

The Canadian Journal of Neurological Sciences

Le Journal Canadien des Sciences Neurologiques

XXVIIIth MEETING OF THE
CANADIAN CONGRESS
OF NEUROLOGICAL SCIENCES

XXVIII^e ASSEMBLÉE ANNUELLE DU
CONGRÈS CANADIEN DES
SCIENCES NEUROLOGIQUES



ABSTRACTS RÉSUMÉS

Toronto, Ontario

June 16 – 19, 1993

XXVIIIth Canadian Congress of
Neurological Sciences
June 16-19, 1993
Toronto, Ontario

The Official Journal of

The Canadian Neurological Society
The Canadian Neurosurgical Society
The Canadian Society of Clinical Neurophysiologists
The Canadian Association of Child Neurology

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XXVIII^e ASSEMBLÉE ANNUELLE DU CONGRÈS CANADIEN DES SCIENCES NEUROLOGIQUES

Royal York Hotel
Toronto, Ontario

June 16 - 19, 1993

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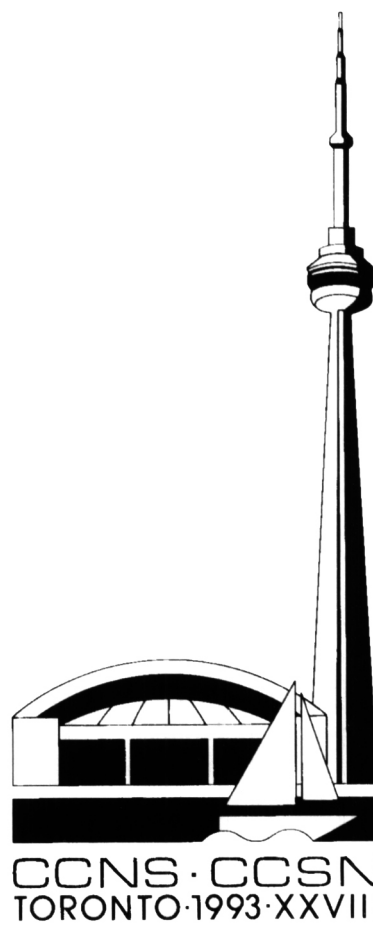
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1993 SCIENTIFIC PROGRAM

TUESDAY, JUNE 15

Child Neurology Day

Genetic Metabolic Advances

Opening Remarks

The Biology and Treatment Strategies in Duchenne Muscular Dystrophy

Mitochondria DNA Mutations Leading to Leigh's and other

Neurodegenerative Diseases

Primary and Secondary Disorders of Camitine Metabolism

Pyridoxine-Responsive Epilepsy - An Ignored Disease: Cause,

Diagnosis and Treatment

Genetics of Epilepsies: Recent Advances

Refractory Epilepsies of Childhood

Opening Remarks

Canadian League Against Epilepsy Guest Lecture:

Early Infantile Epileptic Syndromes: Ohtahara Syndrome

and Early Myoclonic Encephalopathy

Progressive Myoclonus Epilepsies

Contributions of EEG in Evaluating Childhood Refractory Epilepsies

Medical Therapy and Pre-Surgical Evaluation

Surgery of Epilepsy in Childhood

Pathology of Childhood Epilepsies

Canadian Association for Child Neurology Lecture:

The Lennox-Gastaut Syndrome and Severe Myoclonic Epilepsy:

Course and Management

Closing Remarks

Tour of the Epilepsy Unit and the Atrium, Hospital for Sick

Children, 40th Anniversary of the EEG Laboratory founded by

Dr. John Stobo Prichard

Robert Haslam (Toronto)

Ronald Worton (Toronto)

Brian Robinson (Toronto)

Ingrid Tein (Toronto)

Roderick McInnes (Toronto)

Eva Andermann (Montreal)

Willaim Logan (Toronto)

Shunsuke Ohtahara (Okayama)

Fred Andermann (Montreal)

Warren Blume (London)

Paul Hwang (Toronto)

Harold Hoffman (Toronto)

Venita Jay (Toronto)

Jean Aicardi (Paris)

Shashikant Seshia (Winnipeg)

Satellite Symposium I - Clinical Diagnostic Criteria for Vascular Dementia

08:00 Scope & Aims of the Workshop

08:15 Clinical Criteria for the Diagnosis of Vascular Dementia I

08:45 Clinical Criteria for the Diagnosis of Vascular Dementia II

09:15 Coffee

09:45 Neuropathological Criteria for the Diagnosis of Vascular Dementia

10:15 Neuropsychological and Neuroradiological Criteria for the Diagnosis
of Vascular Dementia

10:30 Refreshment Break

10:45 Group Discussion to Define Criteria for the Diagnosis of Vascular Dementia

11:30 Summation

Irma Parhad (Calgary)

Vladimir Hachinski (London)

Timo Erkinjuntti (Helsinki, Finland)

N. Barry Rewcastle (Calgary)

Andrew Kertesz (London)

Ken Rockwood (Halifax)

Satellite Symposium II - Diabetic Neuropathy

Clinical Testing in Diabetic Neuropathy

End-Stage Complications of Diabetic Neuropathy

Pathological Definition and Evaluation in Diabetic Neuropathy

Role of Electrophysiological Studies in Diabetic Neuropathy

Eva Feldman (Ann Arbor)

Andrew Boulton (Manchester, UK)

Anders Sima (Ann Arbor)

Vera Bril (Toronto)

Satellite Symposium III - Management of Brain Vascular Malformations

Survey of Management Selected Cases presented to
the audience and survey of management decisions

Current Role of Endovascular Therapy for Brain Vascular Malformations

Radiotherapy for Arteriovenous Malformations of the Brain

Workshops with expert panels

Survey Review and Concluding Remarks

Alex Berenstein (New York)

Christopher Ogilvie (Boston)

Satellite Symposium IV - Controversies in Stroke

Canadian Stroke Society Annual General Meeting
Canadian Stroke Society/Syntex Prize Lecture and Award Presentation
The European Asymptomatic Tight Stenosis Trial
Management of Acute Stroke
Which antiplatelet agent?
Aspirin in Asymptomatic Carotid Stenosis
Thrombolysis in Acute Stroke

Dafydd Thomas (London, U.K.)
Vladimir Hachinski (London)
J. Donald Easton (Providence)
Robert Côté (Montreal)
Thomas Brott (Cincinnati)

Satellite Symposium V - The Parkinson's Disease Debates: Etiology and Pathophysiology

The Cause of Parkinson's Disease is Entirely Genetic
The Cause of Parkinson's Disease is Entirely Environmental
Free Radicals are of Little Importance in the
Pathophysiology of Parkinson's Disease
Free Radicals Play a Major Role in the Pathophysiology
of Parkinson's Disease

Roger Duvoisin (New Brunswick, NJ)
Ali Rajput (Saskatoon)
Donald Calne (Vancouver)

Warren Olanow (Tampa)

Satellite Symposium VI - Antiepileptic Drug Selection and Adverse Effects: Current Issues, Future Options

Opening Remarks
Acute and Chronic Toxicity
Teratogenic Effects
How Safe are the New Antiepileptic Drugs

Joseph Bruni (Toronto)
Peter Camfield (Halifax)
Eva Andermann (Montreal)
B. Joseph Wilder (Gainesville)

WEDNESDAY, JUNE 16

Course I - Behavioural Neurology

Neuroimaging in Behavioural Neurology
Focal Cognitive Deficits in Dementia
Mechanisms of Facial Recognition
Frontal Lobe Dementia
PET Scanning in Behavioural Neurology

Sandra Black (Toronto)
Andrew Kertesz (London)
Justine Sargent (Montreal)
Morris Freedman (Toronto)
Howard Chertkow (Montreal)

Course II - Evoked Potentials: Ambulatory and Intra-operative

Clinical Applications of Motor Evoked Potentials
Clinical Applications of Visual Evoked Potentials Including
Pattern ERG
Intra-operative Evoked Potential Monitoring: Some Practical
Applications Including Cortical and Spinal Cord Mapping
Evoked Potentials and the Diagnosis of Multiple Sclerosis
Intra-operative Monitoring for Cerebral Ischemia
Brainstem Auditory Evoked Potentials

Keith Chiappa (Boston)
Keith Chiappa (Boston)

David Rowed/David Houlden
(Toronto)
Paul O'Connor (Toronto)
Fred Gentilli (Toronto)
Terry Picton (Ottawa)

Course III - Neuro-otology: Vertigo

Pathophysiology of the Vestibulo-ocular Reflex
Bedside Evaluation of the Patient with Vertigo
Nystagmus
Non-vertiginous Dizziness
BPPV, Not so BPPV and the Surgical Approach to Vertigo
Adaptation of Vestibular Disorders
Tumour of the Cerebello-pontine Angle
Panel Discussion and Interesting Cases

James Sharpe (Toronto)
David Zee (Baltimore)
William Fletcher (Calgary)
Janine Johnston (Winnipeg)
John Rutka (Toronto)
David S. Zee (Baltimore)
David Rowed (Toronto)

Course IV - Spinal Instrumentation Thoraco-lumbar

Lumbar Approaches and Instrumentation
Thoracic Approaches and Instrumentation

C. Dickman (Phoenix)
R. Martin (Syracuse)

Course V - Multiple Sclerosis

The Genetics of MS
Immunology of MS
Natural History
Unusual Clinical Manifestations of MS
The Diagnosis of MS
Beta Interferon Trial: Rationale and Results

George Ebers (London)
Jack Antel (Montreal)
Brian Weinschenker (Rochester)
Trevor Gray (Toronto)
Donald Paty (Vancouver)
Donald Paty (Vancouver)

Course VI - Medicolegal Minefield of Neurology & Neurosurgery

Malpractice cases in neurology and neurosurgery will be presented from the perspectives of both the defense and the plaintiff. Detailed analyses will be carried out by experts from the profession.

THURSDAY, JUNE 17**Breakfast Lecture: Spinal Instrumentation for Neurosurgeons**

Curtis Dickman and
Robert Martin

Poster Session I: Pediatric Neurology, Neuro-oncology, Epilepsy, Neuromuscular, Headache**Plenary Session I - Guests of the Congress**

Opening of the Congress
Welcome

Robert S. Prichard (Toronto)
C. William McCormick,
President (Halifax)
David S. Zee (Baltimore)

Richardson Lecture:

Adaptive Control of Eye Movements: Bringing Ocular
Motor Physiology to the Bedside

Jean Aicardi (Paris)

Canadian Association for Child Neurology Guest Lecture:

Place of Neuronal Migration Abnormalities in Child Neurology

Canadian Journal of Neurological Sciences Award Presentation

Historical Talk: A Century of Neurology in Toronto

John Wherrett (Toronto)
Maurice Choux (Marseille)

Penfield Lecture:

Management of Hydrocephalus Around the World in 1993

The 1993 K.G. McKenzie Memorial Prize for Basic Neuroscience Research:

The Functional Characteristics of Schwann Cells Cultures from Human
Peripheral Nerve Studied *in Vivo*

Allan Levi (Toronto)

André Barbeau Memorial Prize:

Primate Nuclues Basalis of Meynert p_{75}^{NGFR} - Containing Cholienergic Neurons
are Protected from Retrograde Degeneration by the Ganglioside GM

Erik Piro (Montreal)

Lunch Lecture: Epilepsy: The Japanese Perspective

Shunsuke Ohtahara (Okatama)

Free Communications:

Session A: Neurology

General Neurology

Multiple Sclerosis

Session B: Neurosurgery

Session C: Pediatric Neurology

Session D: Neurology

Neuromuscular

Neuro-ophthalmology

FRIDAY, JUNE 18**Meet the Expert Breakfast - Neurology**

David S. Zee and Alan Ropper

Meet the Expert Breakfast - Neurosurgery

Maurice Choux and Fred Epstein

Poster Session II: Neurology, Clinical Neurophysiology, Neurosurgery, Spinal Cord, Cerebrovascular

Plenary Session II - Guests of the Congress

Welcome

Harold Hoffman, Director (Toronto)

Royal College of Physicians and Surgeons Lecture - Neurosurgery:

Fred Epstein (New York)

Intramedullary Spinal Cord Tumours in Children

Royal College of Physicians and Surgeons Lecture - Neurology:

Alan Ropper (Boston)

Canadian Society of Clinical Neurophysiologists Guest Lecture:

Keith Chiappa (Boston)

Magnetic Stimulation: A New Window

Historical Talk: The Development of Neurosurgery in Toronto

Thomas P. Morley (Toronto)

McKenzie Prize for Clinical Neuroscience Research:

Mark Pruel (Montreal)

Differential Diagnosis of Human Intracranial Tumours *in Vivo* using

Proton MR Spectroscopic Imaging with Metabolic Classification in Feature Space

The Herbert Jasper Prize:

Tom Miller (Ottawa)

H-Reflexes in the Upper Extremity and the Effects of Voluntary Contraction

Francis McNaughton Memorial Prize

Christopher Power (Baltimore)

Cerebral White Matter Changes in HV Dementia: Alterations of the Blood-brain Barrier

Free Communications:

Session E: Neurology

Session F: Neurosurgical Oncology

Session G: Clinical Neurophysiology

Session H: Cerebral Ischemia

SATURDAY, JUNE 19

President's Symposium Neurocritical Care

Cerebral Blood Flow and Metabolism

Paul Muizelaar (Richmond)

Electrophysiological Monitoring in the ICU - Some Aspects

Keith Chiappa (Boston)

Multi-modality Monitoring in Head Injury: New Insights into

Richard Moulton (Toronto)

Pathophysiology

Presentation of the Miles Prize in Neurocritical Care

Critical Care of Guillain-Barré Syndrome

Alan Ropper (Boston)

Assessment of Respiratory Function in the Intensive Care Unit

Charles Bolton (London)

Panel Discussion - The Neuro-ICU: Justified or Not?

Charles Bolton, Keith Chiappa, Richard Moulton, Paul Muizelaar,

Alan Ropper, William Sibbald, Charles Tator.

Neurobiology Review Course

Cellular Organization of Neurons

Current Concepts of Neuronal Structure and Function

Brian Flumerfelt (London)

Mechanisms of Motility, Transport and Cell Adhesion in Axon Growth and Regeneration

Mark Bisby (Kingston)

The Neuronal Cytoskeleton: Principle Player or Innocent Bystander?

Michael Strong (London)

"An approach to adult-onset neurodegenerative disorders"

Energy Metabolism and Utilization - Implications for Cerebral Ischemia

Antoine Hakim (Ottawa)

Energy Metabolism and Mitochondrial Disorders

Doug Arnold (Montreal)

Mechanisms of the Brain's Response to Subarachnoid Hemorrhage

Loch Macdonald (Toronto)

An Overview of Neurotransmitter-receptor Interactions

Donald Weaver (Kingston)

Dopamine and Its Receptors: Their role in Parkinson's Disease

Paul Bedard (Quebec City)

SUNDAY, JUNE 20

Neurobiology Review Course

Neuronal Signalling Mechanisms

The Physiology and Pharmacology of Excitatory Amino Acids Transmission

John MacDonald (Toronto)

Intracellular Signalling: An Overview of Receptor-Second Messenger Interactions

Peter Carlen (Toronto)

Calcium Homeostasis and Neurotoxicity

Michael Tymianski (Toronto)

HIV-Related Neuronal Injury: Potential Treatment with Clinically Tolerated

Stuart A. Lipton (Boston)

NMDA Antagonists

Learning and Memory Genes

Derek van der Kooy (Toronto)