Waldenström's Disease

Your doctor has just diagnosed that you have "Waldenström's disease".
Waldenström is the name of the Swedish doctor who first identified this illness in 1944.
It is a disease of the bone marrow, "moelle osseuse", the tissues contained in the bone where all blood cells are produced (not to be confused with the spinal cord, "moelle épinière", which is part of the nervous system).
Waldenström's disease affects a type of cells produced in the bone marrow, called B lymphocytes. These cells form part of the white cells.

Waldenström's disease is linked to overproduction of lymphoid cells (B lymphocytes) in the bone marrow, and more rarely in ganglions and the spleen. In parallel, these abnormal lymphocytes all produce the same antibody, called immunoglobulin M (IgM). Produced in very large quantities, this IgM circulates in the blood.

The consequences of this disease may be of several kinds:

- The presence of a large number of abnormal lymphocytes in the bone marrow hinders its proper functioning. Production of blood cells (red and white cells and platelets) may be impaired, which can lead particularly to anaemia, typically giving rise to fatigue, skin pallor, breathlessness and palpitations.
- The excess of the immunoglobulin being produced may cause various disorders:
  - An attack on the so-called peripheral nerves (those in the limbs) which typically gives rise to pins and needles in the hands and feet, a lessening of sensitivity of touch and on occasion's pain and cramp.
  - A rather unusual anaemia that is triggered by cold.
  - Un "thickening" of the blood which leads to the circulation in small blood vessels being less efficient, in particular in the brain and in the eye. This can cause headaches, vertigo and tinnitus (whistling in the ears) and small haemorrhages in the retina.

All these symptoms and disorders are not present as a matter of course. So when the disease is discovered, half the people concerned do not present any signs of it (they are "asymptomatic") and they do not feel any effect of the disease.

Doctor's notes :

Waldenström's disease is rather rare, as there are only 3 to 5 new cases each year per million inhabitants, that's 180 to 300 cases in France.
This disease occurs more often in men than in women. The average age of diagnosis at present is 63.

The origin of the disease remains unknown. It is neither contagious nor hereditary. There are however forms of the disease that run in families.

Diagnosis

The diagnosis of Waldenström's disease is initially based on blood tests.

Sometimes it is just a rise in the speed of sedimentation of the blood, noted in a blood test as part of a general check-up, or the existence of anaemia that lead to testing for the disease. It is necessary to carry out a protein electrophoresis from a blood sample. This test enables the proteins present in the blood to be analysed, including the antibodies. The presence of a large quantity of IgM produced by the abnormal lymphocytes entails a "peak" which leads on to the examination of the bone marrow. This examination, called a myelogram, enables the diagnosis to be confirmed. Carried out under local anaesthetic it consists of inserting a hollow needle into a bone. Generally the sternum is used for this (the flat bone in the middle of the chest) or the projecting part of the hip. A small quantity of marrow is sucked up, and this enables the diseased cells (the increase in lymphocytes and plasma cells) to be analysed through various tests.

Certain treatments may lead to sterility, especially where men are concerned. So sperm conservation is offered after the diagnosis.

Why treatment is not systematically offered following diagnosis?

When it is asymptomatic, Waldenström's disease does not require treatment. In fact there is no treatment available at present that will cure this disease; but it may remain stable and asymptomatic for years. The medicines currently available have a positive effect on the symptoms and bring about a therapeutic response, i.e. more or less prolonged disappearance of the activity of the disease.

To treat a person who shows no signs of the disease involves the disadvantage of subjecting them to the side-effects of the medicines. Because of this, therapeutic abstention is the best option at present.

Any treatment is likely to produce unwanted side-effects and may present risks. Your doctor will inform you and will tell you which signs to look out for before you start the treatment suggested for you.

Participating in a clinical trial

The best way to contribute to the improvement of disease management is to treat patients in the context of clinical trial. If your doctor suggests this could apply to you, he will explain its purpose, protocol, expected benefits, potential risks and will give you an information leaflet.

Participating in a trial of course means you will first have to give your written informed consent.

Useful contacts:

- **Secretarial / appointment:**
- **Nursing consultation:**
- **Consulting psychologist:**
- **Social worker:**
- **In an emergency:**

Starting the treatment

Two criteria determine how people with Waldenstrôm's disease will be dealt with:

- When the disease is asymptomatic. The patient doesn't feel and doesn't present any apparent signs of the disease; it is just that the "peak" of excess IgM produced by abnormal lymphocytes can be observed in the blood. At this stage, no treatment is necessary (see box opposite). On the other hand regular medical monitoring is indispensable. As a general rule a visit to a haematologist is recommended every six months. At each appointment, a blood test is carried out to measure the quantity of IgM and see if it has increased. Waldenström's disease never develops rapidly or agressively. A six monthly check is therefore completely appropriate.
- When the disease is symptomatic. The patient presents signs that the disease has developed, in particular anaemia or clinical signs linked to the presence of IgM. Whether these symptoms are discovered at the time of diagnosis or several years later, treatment then becomes necessary.

Treatment

Treatment of Waldenström's disease is based on the administration of a course of chemotherapy or one of immunotherapy. Sometimes these two types of treatment are carried out in tandem.

Chemotherapy is based on the use of medicines that attack the diseased cells, either by destroying them or by blocking their growth.

Immunotherapy consists of administering antibodies (called monoclonal antibodies) specifically aimed at the diseased cells. These medicines imitate natural antibodies and bring about the death of the cells they are targeting.

Depending on the chosen treatment, the medicine or medicines are injected intravenously or taken orally. The length of treatment varies from six to twelve months. The latest treatments bring about a therapeutic response in the great majority of cases: the symptoms disappear, the rate of monoclonal IgM tangibly lowers and the disease develops no further. The length of the period of remission varies from one person to the next. It can last for several years.

Throughout the period of the therapeutic response, medical follow-up is the same as that for people who have the disease without showing symptoms, with an appointment with the specialist every six months.

In case of relapse, a fresh treatment is undertaken to obtain a new response. Even if current treatments do not enable the disease to be cured, it is thus possible to keep it under control for a long period.