

WORLD CONGRESS ON HUNTINGTON'S DISEASE

August 16-21, 2003 Toronto, Ontario, Canada

ABSTRACT 023: Effects of rehabilitation on motor performance, mood state and everyday life of HD patients

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Rehabilitation therapy on Huntington's Disease patients has rarely been object of a methodologically valuable attempt to assess its effects, data reported so far being mostly observational or anecdotal ones. We performed a research project aimed at obtaining reliable data on the effect of a multidisciplinary rehabilitation protocol for HD patients. The protocol, including a motor, cognitive, speech and respiratory exercises, was based on a repeated 3-weeks admissions in the rehabilitation home. 42 HD patients were enrolled on the basis of the following criteria: disease stage I-III, a MMSE performance >16, absence of major psychiatric disorders. Here we report data on motor outcomes, effects on patients' mood and on perception of whole experience by patients themselves and caregivers. A comparison of motor performance at each admission and discharge provides evidence of a significant improvement during the 3-weeks period showing the ability of patients to positively respond to treatment. The improvement however was not maintained till the subsequent admission (4 or more months later) and was partially or totally lost.

Additional data from patients and caregivers were collected through an *ad hoc* questionnaire exploring the effects of rehabilitation experience in everyday life: from the quality of family relationship and patient's mood to his/her effective autonomy in performing the routine daily activities. A data preliminary analysis shows a beneficial effect on patient's ability to communicate, interest in family and social life, motor control and engagement in activities. Repeated measures of depression levels on Zung Scale were also collected showing mild to remarkable improvements. The research was made possible by a grant from CNR to MF.



The World Federation of Neurology Research Group on Huntington's Disease,
The International Huntington Association, The Hereditary Disease Foundation,
The Huntington's Disease Association of America, The Huntington Society of Canada
and The Huntington Study Group present the
World Congress on Huntington's Disease

Poster Abstract Detailed Listing

92 posters have been accepted for presentation at the World Congress on Huntington's Disease. All 92 posters will be displayed from Sunday morning until Monday evening. There are two poster sessions, and poster presenters are asked to stand by their poster at their designated session time (either Sunday, August 17 from 7:45 a.m. to 8:45 a.m., or, Monday, August 18 from 8:00 a.m. to 9:00 a.m.). These poster abstract lists are organized by poster session and poster topic.

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Poster Session #1 Poster Session #2 Late-Breaking Research

POSTER ABSTRACT SESSION #1

Sunday, August 17th, 2003 - Staffed from 7:45 a.m. - 8:45 a.m.

Number	Genetics (6)	Presenting Author
008	European Molecular Genetics Quality Network: External Quality Assessment for the Molecular Diagnosis of Huntington Disease in Europe (1997-2002)	Monique Losekoot, PhD
009	Monozygotic Twins Displaying Mosaicism of an Expanded and an Intermediate Allele of the CAG Repeat in the Huntington Disease Gene	Anne Norremolle, PhD
020	Study of Juvenile Huntington Disease Patients of Italian Origin	Ferdinando Squitieri, MD, PhD
036	Molecular Analysis of Turkish Huntington's Disease Patients	Nazli Basak, PhD
057	Sequence and Haplotype Analysis of GRIK2 (GluR6) in Huntington Disease: Assessment of a Modifier Gene	Wen-Qi Zeng, MD, PhD
071	Molecular Study of Huntington Disease in Iranian Families	Fabiola Hormozian, Ms.c in Genetics
Genetic Counseling (7)		
010	UK Study of Reduced Penetrance Alleles in Huntington's Disease	Oliver Quarrell, MD, FRCP
012	Reproductive Decision Making Before and After Predictive Testing for Huntington Disease: An Australian Perspective	Fiona Richards, Master of Social Work
019	Predictive Testing in Huntington Disease Families With Patients Homozygous for CAG Mutation	Ferdinando Squitieri, MD, PhD
021	Non-Consensual Predictive Testing: Testing at 25% risk-Some Legal and Counseling Issues Encountered in Australia	Roslyn Tassicker, Master of Social Work
044	Preimplantation Diagnosis for Huntington Disease-The London Experience	Alison Lashwood, MSc. Genetic Counseling
046	The Impact of Presymptomatic Predictive Testing for Huntington's Disease on Partners and Marital Relationships: Secrets, Lies and Truths	Anita Bruce, BSc
060	Personality Traits in Probands Undergoing Predictive Testing for Huntington Disease	Elisabeth Almqvist, PhD, RN
Psychosocial Issues (8)		
005	Adverse Effects of Predictive Testing for Huntington Disease Underestimated: Long Term Effects 7-10 Years After the Test	Reinier Timman, MA

006	Informing Relatives About Genetic Risk: A Qualitative Study of Patients At Risk For Huntington's Disease or Hereditary Breast/Ovarian Cancer	Karen Forrest, MLitt
014	Innovative Approaches to Improving the Acceptance of Texture	Karen Keast, BSc
023	Effects of Rehabilitation on Motor Performance, Mood State and Everyday Life of HD Patients	Paola Zinzi, psychology
047	Improving Psychiatric Outcomes in an Outpatient HD Population	Teresa Tempkin, RNC, MSN, ANP
062	Parenting Patterns in Patients with Huntington's Disease	Elizabeth McCusker, MBBS, FRACP
066	Who Killed That Lady? A HD Murder Case in Japan	Kaori Muto, PhD
092	Self-Understanding and Identity: The Experience of Adolescents At Risk for Huntington's Disease	Jessica Easton, M.A.

Pathogenetic Mechanisms (3)

004	Homozygosity For CAG Mutation in Huntington Disease is Associated With a More Severe Clinical Course	Ferdinando Squitieri, MD, PhD
017	Genetic Disruption of Tissue Transglutaminase Delays Disease Progression in a Mouse Model of Huntington's Disease	Craig Bailey, PhD
051	Analysis of Huntingtin Protein-Protein Interactions Using the Yeast Two-Hybrid System	Heike Goehler

Cell Dysfunction (5)

015	Specific Progressive cAMP Reduction Implicates Energy Deficits in Presymptomatic HD Knock-in Mice	Silvia Gines-Padros, PhD Biochemistry
039	Abnormal Morphology of HD Fibroblasts Grown in Enriched Culture Medium	Lis Hasholt, Dr. Med.Sci.
058	A Quantitative Gene Expression Analysis Of Laser-Dissected Striatal Neurons In The R6/2 Mouse Model Of Huntington's Disease	Birgit Zucker, MD
074	Heat Shock Protein 27 Protects Monkey Cos Cells Against Oxidative Stress Generated by the Expression of Mutant Huntington Exon 1	Wance J.J. Firdaus, DEA, MSc
075	Huntington Expression Results in a Decrease of Proteasome Activity and Triggers Apoptosis in PC12 Cells	George Lawless

Other (11)

002	Huntington Disease in Cuba	Tatiana Zaldivar Vaillant, MD
007	The Effect of Huntington's Disease on the Ability to Respond to Conflicting Spatial Stimuli	Nellie Georgiou-Karistianis, PhD
011	Small Compounds That Inhibit Mutant Huntingtin Aggregation: Potential Therapeutics of HD Patients	Wang Jin, PhD
013	An Abnormal Sleep Pattern and Excessive Movements Can Characterize Patients With Huntington's Disease	Marieta Anca, MD
025	Comparisons of CAG Repeat Distributions for Familial and Sporadic HD Cases & Intermediate Allele Frequencies For Different Populations Support a Stepwise Model for CAG Expansion	Lilias Barron, BSc
027	Multidisciplinary Care in the Information Age a System for Coordination of Care Amongst Geographically Dispersed Providers	Ronald Risley, MD
029	The Huntingtin-Interacting Protein Endophilin A3 Forms Filamentous Structures Which Associate With Microtubules But Not With Actin Filaments	Alis Hughes, Ms
040	High Throughput Screen To Identify Compounds That Downregulate Intracellular Mutant Huntingtin Expression	Deborah Russel, BA

045	PEG Feeding In End Stage Huntington's Disease: An Examination of the Clinical and Ethical Issues, Including the Views of the Doctor, Patient and the Patient's Family	Sheila Simpson, MBChB, BSc, MD
052	Motor Deficits and Striosome Volume in the YAC72 Mouse Model of Huntington's Disease	Collene Lawhorn, BS, MS Ed
076	Bilateral GP Stimulation for Huntington's Disease	Elena Moro, MD, PhD

POSTER ABSTRACT SESSION #2**Monday, August 18th, 2003 - Staffed from 8:00 a.m. - 9:00 a.m.****Neuronal Vulnerability and Survival (1)**

061	mRNA Profiling of Two Striatal Neuron Populations with Differential Vulnerability in HD: A Study Utilizing LCM, Real-Time PCR, and cDNA Microarrays	Sarah Augood, PhD
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Cellular-Based and Genetic Animal Models (5)

037	Interaction Between Huntingtin and the Nuclear Receptor Corepressor	Nagehan Ersoy, MSc
042	Identification in Cell Culture of Small, Recruitment Positive Polyglutamine Aggregates: Aggregation Foci	Erica Johnson, BS
054	Toxicity of a Carboxyl-Terminal Huntingtin Fragment in Drosophila	Hui Zhu, PhD
064	Suppression of a Polyglutamine Toxicity by a Drosophila Ortholog of MRJ	Parsa Kazemi-Esfarjani, B.Sc., PhD
077	The Role of Calpain in Huntington's Disease	Lisa Ellerby, PhD

Animal Model Experimental Therapeutics (5)

003	A Strategy for Drug Discovery in Huntington's Disease	Laure Jamot, PhD
026	A Dual Role of Adenosine A2A Receptors in 3-Nitropropionic Acid-Induced Striatal Lesions: Implications for the Neuroprotective Potential of A2A Antagonists	David Blum, PhD
038	PEI Mediated In Vivo Gene Transfer in Transgenic Huntington's Disease Mice. Evaluation of Transfection Method, Effect and Biomarkers	Bjarke Naver, MSc
043	Histone Deacetylase Inhibitors Prevent Oxidative Neuronal Death Independent of Expanded Polyglutamine Repeats via a Sp1-Dependent Pathway	Hoon Ryu, PhD
053	Use of Adult Bone Marrow Stem Cell Transplants to Counteract Cognitive Deficits in a Rat Model of Huntington's Disease	Gary Dunbar, PhD

Clinical Characteristics (20)

016	Subcortical Mild Cognitive Impairment: A Novel Concept of Mental Dysfunction	Raphael Bonelli, MD
018	Nature and Development of HD in a Nursing Home Population: The Further Development of the BOSH Rating Scale	Hans Claus, MSc
024	Objective Assessment of Akinesia and Bradykinesia in Huntington's Disease	Jeroen van Vugt, MD, PhD
028	Somatoform Disorders as the Initial Presentation of Huntington Disease	Vicki Wheelock, MD
031	Does the Clinical Spectrum of Huntington's Disease Include Tremor	Neil Mahant, MBBS
033	Stereotypic Leg Movements in a Family Member of Huntington's Disease	Din-E Shan, MD, PhD
034	Psychomotor Slowing and Memory Disturbances Over a Three-Year Period in Presymptomatic' carriers for Huntington's Disease	Marie-Noelle Witjes-Ane, MSc

035	Assessment of Change in Cognitive Function in Huntington's Disease	Julie Snowden, PhD
041	Does the Cause of Functional Disability Change With Disease Progression in Patients with Huntington's Disease?	Yvette Grimbergen, MD
048	Changes in Sexual Behaviour Associated with Huntington's Disease	David Craufurd, FRCPsych
050	Walk and Drink Time; Objective Measures of Motor Progression in Huntington's Disease	Elizabeth Howard, BSc, MB ChB, MRCP
055	Social Cognition in Huntington's Disease and Frontotemporal Dementia	Jennifer Thompson, B.Sc
069	Defining Progression in Huntington Disease	Donald Higgins, MD
070	Safety and Feasibility of the Prospective Huntington At Risk Observational Study (PHAROS): A Progress Report	Elise Kayson, MS, RNC
072	Clinical Predictors of Neuropathological Severity: A Prospective Autopsy Study of 100 Individuals with Huntington's Disease	Adam Rosenblatt, MD
073	Risk factors for Osteoporosis in Women with Huntington's Disease in a Long-term Care Setting	Ayana Duckett, BA
079	Peg Insertion Reflects Dysfunction in Huntington's Disease	Carsten Saft, MD
082	Implicit Processes in People with Huntington's Disease	Kristy Bolter, PhD
085	Episodic Memory Impairment in Huntington's Disease: a Meta-Analysis	Alonso Montoya, MD
091	Pupillary Measure of Brainstem Activation is Reduced in Huntington's Disease	Francois Richer, PhD
Neuroimaging (5)		
030	Progression of Structural Neuropathology in Huntington's Disease Using Voxel and Tensor Based Morphometry	Christopher Kipps, MBBS
056	Quantification of Caudate and Putamen Atrophy by Volumetric MRI in Patients with Huntington Disease. Association Between Length of the CAG Repeat and Age at Onset	Heloisa Ruocco, PhD
059	Brain Energy Metabolism in Huntington's Disease	Marguerite Wieler, BScPT
065	MRI and PET Assessment of Brain Involvement in Subjects With Presymptomatic, Initial and Advanced Huntington Disease	Ferdinando Squitieri, MD, PhD
090	Frontal Hypoactivation and Reduced Voluntary Control in Early Huntington's Disease	Francois Richer, PhD
Human Experimental Therapeutics (8)		
001	Targeted Nucleotide Exchange in the CAG Repeat Region of the Human HD Gene	Eric Kmiec, PhD
022	Increased Cell Proliferation and Neurogenesis in Huntington's Disease	Maurice Curtis, BSc, MSc
032	Treatment of Huntington's Disease Using Essential Fatty Acids (Long Term Follow Up Case Presentation)	Krisna Vaddadi, FRC Psych
049	Measurement of Irritability in Huntington's Disease	David Craufurd, FRC Psych
063	Ethyl-Eicosapentaenoate (Ethyl-Epa) in Huntington's Disease: A Randomised, Placebo-Controlled Trial	Blair Leavitt, MD, CM
067	Management of Huntington's Disease: An Evidence-Based Review	Raphael Bonelli, MD
088	Mechanism of Action of the Anti-Chorea Drug tetrabenazine: A Review	Kathleen Clarence-Smith, MD, PhD

LATE-BREAKING RESEARCH (8 POSTERS)**Pathogenetic Mechanisms (1)**

Poster will be staffed on Sunday, August 17th, 2003
7:45 a.m. - 8:45 a.m.

087-LBR- Msh2 Protein in Base-excision Mediated CAD Expansion Irina Kovtun

Cellular-Based and Genetic Animal Models (2)

Poster will be staffed on Monday, August 18th, 2003
8:00 a.m. - 9:00 a.m.

078-LBR Behavioral Manifestations of High Extracellular Dopamine in HdhQ92 Knock-in Mice Michel Cyr, PhD

083-LBR Cell Culture Screen Identifies Caspase Inhibitors as Potential Drugs for the Treatment of Huntington's Disease Charity Aiken

Animal Model Experimental Therapeutics (1)

Poster will be staffed on Monday, August 18th, 2003
8:00 a.m. - 9:00 a.m.

086-LBR Cop-1 Vaccination Reduces Motor Function Deficits and Increases Life Expectancy in a Transgenic Mouse Model of Huntington's Disease Yona Gefen, PhD

Clinical Characteristics (3)

Poster will be staffed on Monday, August 18th, 2003
8:00 a.m. - 9:00 a.m.

080-LBR Is 41 Better Than 45? Influence of Low CAG Ranges on Huntington's Disease Carsten Saft, MD

081-LBR Emerging Cohort Characteristics in the Prospective Huntington At Risk Observational Study (PHAROS) Kevin Biglan, MD

089-LBR Initial Baseline Characteristics in the PREDICT-HD (Neurobiological Predictors of HD) Study Jane Paulsen, PhD

Neuroimaging (1)

Poster will be staffed on Monday, August 18th, 2003
8:00 a.m. - 9:00 a.m.

084-LBR Onset and Rate of Change in Basal Ganglia Volume in Presymptomatic Subjects Elizabeth Aylward, PhD

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