ORIGINAL ARTICLE

The Effect of Peat Components on Endocrine and Immunological Parameters and on Trace Elements — Results of Two Pilot Studies

ANDRÉ-M. BEER¹, STEFAN FEY¹, STEFAN WALCH², KAI LÜTHGENS³, THOMAS OSTERMANN⁴, JULIAN LUKANOV⁵

¹Department of Natural Cure, Blankenau Hospital, Hastingen, Germany
²Department of Clinical Chemistry, Laboratory Group, Heidelberg, Germany
³Department of Endocrinology and Oncology, Laboratory Prof. Enders & Partner, Stuttgart, Germany
⁴Chair of Medical Theory, University of Witten/Herdecke, Germany
⁵Department of Biophysics, Med. University, Plovdiv, Bulgaria

SUMMARY

Peat and different peat preparations are successfully used in clinical therapies for different indications (as, for instance, in the field of gynecology). New studies show the biochemical effects of peat components which they have aside from their physical-thermal effects. This is of extraordinary interest with regard to the medical use of peat, because considerable concentrations of trace elements and heavy metals have been found in different kinds of peat. By means of atomic spectrometry it was investigated in 17 female patients with irritable bladder whether and how variations of the concentration of special trace elements and heavy metals (lead, cadmium, copper, manganese) could be measured within 24-hour urine after vaginal peat-mush treatments had been applied serially. Additionally, the effect of peat-mush baths compared to the effect of water baths (n=6) — both of which were applied to 17 female patients with degenerative diseases — was examined with regard to their special endocrinological parameters. The results concerning safety did not show any changes of the concentration of the trace-elements or heavy metals within the 24-hour urine. These results can be explained by the chelating features of the peat components, which are the reason for the absorption of the trace elements. Examinations done to compare the effects of peat-mush baths and water baths have shown that peat components — independent from their thermal effects — are the reason for the occurrence of special effects. This applies in particular to the parameter soluble interleukin-2-receptor. As regards estradiol, a significant increase could be measured after peat-mush baths had been applied to 17 postmenopausal female patients (n=11). Comparing these results with those of the group of patients treated with water baths, we noticed that the increase of estradiol was remarkably lower and not significant. The effect of the peat components is thought to be the reason for this. (Clin. Lab. 2001;47:161-167)