Puncture template

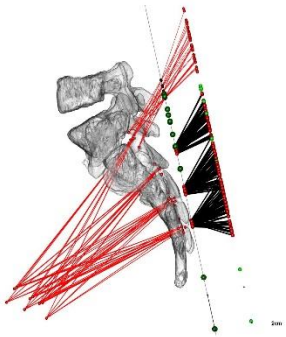
For guiding the electrodes with pinpoint accuracy for test stimulations within the scope of sacral neuromodulation

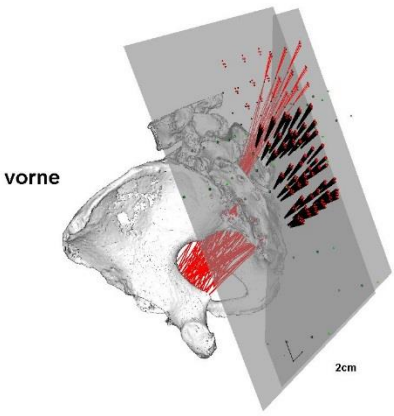
Technology

Sacral neurostimulation has decisively changed the therapy for faecal and urinary incontinence. This therapy is cost-effective in comparison with other surgical interventions despite the high implant costs because it is possible to predict the success of the therapy from a preceding test phase. For this test stimulation, the patient is punctured and a test electrode that is connected to an external stimulator is used to stimulate the patient at those points at which the expensive neurostimulator subsequently should be used. Only patients that respond positively to this stimulation are recommended for the minimally invasive intervention, and so the long-term success rate of this therapy currently lies at a remarkable 53% according to ITT analysis.
The success of the test stimulation depends primarily on the success of the puncture. To this end, the puncture template was developed as a puncture aid. Relevant puncture lines are projected into this three-dimensional template with the aid of a morphometric analysis of sacrum and pelvis such that the relevant soft-tissue structures of the pelvis are punctured in a targeted manner and implants can be guided into the correct position.

Innovation

- There are customized puncture templates in different sizes, which are adapted to the different anatomies of man, woman and child
- All the relevant information in respect of position and angle relationships of anatomical structures is mapped out
- The application is possible without much technical outlay (e.g. x-rays, navigation aids)





Main Application

- Sacral neuromodulation for treating incontinence

Development status

Design prototype

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Urology, sacral neuromodulation, sacral nerve stimulator

Patent status

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