the pallidum. After implantation of the electrodes again MRI is performed to confirm the correct placement. The second step is the implantation of the pulse generator which can be either done in the pectoral or infracostal region. The pulse generator is then connected to the electrodes. The DBS system is fully implantable. Stimulation parameters are adjusted via telemetry.

Typically stimulation settings in dystonia are higher than in Parkinson's disease or tremor. Another striking difference is the fact that the therapeutic effect is not immediate or even instant like i.e. in tremor, but delayed. It can take weeks or even months until the full effect is deployed.

The best results are achieved in DYT 1 positive patients with the generalized form, but also non DYT 1 and secondary dystonias can profit from DBS. Particular attention has to be given to exclude psychogenic forms of dystonia. These may mimic the classical disease but are refractory to DBS.

Gpi DBS in dystonia drives down the pathological activity of this nucleus resulting in an often dramatic reduction of the dystonic symptoms, bringing back normal motricity and preparing the way for physiotherapy, which is a key issue in the postoperative treatment.

#### ORAL SESSION: MULTIPLE SCLEROSIS

### Future therapeutics options available in phase 3 trials for treatment of multiple sclerosis – OC57

#### C. Ionete

Multiple sclerosis (MS) is the most common neurological cause of disability in young people. The disease-modifying treatments, IFN-beta and glatiramer acetate, have been widely available over the last decade and have shown a beneficial effect on relapse rate and magnetic resonance imaging parameters of disease activity; however, their effect on disease progression and disability is modest. Therefore, the search for alternative treatment strategies continues.

In this review we summarize subtypes of multiple sclerosis indications, expression and function of target antigens, scientific rationales for multiple sclerosis therapy, putative modes of action and pharmacological aspects.

Therapeutic monoclonal antibodies (mAbs) are potent new tools for a molecular targeted approach to modify the course of multiple sclerosis (MS). Besides natalizumab, which was approved in 2006, three other mAbs (alemtuzumab, rituximab and daclizumab) were successfully tested in Phase II MS trials.

We provide a critical discussion of clinical MS trials, including protocols and interim analyses of trials currently underway. We pay special attention to the clinical handling of safety issues.

This review outlines current evidence supporting efficacy of new drugs; including investigative oral and parenteral agents and combination therapy approaches and highlights the need for emerging therapies and strategies for multiple sclerosis management

#### YNT SESSION

Ethical rules in diagnosis, treatment, and rehabilitation of neurological patients – OC58

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The relationship between patients and physician is based on ethical conventions, first constituted by the Hippocratic Principles, which oblige the physician to use all possibilities to cure the patient and do no harm. Modern concepts to provide a patient have been developed by the Helsinki declaration of the World Medical Association (1964), the Belmont Report (1979) and the UNESCO-Declaration on Bioethics and Human Rights (Paris, 2005). The main rules of ethical principles in contact with patients are the respect for persons (autonomy), beneficence and justice. The basis for diagnosis, treatment, neuro-rehabilitation, and nursing care as well as for participation in medical research involving human subjects is the "informed consent", provided by the physician to the patient. With informed consent the physician must be free to use even unproven or new prophylactic, diagnostic and therapeutic measures, if his judgement offers hope of saving life, re-establishing health or alleviating suffering (Helsinki Declaration, chapter 32).

Ethical rules based of Western civilisation and ethical concepts of other civilisations have to be taken into account in today's increasingly globalized environment; attempts at harmonisation are currently taking place at the level of the United Nations. In the relationship between patient and physician informed consent has the central position in medical care as well as in research. Every patient has to be treated as an "autonomous agent". Therefore, the patient has the right to refuse a treatment or to interrupt an on-going therapeutic program including diagnostic procedures for medical care as well as for clinical research. If a patient is refusing diagnostic procedures or a treatment program the responsible physician has to inform the patient about the medical consequences. In case a patient is refusing the involvement in a clinical trial no disadvantage may result in diagnostic procedures and treatment.

A special protection is necessary for persons with diminished autonomy like children and patients lost of capacity to consent like patients in a coma of different stages including apallic syndrome/vegetative state and in reduced conscious state, which includes dementia, frontal lobe syndrome, Korsakov- and Klüver-Bucy-syndrome and perceptive aphasia.

In untreatable neurological conditions like patients in a severe defect state of an apallic syndrome/ vegetative state and in a stage without possibilities of further improvement the decision to end the life by withdrawal of nutrition and fluid is by ethical principles not acceptable in the most European countries. Even in case of an end of life decision based on a legal judgement process a physician is not allowed to execute the order by ethical demands.

### WORKSHOP: THE MANAGEMENT OF MULTIPLE SCLEROSIS IN DANUBIAN COUNTRIES

#### Multiple sclerosis centers in Hungary – OC59

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The Multiple Sclerosis (MS) Center of the Department of Neurology, University of Szeged with approximately 800 patients is one of the largest in Hungary. From these patients 210 are receiving immunomodulatory therapy. The MS working group includes two specialists in neurology with permission to prescribe disease modifying therapy, a study nurse, one resident in neurology, two fulltime, and one parttime PhD students. Medical services cover in-patient as well as out-patient care. All diagnostic tools needed to confirm the disease are available in one building: MRI imaging, CSF examination (including the possibility to store the CSF in a CSF bank) and electrophysiological examination. Our site took part in several multi-center, international pharmacological studies. The diverse research activities include the Genetic Analysis of Multiple sclerosis in EuropeanS (GAMES) and the BioMS collaborations on international level. Field of interest are epidemiology, genetic background, pathogenesis (especially kynurenine and catecholamine metabolites), CSF biomarkers, quality of life.

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## PROGRAM

# ABSTRACTS

*Sinaia,* May 21<sup>st</sup> — 24<sup>th</sup>, 2008