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STUDY OF SPECT IN DEPRESSIVE DISORDERS

Thesis submitted for partial fulfillment of the requirements of the M.D Degree In Psychiatry

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To my family, my husband and my daughter

Nahla Nagy



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Errata

Page	Wrong	Correction
9	thrombotic or embolic	thrombotic,embolic or hemodynamic
13	(Abd El Moneim, 1994)	(Abd El Moneim et al, 1994)
13	stable	unstable
29	(Guibelei et al,1990)	(Suhara et al, 1992)
69	Patients /Controls	Controls/ Patients
117	(Bracke-Tolmitt et al, 1986)	1989
130	(D'Elia G and Perris C,1973	3) 1987
131	(Devous MD and Leroy RF 1989)	, shift upward after (Devanand et al,1991)
134	(Holman et al,1985)	shift upward after (Hoffman et al,1991)
135	(Holman et al,1991)	shift upward after (Holman et al,1985)
135	(Holman BL and Devous MD SR,1992)	shift upward after (Holman et al,1991)

INTRODUCTION & AIM OF THE WORK

INTRODUCTION

Single photon emission computed tomography (SPECT) techniques provide a powerful window into the function of the brain and promise to become an important component of the clinical evaluation of patients with neurological and psychiatric diseases.

Functional SPECT provides a unique tool to explore the hemodynamic and biochemical consequences of diseases that affect the brain.

Substantial literature has emerged charting potentially powerful applications of functional brain SPECT in cerebrovascular diseases, dementia, epilepsy, schizophrenia and affective disorders.

Few studies were performed in the field of affective disorders. During the last decade, there have been several reports of alterations in resting cerebral perfusion or metabolism in patients with various forms of depression.

Additional investigations reported on the effects of medications, electroconvulsive therapy and cognitive tasks on cerebral physiology in mood disordered patients.

However, these studies were few in number and their results were controversial, which encouraged us to do this work that may help to answer the question, whether brain SPECT is of benifit in defining the anatomy of depression.

We are going to review in brief how SPECT works and its benefit in the field of neuropsychiatry.