In hypertension and heart failure:

Keep an eye on magnesium levels

Individuals with cardiac insufficiency (heart failure) and high blood pressure should make sure they are getting enough magnesium. This has been suggested in recent publications by scientists working with Professor Klaus Kisters. In an own experiment performed at St. Anna Hospital in Herne, Kisters observed that patients with advanced heart failure (NYHA III-IV) and high blood pressure can benefit from supplementary treatment with magnesium orotate.

In all 11 patients who, in addition to their usual medication, were given approximately 300 mg of magnesium as magnesium orotate daily, Professor Kisters reported positive effects on blood pressure, cardiac arrhythmia and NT-proBNP levels (N-terminal-pro brain natriuretic peptide). The NT-proBNP value is a key marker of heart failure and is used for diagnostic purposes and to assess patient prognosis and the success of a course of treatment. In the patients receiving magnesium orotate, NT-proBNP had already fallen to a statistically significant value after just one week (p< 0.01). No side effects were observed and kidney function remained stable.

In magnesium orotate, the mineral is bound to the vitamin-like substance orotic acid. As a physiological precursor in the pyrimidine metabolism, orotic acid influences the cellular energy metabolism, such as ATP synthesis and intracellular magnesium fixation.

The fact that the supplementary administration of magnesium orotate can be of benefit, even in patients with severe heart failure who are already under optimum cardiac therapy, was also proven by the MACH study, published in 2009. In this double-blind, randomised and placebo-controlled trial involving 79 patients with heart failure, the use of magnesium orotate as a co-therapy significantly improved both quality of life and life expectancy.

The blood pressure lowering, heart rhythm stabilising and cardioprotective action of magnesium has also been verified in many trials. Prof. Kisters therefore advises: "In patients with high blood pressure and heart disease, optimum magnesium levels are extremely important. It is imperative that a deficiency is corrected quickly, to prevent further organ damage and any worsening of the disease." This applies in particular to patients who also have diabetes, Kisters emphasised.
Sources:


