887

## Decision-making: the heart of evidence-based medicine (EBM) in neuroscience

A. A. Eltobgy<sup>1</sup> and H. Abdul Moneim<sup>2</sup>

<sup>1</sup>Faculty of Medicine, Al-Azhar University, Cairo, Egypt; and <sup>2</sup>School Health Department, MOH, Abu-Dhabi, United Arab Emirates

**Introduction** Advances in neuroscience to be continued in providing quality care must rely on the conscientious, explicit, and judicious use of best evidence in making clinical decisions. EBM in neuroscience is important for the following reasons: (1) Neurological practice depends on increasing diagnostic and therapeutic interventions. (2) Clinicians continue to face growing pressure to justify their decisions with evidence. (3) Wide variations exist in practice due to sub-optimal interpretation of evidence and explosion in literature.

**Objectives** (i) Address the importance and uses of EBM in neuroscience as valued by the practicing physicians; (ii) Determine the major obstacles for integration of EBM into current practice

Methodology The Systematic Literature Review (SLR) has been adopted and based on a structured process involving: well formulated questions; comprehensive data search; unbiased selection and abstraction process; critical appraisal of data (CATS); and synthesis of data. It covered reasonable numbers of EBM programs (43) and models (16). contemporary methods of critical appraisal, and standards for neurological interventions. Also, consultations with medical researchers and experts were made.

Results and conclusions Addressing key policy concerns in this arena could substantially enhance neurological programs based on EBM. A sound health policy must be developed around well-conceived neurological models (4 quality models were analysed) and the best available evidence. It must be realigned to create a cohesive framework and connected with the mission of neurological care at the service delivery points. Policy makers also must deal with the problems of "scale-up" e.g. underwriting model development and capacity building.

#### SS1-5

## Some bioethical and metaphysical aspects on the end of the life of demented patients

S. J. Baloyannis

Aristotelian University, Thessaloniki, Greece

The gradual decline of the higher mental faculties in dementia causes a substantial alteration of the profile of the personality of the patients, seriously affecting their social interactions. From the psychological point of view it is very hard to approach the interior aspect and to assess the existential background of a person suffering from dementia, since the common routs of the exteriorization of the human soul, such as the verbal communication and the pattern of the behavior are no longer effective in expressing the interior movements of the psyche and its active existential dimensions. The moral and spiritual values respected and protected in the area of bioethics in neurology in cases of dementia, according to the orthodox vision, would be based on the acknowledgments: (a) of the sacred character of human life from conception to the grave; (b) of the holiness and the theosis of the human being; (c) of the metaphysical extensions of the existence and the participation in eternity, which provides ultimate meaning in human life; and (d) the sacrificial love of God, as the origin and basis

of the deep understanding of the human being at any physical or mental condition. The role of the neurologist in cases of progressive and irreversible dementia is to reduce as much as possible the mental and physical suffering, to apply any efficient method of treatment, to protect the dignity and the sacredness or sanctity of the patient, to recognize and respect all the spiritual and metaphysical expectations of the patients and to allow the patients to experience a twilight to their life which would be indeed "painless, blameless and peaceful".

### European Society of Clinical Neuropharmacology (ESCNP): CNS drug action on gene expression

#### SS2-1

#### CNS drug action on gene expression

<u>P. Riederer</u><sup>1</sup>, L. Battistin<sup>2</sup>, M. B. H. Youdim<sup>3</sup>, A. Leon<sup>2</sup>, A. Cagnin<sup>2</sup>, F. Gerstenbrand<sup>4</sup> and E. Grünblatt<sup>3</sup> <sup>1</sup>Würzburg, Germany; <sup>2</sup>Padova, Italy; <sup>3</sup>Haifa, Israel; and <sup>4</sup>Vienna, Austria

Since its development, microarray technique has revolutionized almost all fields of biomedical research by enabling highthroughput gene expression profiling. The expression pattern of genes can provide indirect information about function, drug target and cause of a disease. Using cDNA or oligonucleotide microarrays, thousands of genes from various organisms have been examined with respect to differentiation/ development, disease diagnosis, and drug discovery. Nevertheless, research on central nervous system (CNS) drugs using microarrays has been rather limited. It is quite likely that our classic treatments are not targeted at most of the genes actually responsible for the illnesses but rather are the results of fortuitous medications that impact on symptoms and only indirect modify the disease processes themselves. Therefore, gene expression techniques will be most useful in this field. Recently, this approach to study gene expression was put in use also in the study of CNS, such as in animal models for Huntington's and Parkinson's disease and for focal ischemia, in cell culture such as in PC12 cells treated with antipsychotic drugs, as well as in human illnesses such as alcoholism and multiple sclerosis lesions. Therefore we have seen it necessary to organize a symposium in order to discuss the benefits of microarrays as a tool of studying neuropsychiatric disorders as well as their drugs' effects on gene expression under ethical aspects.

Joint Symposium EFNS-EMN (Euroacademia Multidisciplinaria Neurotraumatologica). Spinal cord injury. Acute treatment and functional rehabilitation and re-engineering, state of the art

#### SS3-1

#### Prognostic factors and functional outcome in spinal cord injury

A. Curt

Spinal Cord Injury Center, University Hospital, Zürich, Switzerland

The clinical assessment of the level, extent and severity of spinal cord injury (SCI) can be significantly supplemented by electrophysiological recordings. These recordings provide

### **EUROPEAN JOURNAL OF NEUROLOGY**

Volume 10, Supplement 1, September 2003

# Abstracts of the 7th Congress of the European Federation of Neurological Societies

30 August–2 September 2003 Helsinki, Finland





1471-0552(200309)10:5+1;1-Z