Information sheet for patients affected by PEMPHIGUS

These information sheets were written in collaboration with the Reference Centre for Autoimmune Bullous Diseases and the Pemphigus-Pemphigoïde France patient association.

Dear Sir or Madam,

This sheet is intended to provide you with information on **pemphigus**. It is not a substitute for a medical consultation.

Its purpose is to promote dialogue with your doctor. Feel free to ask him or her to specify any points that do not seem sufficiently clear to you and to ask for additional information on your particular case.

Indeed, some of the information contained in this sheet may not be adapted to your case: it is important to remember that each patient is different. Only your doctor can give individualised and adapted information.

The disease

What is pemphigus?

Pemphigus is a rare group of bullous diseases of the skin and mucous membranes of autoimmune origin, which means that the body, following a disruption of the immune system*, produces antibodies (autoantibodies) against its own skin and/or mucous membranes.

It is characterised by the appearance of painful blisters and superficial wounds (erosions) on the skin and/or mucous membranes (mouth, nostrils, throat, eyes, esophagus, genital mucosa, anus). Not all skin and mucous membranes are necessarily affected.

*Immune system: the set of defences of an organism (including white blood cells and antibodies) that normally allows it to recognise what belongs to its body and to defend itself against what is foreign to it (microbes for example). In this disease, it is mistaken and removes by mistake the skin and/or mucous membranes.

Is the disease serious?

It is sometimes a serious disease that requires treatment for several years.

What is it caused by?

The triggering factor(s) of this disease in a given individual at a given time are not known. It may be caused by a highly stressful event. Exceptionally, the disease may be caused by certain specific drugs. Most often there is no cause.

Who can be affected?

Pemphigus affects people of all ages, ethnic backgrounds and genders. Nevertheless, people between 50 and 60 years of age and populations living around the Mediterranean are more often affected. There is no difference between men and women.

How many people have the disease?

Pemphigus is a very rare disease whose incidence (number of new cases per year) is about 60 to 200 cases per year in France, or 1 to 2 people per million inhabitants.

Are there different kinds of pemphigus?

Yes, there are three forms of pemphigus:

1- PEMPHIGUS VULGARIS (OR COMMON PEMPHIGUS)

The term "vulgaris" means "common". Pemphigus vulgaris is the most common form of pemphigus in Europe. It can affect either the mucous membranes (the most frequent) or the skin and mucous membranes, rarely the skin in isolation. It manifests itself by blisters that are pierced almost immediately after their appearance and leave superficial wounds (erosions) often painful. The face, scalp and chest are often affected. All the mucous membranes mentioned above (mouth, nostrils, throat, eyes, esophagus, genital mucosa, anus) can be affected, but it is the mouth that is most frequently affected.

2- PEMPHIGUS FOLIACEOUS (OR PEMPHIGUS SUPERFICIALIS)

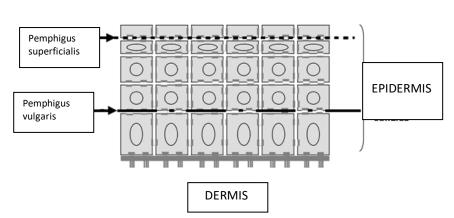
In the case of pemphigus superficialis, there is no damage to the mucous membranes, only the skin is affected. Crusty wounds or fragile blisters usually appear on the face and scalp, on the chest, back, arms and legs.

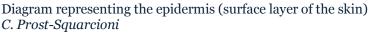
3- PARANEOPLASTIC PEMPHIGUS

Paraneoplastic pemphigus is the most serious form of pemphigus, but it is extremely rare. It most often occurs in people who have already been diagnosed with a malignant tumour (cancer); otherwise the diagnosis of the disease will lead doctors to look for a previously undetected tumour. The skin and mucous membranes can be affected but also, unlike other forms of pemphigus, the lungs.

How do we explain the symptoms?

Symptoms, i. e. blisters, are the result of a disruption of the immune system. The body produces abnormal antibodies (or auto-antibodies) that alter desmosomes: skin proteins whose function is to weld skin cells together. Thus, these cells will detach from each other, causing bubbles to form (see diagram below).





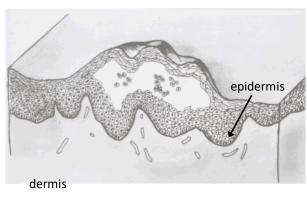


Diagram representing a blister. *C. Prost-Squarcioni*

Is it contagious?

No, this disease is not contagious.

Is it hereditary?

Pemphigus is not an inherited disease, although there is a genetic predisposition to develop the disease. Some genes transmit a terrain that predisposes to the development of pemphigus; but even in people with this gene, the risk of triggering the disease remains extremely low.

Family forms are therefore extremely rare and there is no reason to worry family members about this. No genetic testing is required.

How is it diagnosed?

The dermatologist examines the appearance, number and location of blisters and small wounds left by bubbles (erosions). This is the clinical analysis.

Under local anaesthesia, (s)he takes two samples of small skin fragments (biopsies). These analyses will allow us to see:

- at what depth the detachment is located and blisters are formed. This is the histological analysis.
- autoantibodies that attack the junction membrane (basement membrane) between the epidermis and dermis. This is the direct immunofluorescence analysis.

A blood test may be performed to determine the type and amount of autoantibodies. This is the biological analysis (most often using ELISAs).

How does it evolve?

Pemphigus evolves over time by successive outbreaks. It can be severe if left untreated.

As the blisters disappear, they sometimes leave coloured (pigmented) spots but they do not leave scars.

With the treatment given at the beginning (attack treatment), blisters and erosions cease to appear in 15 days to 1 month on average. The disease is said to be "controlled" and treatment is gradually reduced, becoming milder. This lighter treatment (maintenance treatment) is necessary for several years to prevent relapses.

Before diagnosis, and in the interval between the initiation of treatment and the control of the disease, hospitalisation is sometimes necessary. Indeed, lesions can be widespread, infected or responsible for severe skin and mucous membrane pain requiring specific local treatment and care and feeding can be made difficult by lesions in the mouth and throat.

When the disease is controlled, follow-up treatment is done during a medical consultation and/or in day hospital.

Treatment, care, follow-up

Is there a treatment for this disease?

The treatment of pemphigus is very effective.

It generally takes place in two phases:

- Initial treatment (attack treatment) usually involving high doses of medication to stop the progression of the disease and achieve healing of the lesions.
- Disease maintenance treatment to maintain remission (no relapse), usually continued for several years.

Attack treatment is based on systemic corticosteroid therapy alone or in combination with an immunosuppressive drug (which blocks the production of autoantibodies), most often rituximab (Mabthera®, Rixathon®), more rarely mycophenolate mofetil (CellCept® and its generics) or azathioprine (Imurel®). This treatment is then reduced very gradually to avoid relapses.

Local treatments with corticosteroids in cream or mouthwash can be very useful to accelerate the healing of lesions and improve comfort.

In case of pain, analgesic (pain relief) treatments should be used.

Discontinuation of maintenance treatment should be discussed on a caseby-case basis and should only be done in consultation with the dermatologist. Any unprepared or too early discontinuation of treatment usually results in a relapse of the disease requiring resumption of treatment.

Is psychological support desirable?

Psychological support may sometimes be considered, at the beginning of the disease and in its severe forms, when there is a strong impact on the patient's quality of life.

Can this disease be prevented?

The onset of the disease cannot be prevented.

Living with pemphigus

In general, when the disease is controlled through treatment, the patient's daily life is virtually unchanged outside the constraints of treatment and possible side effects.

No treatment is contraindicated but it is advisable to check for possible interference with corticosteroids and/or immunosuppressants.

A detailed fact sheet with tips for the daily life of patients with bullous disease (skin hygiene, clothing, nutrition, sun protection, physical activity etc.) is available on the website of the National Reference Centre for Autoimmune Bullous Diseases http://www.chu-rouen.fr/crnmba.

Where can you be treated?

In a dermatology department located in a hospital centre.

In France, there is a reference centre and several competence centres for the management of autoimmune bullous diseases (contact details on the website of the national reference centre for autoimmune bullous diseases http://www.chu-rouen.fr/crnmba).

Since several mucous membranes can be affected, multidisciplinary followup (= by several specialists) is often useful: dermatologist, ophthalmologist, ENT specialist, stomatologist etc. as well as thegeneral practitioner.

Cortisone can give unwanted effects, so watch for blood pressure, bones, diabetes, etc.

Dieticians and	physiotherapists	s can also pro	ovide assistance	if necessary.

To know more

Where can I get more information?

How to connect with other patients with the same disease?

There is a French patient association "Association Pemphigus Pemphigoïde France" created by patients and their families in March 2005.

URL: http://www.pemphigus.asso.fr Contact Numbers for questions and information requests: *Hélène Facy (Paris area): +33 (0)687 114 026

* Bernadette Dejean (Western and Southern regions): +33 (0)683 395 320 *Jenny Vernet (Eastern and Northern regions): +33 (0)634 686 874 57 Telephone number of the association's headquarters: +33 (0)143 252 5 42 88

There are also websites dedicated to all rare diseases:

http://www.orpha.net

http://www.maladiesraresinfo.org (01.56.53.53.81.36. non surcharged call)

This website provides answers to any questions that you may have during corticosteroid treatment:

http://www.cortisone-info.fr