

## Manual needle acupuncture vs. laserneedle acupuncture- a scientific comparison

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Using the recently developed non-invasive laserneedles<sup>1</sup>, clinical and physiological acupuncture studies can be performed under double-blind conditions in full accordance with the standards of the evidence-based western medicine. Under equivalent stimulation conditions we have studied systematically the alterations of physiological parameters in the brain using manual needle acupuncture and laserneedle acupuncture as well. We present the results of these studies, which demonstrate, that manual needle acupuncture and non-invasive laserneedle acupuncture generate comparable cerebral and peripheral effects. As a consequence, we show that laserneedle stimulation can be used for a general scientific objectivization of the medical effects of acupuncture.

<sup>1</sup> Gerhard Litscher and Detlef Schikora  
*Laserneedle- Acupuncture: Science and Practice*  
Pabst Science Publishers, Lengerich, 2005

## Treatment of the cellular causes of osteoarthritis and osteonecrosis- a new medical lasertherapy

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The interaction of photons with human tissue generates different effects in cellular structures. These effects allow to develop new and medication-free therapeutic strategies for the treatment of some important western endemic diseases. In the talk I will demonstrate the development of a new lasertherapy for the treatment of primary osteoarthritis, aseptic osteonecrosis and rheumatoid arthritis. This therapy influences directly the complex cellular causes of osteoarthritis and osteonecrosis and therefore generates stable regeneration effects in osteoarthritic joints and osteonecrotic bones. Based on in-vitro studies of human osteoblast- and chondrocyte- cell cultures, it will be demonstrated that the cell metabolism can be increased of about 900 %. Due to the strongly increased cell metabolism, the chondrocyte cells produce more collagen, hyaluronacid and proteoglycans and therefore the disturbed balance between cartilage generation processes and cartilage reduction processes can be shifted to the cartilage production side. Some clinical studies and casuistics are presented, which show that the new lasertherapy has the potential to stop the progression of osteoarthritic and osteonecrotic processes and to regenerate bone- and cartilage tissue.

Curriculum vitae Prof. Dr.sc.nat. Detlef Schikora



present status:

Head of the Biophotonics Group at the Faculty of Science, University of Paderborn, Germany

born 24.11.1948 in Eilsleben, Germany, married, two daughters

134 scientific original publications

Co-author of the book „Laserneedle-Acupuncture: Science and Practice”, Pabst Science Publishers, Lengerich, 2004

1. International Research Award 2004 of the Medical Acupuncture Research Foundation (MARF) and the American Association of Medical Acupuncture (AAMA) of the United States of America

Inventor of “laserneedles” for medical applications in 1998