German Research Network on Neuropathic Pain (DFNS)

Pathophysiology, Prevention and Therapy
Speakers: R. Baron and T.R. Tölle

General Research Concept

Classification of neuropathic pain has been based on disease entities, anatomical localization and histological observations. Treatment algorithms have been almost entirely empirical and disease-oriented. In the past decade, studies in animals and humans have shown that neuropathic pain is probably not a result of a single pathophysiological mechanism, but the end product of an altered peripheral, spinal and supraspinal processing. Since sensory symptoms and special pain types are closely related to the underlying mechanisms, clinical assessment of the symptoms can give a clue of the distinct mechanisms that operate in one individual patient.

The central Integrative Network Project of the DFNS is a Neuropathic Pain Data Bank. All network participants subserve the data bank with standardized information of each patient/volunteer regarding socio-economic, psycho-social and psychological data as well as results of Quantitative Sensory Testing (QST). Moreover, a blood sample bank has been initiated. All clinical data are centrally managed by a data management system for documentation and quality assurance in pain treatment (QUAST “Qualitätssicherung in der Schmerztherapie”).

Overall, the integration of research and service will improve the understanding of the pathophysiology and foster the development of new and the appropriate usage of established interventions for the treatment and the prevention of neuropathic pain. The ultimate goal is to prevent the development of chronic pain by an early intervention or to extinguish chronic pain by a thoughtful combination of multiple treatment options.

The QST-Battery

The DFNS-Team

The German Research Network on Neuropathic Pain (DFNS) includes the major institutions, authorities and medical disciplines engaged in therapy and research on neuropathic pain. Here some participants of the DFNS-Team with international guests: