens of the eye. In order to avoid eye side effects, sunglasses must be worn when staying outdoors in the sunshine on the day of treatment. Tanning solariums emit almost pure UVA radiation. The effect of solarium treatment on psoriasis is limited.

Prolonged, intense exposure to ultraviolet light can increase the risk of premature aging of the skin and the development of skin cancer. With the knowledge we have today, it seems, however, that the use of ultraviolet light as treatment only increases the risk of skin cancer on a very low level. The types of skin cancer that can occur are slow growing and can be cured.

Tablet treatment

Tablet treatment with methotrexate, acitretin (Neotigason®) or ciclosporin (Sandimmun®) is used to treat severe psoriasis.

Tablet treatment is used in rare cases and only for psoriasis patients for whom other treatments have not had an effect.

Acitretin is related to vitamin A. Acitretin can result in a significant improvement, but this improvement is often accompanied with side effects, especially in terms of dryness and flaking of the mucous membranes; just as there can be seen an impact on the liver function and an increase of the content of certain fats in the blood. It is therefore important to arrange regular consultations with the doctor during an acitretin treatment. Acitretin is teratogenetic and is

slowly excreted from the organism. It is thus important that women are protected against pregnancy during and following treatment.
Methotrexate is a so-called cell poison. With psoriasis, methotrexate is given in such small quantities that only the immune system is affected. Methotrexate is one of the most effective means for treatment of psoriasis. When initiating a methotrexate treatment, blood samples must be taken once a week. Later on, monthly blood samples will be sufficient.
Ciclosporin affects the immune system of the organism, and it therefore has a very good effect on even severe psoriasis outbreaks. However, treatment with ciclosporin can increase blood pressure and decrease the renal function. Therefore, ciclosporin is not suitable for long-term treatment.

Biological treatment
Biological drugs are proteins, usually antibodies, specifically designed to affect the activation of the immune system in the skin. Compared to traditional treatment, biological therapy can have similar or even fewer side effects.
The treatment is expensive. So far, ustekinumab (Stelara®), etanercept (Enbrel®), adalimumab (Humira®) and infliximab (Remicade®) are approved for treatment of severe psoriasis which cannot be satisfactorily treated in any other way. The biological substances are given as an injection either in a vein (at the hospital) or beneath the skin (by the patient him/herself).

Climate therapy
Climate therapy can sometimes be chosen over hospitalisation. Climate therapy lasts 4 weeks and is commonly carried out at the Dead Sea in Israel. The most important part of the treatment is the sunbeams which especially in this geographic area contain many UVA rays. In addition, the patients bathe in the Dead Sea which has a very high salt content.
Climate therapy often results in total improvement of the skin; however, as with the other treatments, psoriasis will reappear at one time or another.

Experimental treatment
Extensive research is being conducted in the field of psoriasis, and new treatments are being tested.
However, the road from the first testing of a new product to its availability at the pharmacy is long.