



Universiteit
Leiden
The Netherlands

On lupus of the brain : magnetic resonance imaging studies

Emmer, B.J.

Citation

Emmer, B. J. (2010, November 25). *On lupus of the brain : magnetic resonance imaging studies*. Retrieved from <https://hdl.handle.net/1887/16179>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/16179>

Note: To cite this publication please use the final published version (if applicable).

On Lupus of the Brain.

Magnetic Resonance Imaging Studies

Aan mijn ouders

On Lupus of the Brain.

Proefschrift

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof.mr. P.F. van der Heijden,

volgens besluit van het College voor Promoties
te verdedigen op donderdag 25 november 2010

klokke 16.15 uur

door

Bart Jeroen Emmer

geboren te Haarlem
in 1977.

Promotores: Prof dr. M.A. van Buchem
Prof dr. T.W.J. Huizinga

Co-promotor: J. van der Grond

Overige commissieleden: Prof. dr. F. Koning
Prof dr. A.J.M. Rozemuller
*VU Medisch Centrum Amsterdam, afdeling
Pathologie*
Prof. dr. V.H. Perry
*University of Southampton, Experimental
Neuropathology, School of Biological Sciences*

ISBN: 978-90-8559-034-7

Publication of this thesis was financially supported by the Dutch Arthritis Association (Reumafonds), Novartis Pharma BV, Sectra Benelux, Guerbet Nederland and the Imago Foundation, Oegstgeest.

Contents

Chapter 1:	Introduction	9
Chapter 2:	Detection of Change in CNS Involvement in Neuropsychiatric SLE: a Magnetization Transfer Study	17
Chapter 3:	Selective Involvement of the Amygdala in Neuropsychiatric Systemic Lupus Erythematosus.	29
Chapter 4:	Correlation of magnetization transfer ratio histogram parameters with neuropsychiatric systemic lupus erythematosus criteria and proton magnetic resonance spectroscopy: <i>Association of magnetization transfer ratio peak height with neuronal and cognitive dysfunction</i>	39
Chapter 5:	Brain Involvement in Rheumatoid Arthritis: a Magnetic Resonance Spectroscopy Study	53
Chapter 6:	Perfusion MRI in Neuro-Psychiatric Systemic Lupus Erythematosus	65
Chapter 7:	Tract Based Spatial Statistics on Diffusion Tensor Imaging in Systemic Lupus Erythematosus Reveals Localized Involvement of White Matter Tracts	79
Chapter 8:	Summary	91
	Publications	103
	Curriculum Vitae	107
	Acknowledgment	111
Appendix	A,B,C.	115

