

*Original Article · Originalarbeit*

## **Änderung der Nierendurchblutung durch organassoziierte Reflexzonen­therapie am Fuss gemessen mit farbkodierter Doppler-Sonographie**

I. Sudmeier<sup>a</sup>, G. Bodner<sup>b</sup>, I. Egger<sup>c</sup>, E. Mur<sup>a</sup>, H. Ulmer<sup>d</sup>, M. Herold<sup>a</sup>

<sup>a</sup>Universitätsklinik für Innere Medizin,

<sup>b</sup>Universitätsklinik für Radiodiagnostik,

<sup>c</sup>Universitätsklinik für Neurologie

<sup>d</sup>Institut für Biostatistik und Dokumentation, Innsbruck, Austria

Address of Corresponding Author

*Forschende Komplementärmedizin* 1999;6:129-134 (DOI: 10.1159/000021238)

Using colour Doppler sonography blood flow changes of the right kidney during foot reflexology were determined in a placebo-controlled, double-blind, randomised study. 32 healthy young adults (17 women, 15 men) were randomly assigned to the verum or placebo group. The verum group received foot reflexology at zones corresponding to the right kidney, the placebo group was treated on other foot zones. Before, during and after foot reflexology the blood flow of three vessels of the right kidney was measured using colour Doppler sonography. Systolic peak velocity and end diastolic peak velocity were measured in cm/s, and the resistive index, a parameter of the vascular resistance, was calculated. The resistive index in the verum group showed a highly significant decrease ( $p \leq 0.001$ ) during and an increase ( $p = 0.001$ ) after foot reflexology. There was no difference between men and women and no difference between smokers and non-smokers. Verum and placebo group significantly differed concerning alterations of the resistive index both between the measuring points before versus during foot reflexology ( $p = 0.002$ ) and those during versus after foot reflexology ( $p = 0.031$ ). The significant decrease of the resistive index during foot reflexology in the verum group indicates a decrease of flow resistance in renal vessels and an increase of renal blood flow. These findings support the hypothesis that organ-associated foot reflexology is effective in changing renal blood flow during therapy.