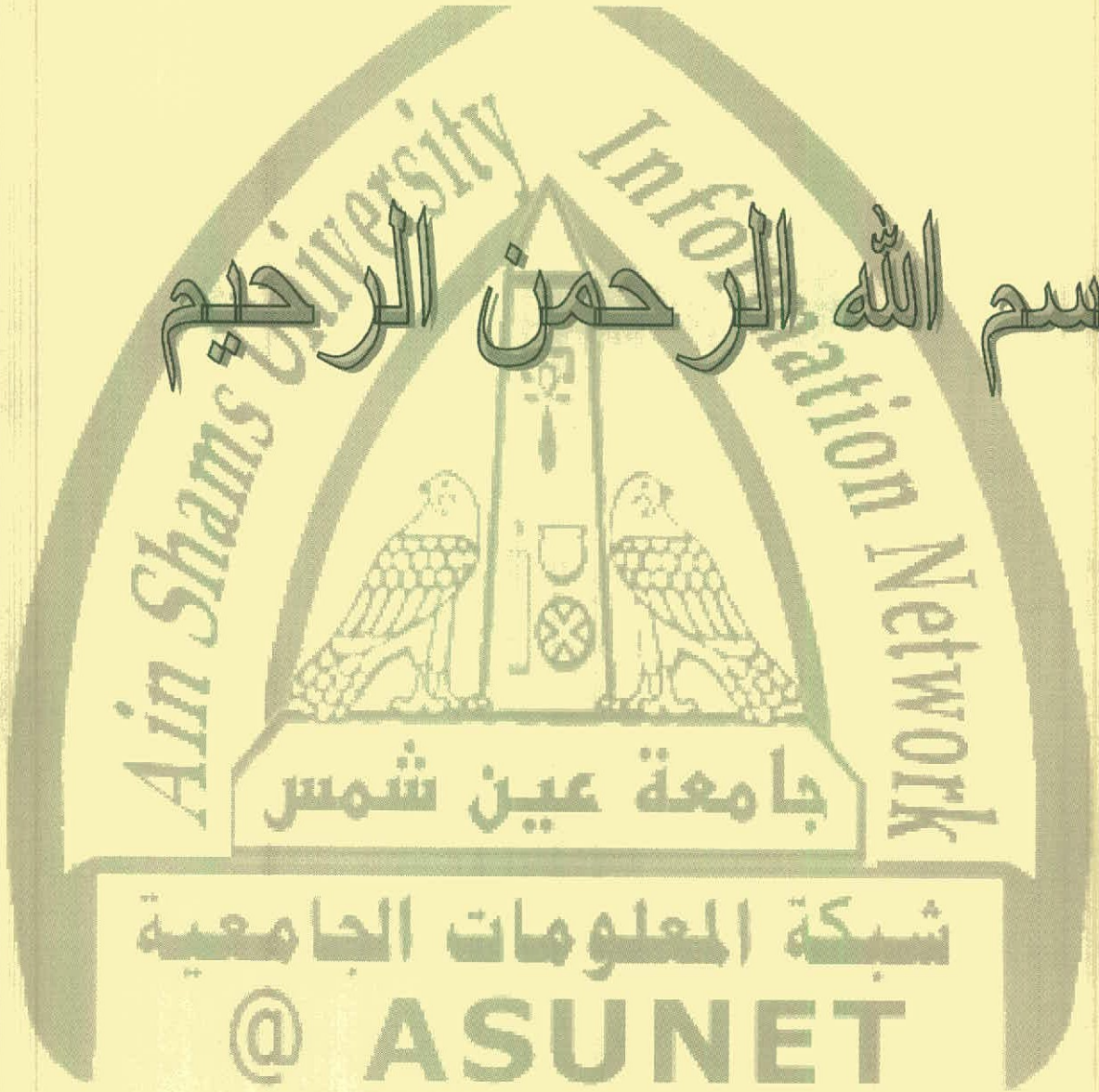
شبكة المعلومات الجامعية



بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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بالرسالة صفحات لم ترد بالاصل

NEUROPSYCHOLOGICAL FUNCTIONING IN EUTHYMIC ADOLESCENT PATIENTS WITH BIPOLAR DISORDER

Thesis

Submitted in partial fulfillment of master degree in

Psychiatry and Neurology

By

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محضر
اجتماع لجنة الحكم على الرسالة المقدمة من
الطبيب/ محمد عبد السميع
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في الطب النفسي

تحت عنوان : باللغة الإنجليزية : Neuropsychological functioning in euthymic adolescent patients with bipolar disorder

: باللغة العربية
الوظائف العصبية النفسية المعرفية لمرضى اضطراب الوجدان ثنائي القطب

بناء على موافقة الجامعة بتاريخ ١٧ / ١٠ / ٢٠١١ تم تشكيل لجنة الفحص والمناقشة للرسالة المذكورة أعلاه على النحو التالي :-

١. أ.د. طارق عبد الرحيم ... من المشرفين
٢. أ.د. أحمد عبد اللطيف عبد الحميد ... ممتحن داخلي
٣. أ.د. مصطفى محمود كفافي ... ممتحن خارجي

بعد فحص الرسالة بواسطة كل عضو منفردا وكتابة تقارير منفردة لكل منهم انعقدت اللجنة مجتمعة في يوم الثلاثاء بتاريخ ٢٢ / ١١ / ٢٠١١ بقسم الطب النفسي (ع) بكلية الطب – جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضوع الرسالة والنتائج التي توصل اليها وكذلك الأسس العلمية التي قام عليها البحث .

قرار اللجنة :

قبول الرسالة

توقيعات أعضاء اللجنة :-

المشرف / الممتحن	الممتحن الداخلي	الممتحن الخارجي

عصام

ABSTRACT

Background: Wide ranging neuropsychological deficits have been found in the euthymic phase of bipolar disorder in both adult and adolescent patients in several studies.

Aim: To assess sustained attention, auditory and visual short term memory, mental processing speed and set shifting abilities in adolescent patients with bipolar disorder , type I in the euthymic phase.

Method: Thirty adolescent patients with bipolar disorder, between ages 13-19 yrs. of both sexes, were recruited fom Kasr el Eini psychiatric outpatient clinic and the diagnosis of bipolar disorder was ensured and exclusion of other psychiatric comorbidities was done using the K-SADS-PL. Euthymia was defined as scores 7 or below on both the HDRS and YMRS.A control group matched in age, sex and educational level was recruited and both cases and controls were subjected to the letter cancellation test,digit span and digit symbol subtests of the Arabic version of Wechsler intelligence scale, bender gestalt test and Wisconsin card sorting test.

Results: The patients included in the study showed poorer performance than the controls in all the neuropsychological tests applied, with a statistically significant difference between the mean scores of the groups. The number of manic episodes and the age of illness onset was positively correlated to the mean number of omission errors in the letter cancellation test. Female patients showed a statistically significant better performance than male patients in the digit symbol coding test. but there were no significant gender differences in the scores of the other tools applied.

Conclusion: There are neuropsychological deficits in the areas of sustained attention, set shifting, processing speed and visual and auditory short term memory in euthymic adolescent patients with bipolar disorder, type I. There is a significant correlation between the number of manic episodes as well as age of illness onset and sustained attention. The female patients in our study have a faster mental processing speed than male patients. The presence of the above mentioned neuropsychological deficits in the euthymic phase of bipolar disorder in adolescent patients with few number of episodes and short duration of illness may represent a possible trait marker of the illness, though more research in this area is needed to establish whether these deficits represent stable trait markers or not.

Keywords: Bipolar disorder, neuropsychological functions, euthymia

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LIST OF ABBREVIATIONS

(^{1}H) MRS	:	Proton magnetic resonance spectroscopy
^{11}C-SCH2330 PET	:	Methionine positron emission tomography
^{31}P MRS:	:	Phosphorous magnetic resonance spectroscopy
5HT T 11	:	Long variant of serotonin transporter
5HT T	:	Serotonin transporter
5HT Tss	:	Short variant of serotonin trransporter
5HT	:	Serotonin
$5HT1_A$	:	5-beta hydroxytryptamine receptor 1
AACAP	:	American Academy of Child and Adolescent Psychiatry.
APA	:	American Psychiatric Association
APT	:	Attention process training
ATP	:	Adenosine triphosphate
ACC	:	Anterior cingulate cortex
ADHD	:	Attention deficit hyperactivity disorder.
BAS	:	Behavioral approach system
BADS	:	Behavioural Assessment of the Dysexecutive Syndrome
BD	:	Bipolar Disorder
BORB	:	Birmingham Object recognition battery
BOLD	:	blood-oxygen level dependent
BDNF	:	Brain Derived Neurotrophic factor
CVLT	:	California verbal learning test
CANTAB-ID-ED	:	Cambridge automated neuropsychological testing battery intradimensionsional/extadimensional
COMT	:	Catechol O methyl transferase
Cho	:	Choline containing compounds
CFH	:	Cognitive flexibility hypertext
CFT	:	Cognitive flexibility theory
CT	:	Computed XRay tomography
CPT-IP	:	Continuous performance task-identical pairs version
CPT	:	Continuous performance test
Cr	:	Creatine
DAOA	:	D- amino acid oxidase activator
DAO	:	D-amino acid oxidase

DSM III	:	Diagnostic and Statistical manual of mental disorders-3rd edition
DSM IV-TR	:	Diagnostic and Statistical manual of mental disorders-4th edition-text revised
DISC-1	:	Disrupted in Schizophrenia 1
DLPFC	:	Dorsolateral prefrontal cortex.
ECT	:	Electroconvulsive therapy
EE	:	Expressed emotions
FDA	:	Food and Drug Administration
fMRI	:	Functional magnetic resonance imaging
GABA	:	Gamma-aminobutyric acid
HDRS	:	Hamilton depression rating scale
IF	:	Inference
IQ	:	intelligence quotient
IM	:	Intramuscular
JBD	:	Juvenile bipolar disorder
LD	:	Linkage disequilibrium
LIP	:	Lateral intraparietal area
LNNB	:	Luria-Nebraska Neuropsychological Battery.
MR	:	Magnetic resonance
MRI	:	Magnetic resonance imaging
MRS	:	Magnetic resonance spectroscopy
MSP	:	Most severe past episodes
Ino	:	Myo-inositol
NAA	:	N- acetyl aspartate
NP-BD	:	Non psychotic bipolar disorder
PIQ	:	Performance intelligence quotient.
PCr	:	Phosphocreatine
PDE	:	Phosphodiesters
PME	:	Phosphomonoesters
PET	:	Positron emission tomography
PFC	:	Prefrontal cortex
proBDNF	:	Pro brain derived neurotrophic factor
PALPA	:	Psycholinguistic assessment of language processing in adult acquired aphasia
RRP	:	Readily Releasable Pool