

ADHS – Therapy with Magnesium

By Prof. Hans-Georg Classen

Since the 1930s it has been known that individuals who are still growing are particularly sensitive to magnesium (Mg) deficiency, reacting - inter alia - with developmental disturbances, over excitability, a tendency to develop convulsions and increased stress sensitivity; this can result in a vicious circle, in which stress increases the loss of magnesium and therefore exacerbates the deficiency, as has been shown by extensive studies carried out, among others, by Prof. Dr. Classen of the University of Hohenheim. In this context it is striking that even a Mg deficiency in the mother during pregnancy reduces the stress resistance of the offspring, as was shown by the working group under Prof. Fehlinger, Charité Berlin, in 1982 (Mg Bulletin 1982; 4:182-8). - If on the other hand the stress is reduced, the Mg losses also diminish and the balance is improved, as well as after a sufficient increase in Mg intake. Indeed, Schmidt et al. (Psychiatry Res. 1994; 54:199-210) observed in hyperactive boys after three weeks of treatment with the stimulants dextroamphetamine or methylphenidate (n=14/group) not only an improvement in the symptoms, but also normalisation of the initially reduced plasma Mg!

Against this background, the study results obtained by the working group under M. Mousain-Bosc (University of Nimes/France) are of particular interest (Magnes Res. 2006; 19:46-52): in comparison to healthy controls, 40 children with ADHD (Attention Deficit Hyperactivity Disorder) had intracellular magnesium symbol levels that were initially reduced. After eight weeks of supplementation with magnesium plus vitamin B6 (6 mg/kg/day and 0.6 mg/kg/day) the clinical symptoms also improved at the same time, with normalisation of the Mg status. If the supplementation was interrupted, the Mg levels fell back again and the symptoms returned within a few weeks. Against this background the use of magnesium in ADHD appears to be indicated, either alone or in combination with or as a replacement for Ritalin^R.