Behavior and mood disorders in focal brain lesions

This is the first clinical reference work to address specifically the relationship of focal brain dysfunction to behavioral and emotional disorders. Focal lesions produce distinctive behavioral changes, which are instructive in terms of understanding brain function as well as interpreting the symptoms of individual patients. This book offers a comprehensive account of these manifestations of brain lesions, including stroke, trauma, epilepsy, multiple sclerosis, and even neurosurgery.

A worldwide team of neuroscientists and clinicians examines the links between regional brain dysfunction and disorders of mood, thought and affect processing, and behavior. Chapters are devoted to methodological issues, to lesions of specific sites, such as the frontal lobes, basal ganglia, and thalamus, and to symptoms such as mood disorder, violent behavior, and anosognosia.

Unique in approach and authority and illustrated with informative case histories, *Behavior and Mood Disorders in Focal Brain Lesions* makes a major contribution to understanding the behavioral consequences of focal brain lesions, summarizing the current state of research, and providing the basis for improved patient care.

Julien Bogousslavsky is Professor and Chairman of Neurology at the Centre Hospitalier Universitaire Vaudois in Lausanne, Switzerland.

Jeffrey L. Cummings is Augustus S. Rose Professor of Neurology and Professor of Psychiatry and Biobehavioral Sciences at the University of California, Los Angeles.

Both editors have written extensively in neurology, neuropsychiatry, and the areas where these disciplines converge.

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Edited by
Julien Bogousslavsky
and
Jeffrey L. Cummings

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In the memory of my friend
Pierre-Henri Ganem
Julien

To Inese and Juliana
Jeffrey

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Contributors

Serge Bakchine
Hôpital Maison Blanche, SHU de Reims, France

Julien Bogousslavsky
Service de Neurologie, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland

Caterina Breitenstein
University of Trier, Trier, Germany

Louis R. Caplan
Department of Neurology, Beth Israel Deaconess Medical Center, Harvard University, Boston, Massachussetts, USA

Jeffrey L. Cummings
Department of Neurology, UCLA School of Medicine, Los Angeles, California, USA

David W. Desmond
Departments of Neurology and Pathology, SUNY Downstate Medical Center, Brooklyn, New York, USA

Frédéric Dubas
Service at Neurologie A, Centre Hospitalo Universitaire, Angers, France

Terri Edwards-Lee
UCLA Medical Center and West Los Angeles Veterans Affairs Medical Center, Los Angeles, California, USA

Paul J. Eslinger
Section of Neurology, Department of Medicine, Hershey Medical Center, Hershey, Pennsylvania, USA

Frédérique Etcharry-Bouyx
Departement de Neuropsychologie, Centre Hospitalo Universitaire, Angers, France

Laszlo Geder
Department of Behavioral Science, College of Medicine, Pennsylvania State University, Hershey, Pennsylvania, USA

Joseph Ghika
Department of Neurology, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland

Florence Ghika-Schmid
Neurologist, Lausanne, Switzerland

Jordan Grafman
Cognitive Neuroscience Section, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, Maryland, USA

Michael Habib
Neurological Unit and Laboratory of Cognitive Neurology, University Hospital La Timone, Marseille, France

Facundo Manes
Department of Psychiatry, University of Iowa School of Medicine, Iowa City, Iowa, USA

John M. Ringman
Department of Neurology, UCLA School of Medicine, Los Angeles, California, USA

Robert G. Robinson
Department of Psychiatry, UIHC, Iowa City, Iowa, USA

Sergio E. Starkstein
Department of Neuropsychiatry, Raul Carrea Institute of Neurological Research, Buenos Aires, Argentina

Daniel Tranel
Department of Neurology, Division of Behavioral Neurology and Cognitive Neuroscience, University of Iowa College of Medicine, Iowa City, Iowa, USA

Diana Van Lancker
New York University, New York, USA

Patrik Vuilleumier
Institute of Cognitive Neuroscience, University College London, London, England

Deborah L. Warden
Defense and Veterans Head Injury Program, Walter Reed Army Medical Center, Washington DC, USA

Atsushi Yamadori
Section of Neuropsychology, Division of Disability Science, Tohoku University Graduate School of Medicine, Sendai, Japan

Preface

As implied in the name, the central nervous system is a system of highly interconnected structures organized as parallel circuits of connected series of modules underlying complex human behavior and emotion. Despite the interconnected nature of the central nervous system, focal lesions produce distinctive behavioral changes and are highly instructive in terms of understanding both brain function and neurobehavioral syndromes manifested by individual patients. Studies with functional brain imaging have largely confirmed conclusions derived from observations based on the study of patients with focal lesions and investigation of brain injuries using structural and functional imaging.

The neuropsychological consequences of focal brain lesions have been relatively thoroughly studied. Memory disorders, aphasia, agnosia, apraxia, alexia, agraphia, and disorders of executive function have been intensely studied with neuropsychological and cognitive psychological approaches in the recent past. On the other hand, the emotional and behavioral consequences of focal brain lesions are more obscure and have been studied relatively little. This volume provides a comprehensive update of behavioral and emotional changes associated with focal central nervous system lesions. Abnormalities of mood, thought and affect processing, motivation, and sexual behavior are described. This volume summarizes the current state of research with regard to the behavioral and emotional consequences of localized brain lesions and provides the basis for further research and patient care.

Julien Bogousslavsky and Jeffrey L. Cummings

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