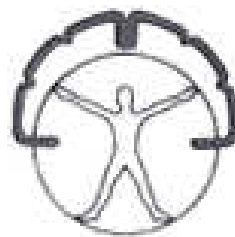


Movement Disorders



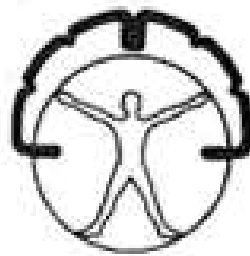
Official Journal of the Movement Disorder Society

Abstracts of The *Movement Disorder Society's* Eighth International Congress of Parkinson's Disease and Movement Disorders



June 14–17, 2004
Rome, Italy

Abstracts of the
**Eighth International Congress of
Parkinson's Disease and *Movement Disorders***



**June 14–17, 2004
Palazzo dei Congressi
Rome, Italy**

Published as a Supplement to
***Movement Disorders*, Volume 19, 2004**

 **WILEY-LISS**

A WILEY-LISS, INC., PUBLICATION

CONTENTS

PLENARY/PARALLEL SESSION 5

Monday, June 14, 2004, 8:30 AM – 11:00 AM

- S1 Plenary Session 1: Etiopathogenesis of Cell Death in Parkinson's Disease
- S3 C. David Marsden Lecture
- S3 Plenary Session 2: The Basal Ganglia Pathophysiological Model: Contributions and Limitations
- S5 Parallel Session 3: Cognitive and Behavioral Dysfunction in Movement Disorders
- S6 Parallel Session 4: Update on Other Movement Disorders
- S7 Plenary Session 3: Experimental Interventional Therapeutics for Movement Disorders
- S9 Stanley Fahn Lecture
- S9 Plenary Session 4: Modern Concepts in the Diagnosis and Treatment of Parkinsonism
- S11 Parallel Session 5: Dyskinesias in Parkinson's Disease
- S12 Parallel Session 6: Pathophysiology of Movement Disorders
- S14 Parallel Session 7: Controversies
- S17 Parallel Session 8: Surgery

POSTER SESSION I

Monday, June 14, 2004, 8:30 AM – 5:00 PM

Authors present odd numbers: 12:00 PM – 1:00 PM

Authors present even numbers: 4:00 PM – 5:00 PM

- S19 Ataxia: Poster numbers 1–90
- S48 Chorea: Poster numbers 91–120
- S57 Clinical Electrophysiology: Poster numbers 121–164
- S72 Drug-Induced Movement Disorders: Poster numbers 165–176
- S76 Dystonia: Poster numbers 177–312
- S117 Gene Therapies and Cell-Based Therapies: Poster numbers 313–322
- S120 Myoclonus: Poster numbers 323–334
- S125 Spasticity: Poster numbers 335–344

POSTER SESSION 2*Tuesday, June 15, 2004, 8:30 AM – 5:00 PM**Authors present odd numbers: 11:30 AM – 12:30 PM**Authors present even numbers: 4:00 PM – 5:00 PM***S129** Parkinson's Disease 1: Poster numbers 345–694**POSTER SESSION 3***Wednesday, June 16, 2004, 8:30 AM – 5:00 PM**Authors present odd numbers: 11:30 AM – 12:30 PM**Authors present even numbers: 4:00 PM – 5:00 PM***S245** Parkinson's Disease 2: Poster numbers 695–815**S283** Surgical Therapy: Poster numbers 816–949**S327** Parkinsonism – Other: Poster numbers 950–1017**POSTER SESSION 4***Thursday, June 17, 2004, 8:30 AM – 4:30 PM**Authors present odd numbers: 12:00 PM – 1:00 PM**Authors present even numbers: 1:00 PM – 2:00 PM***S349** Genetics: Poster numbers 1018–1073**S367** Neuroimaging: Poster numbers 1074–1130**S387** Neuropharmacology: Poster numbers 1131–1166**S400** Non-Motor Aspects of Movement Disorders: Poster numbers 1167–1209**S413** Other Clinical: Poster numbers 1210–1278**S437** Tics: Poster numbers 1279–1290**S441** Tremor: Poster numbers 1291–1338**S457** Index of Authors**S478** Index of Key Words

Gyrokinesics: A preventive rehabilitation program in Parkinson's disease

M.H. Anca (Israel)

Objective: To assess the effect of GK, a complex rehabilitation program on PD in an open label pilot study.

Background: The management of Parkinson's disease (PD) aims to improve quality of life by preventing and reducing the multiple clinical disabilities. The oscillatory human basal ganglia activity focuses on the effect of voluntary movement that similar to levodopa could change the synchronisation of neuronal discharge and improve the bradikinesia. Several reports showed an improving effect of music therapy and physical training on motor performance in PD. Gyro-Kinetics (GK) is a rehabilitation method that combines movement, touch and music to restore the physiological balanced state on physical, mental and emotional levels. It has been successfully used in several conditions: movement disorders, musculoskeletal, vascular, respiratory and digestive disorders, ADHD. The GK, including a passive session (a touch to create oscillations that propagate through the patient's body) and an active session (several pre-arranged sets of functional and structuring movements) prelies on music, from leisure to staccato rhythm, as an integral part of the therapy, to enhance the effect of the oscillatory and structured movements. These movements, adopted from the martial arts, from slow rotations to stretching exercises provide a complete workout to the musculo-skeletal system, helping patients to increase their kinesthetic awareness.

Method: Our pilot study lasted 3 months. It consisted of weekly session of GK in 11 PD patients (7 males) with mean age of 63 ± 9.9 years, mean disease duration of 3.9 ± 2 years and Hoehn and Yahr stage 1 to 3. Only 4 patients received levodopa as a previous therapy. No drug changes were made during the study period. The disease severity was assessed by a neurologist using UPDRS motor score, ADL score and CGIC. The assessment was done monthly, at baseline and final visit, pre and posttraining

session and once during the second month. The CGIC was done each session.

Results: All patients finished very satisfied this study. GK had a significant immediate postsession but also long standing improving effect on motor parameters: baseline UPDRS improved ($P = 0.004$) in all patients after the training session and remained improved for 1 week, between 2 sessions ($P = 0.13$). Remarkable immediate improvement was seen in: hypomimia ($P = 0.002$), hand alternated rapid movements ($P = 0.004$), speech tremor at rest, bradikinesia, gait and mood. The patients reported improvement of their breathing and constipation problems. The ADL improved from baseline to the last visit ($P = 0.09$). Nine patients (81%) reported clear improvement on CGIC ($P = 0.01$). 2 patients with advanced disease did not improve but remained stable.

Conclusion: GK seems to be effective on general motor and mood dysfunction in PD. It also can improve the respiratory and gastrointestinal disturbances and the patient awareness of his disease. The combined modalities of GK prove a higher effectivity and usefulness in the early stages of the disease in order to prevent the later complications. Further controlled studies are desirable.