Acromegaly

Acromegaly is a rare hormonal disorder that brings many complications to its bearers. With certain attention and clinical experience patients with acromegaly may be recognized on first sight and that is the reason why we should know more about this condition.

Acromegaly is related to function of the pituitary gland. The pituitary gland or pituitary tissue located on basis of the brain and produces many hormones. For this moment it is important to know that it secretes the so called growth hormone. Growth hormone has complex effects, it influences growth of the organism since childhood. It is the growth hormone to which we owe for our height.

If the growth hormone production increases by a child a condition called gigantism emerges. An individual afflicted with gigantism looks symmetrical and has "only" greater height than average population. Acromegaly is similar condition but in this case growth hormone overproduction starts by an adult.

Causes

The most common cause is a benign tumor of the pituitary gland whose cells start to produce surplus of the growth hormone and secrete it into blood.

Symptoms

The manifestation of the disease is slow and gradual. The long-term effect of growth hormone orders our cells to grow and multiply. In adult human excessive exposure to growth hormone leads to asymmetric enlargement of peripheral parts of the body, particularly the hands, feet, genitals and parts of their face. The patient's first problem may be the need to buy a new pair of shoes because his feet are bigger. The face becomes enlarged, so does the tongue and jaws. In enlarged jaws gaps appear between the teeth and risk of caries increases as well. Heart may also be affected; it swells and ceases to perform its proper function as a blood pump – cardiac failure may slowly develop. Patients tend to be obese and often have elevated blood sugar.

There is a significant risk of occurrence of numerous benign tumors in the colon. These tumors can later change into the colorectal carcinoma.

Diagnosis

The doctor may presume diagnosis of acromegaly from clinical signs mentioned above. The suspicion can be confirmed by serologically diagnosed elevation of growth hormone. It is always necessary to examine the brain (pituitary gland) by imaging techniques such as computed tomography or magnetic resonance imaging to exclude presence of a brain tumor.

Treatment

The therapy is pharmacological; we use some drugs with opposite effects than growth hormone or more modern substances that directly block its effect. If a tumor is found in the pituitary gland, it is often necessary to remove it. This can be done either surgically or by targeted irradiation by using the so called Leksell gamma knife.

The patient should have regular colonoscopy examinations with removal of all benign polyps.