SUMMARY & CONCLUSION

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SUMMARY

The aim of this work is to evaluate the autonomic manifestations and the study of the psychiatric and the psychometric manifestations in the complex partial seizures and the primary (idiopathic) grand mall epilepsy.

The study of this thesis was done on two epileptic groups: the first group includes 50 patients suffering clinically from complex partial seizures and the second group includes 50 patients suffering clinically from primary grand mal epilepsy. All patients were selected to fulfill the criteria mentioned in details in the "SUBJECT AND METHOD" section of this thesis.

All patients in each group were subjected to the following:

- 1- Clinical assessment include:
 - (a) Thorough history taking.
 - (b) A detailed conducted neurological examination.
 - (c) A detailed and throughly conducted psychiatric

- examination with special emphasis on the cognitive and mental functions.
- (d) Physical examination includes all body systems and routine investigations when needed.
- (e) Full epilepsy sheet taking. (The sheet of Epilepsy
 Outpatient Clinics of Kasr El-Aini Hospital)
- 2- Electroencephalographic (EEG) recording for vertification of diagnosis,, detection of the laterality of the focus and its correlation to the cognitive manifestations.
- 3- Computed Axial Tomography to detect any brain lesions.
- 4- Evaluation of the autonomic changes in both patients groups by:
 - (a) Clinical examination to detect blood pressure, respiratory and heart rate changes, dizziness, fainting, sweating, flushing ...etc.
 - (b) Autonomic tests include response of blood pressure to stand and to stress.
 - (c) Electrocardiographic (EEG) screening to detect specific changes in its various components.
- 5- Psychometric assessment by:
 - (a) Wechsler-Adult Bellevue Intelligence Scale (Arabic version) to detect intellectual and momory changes.

- (b) Middlesex Hospital Questionnaire (Arabic version) to demonstrate abnormal personality traits of anxiety, phobia, obsessionalism, psychosomatic, depression and hysteria.
- (c) Minnesota Multiphasic Personality Inventory (Arabic version) to demonstrate abnormalities of specific selected scales of schizophrenia, paranoia, and psychopathy.

Actual statistical analysis of the resulting data using specific computer program revealed the results which were mentioned in details in the "RESULTS" section of this thesis.

The following generalization can be made:

1- Autonomic manifestations:

- (a) Dizziness, fainting and impotence occure more significantly in the CPS group than in the GME group.
- (b) Abnormal response of blood pressure to stand and to stress occure more significantly in the CPS group than in the GME group.

(c) Two specific features of the ECG, arrhythmia and prolonged QT interval occure more in the CPS group. However no significant difference in various components of the ECG between the two groups.

2- Psychiatric and psychometric manifestations:

(A) Wechsler-Bellevue Intelligence Scale:

- There is no a significant difference between the CPS and the GME groups on the different subscales of the WAIS except on the information and the digit span subscales being lower in the CPS group. The different I.Q. scores of both groups lie in the below average level of the standards. The different I.Q. scores of the GME group were better than that of the CPS group.
- I.Q. values seem to be differentially related to the laterality of the focus. Patients with left hemispheric focus tended to have the lower verbal I.Q values, while those with right hemispheric focus have the lower performance I.Q. values.
- There is a positive significant correlation between long duration of epilepsy, high frequency of epileptic fits, incidence of status epilepticus, and

the EEG abnormalities on one hand and the development of cognitive and intellectual deterioration on the other hand.

There is a negative significant correlation between momory subscales of WAIS, and different I.Qs on one hand and the duration of epilepsy, frequency of epileptic fits and the incidence of statue epileptcus on the other hand.

(B) Middlesex Hospital Ouestionnaire:

- There is a significant difference between the CPS and the GME groups on the anxiety, psychosomatic and depressive traits, being higher in the CPS group.
- The right hemispheric focus subgroup has the significantly higher means on the anxiety, and depressive scales of the CPS group and on the anxiety and psychosomatic scales of the GME group.
- There is a positive correlation between the duration of epilepsy and the frequency epileptic fits on one hand and the development of neurotic disorders on the other hand.

(C) Minnesota Multiphasic Personality Inventory:

- There is no significant difference between the CPS and the GME groups on the selected personality traits of schizophrenia, paranoia and psychopathy.
- The incidence of schizoid and psychopathic personality trait were significantly higher in the left hemispheric focus subgroup.
- There is no a significant correlation between the duration of epilepsy and the frequency of epileptic fits on one hand and the development of personality traits of the MMPI on the other hand.

CONCLUSIONS

From the results obtained in this research, it is evident that:

- (1) Dizziness, fainting and impotence occur more significantly in the CPS group than in the GME group.
- (2) Abnormal response of blood pressure to stand and to stress occure more statistically significant in the CPS group than in the GME group.
- (3) Other clinical autonomic manifestations and different ECG variables were proved to show no significant difference between the two groups, however arrhythmia and prolonged Q.T interval occur more in the CPS group.
- (4) There is no significant difference between the two epileptic groups on different intellectual variables of the Wechsler-Bellevue Adult Intelligence Scale except for memory subscales (Information and digit span) which are lower in the CPS group.
- (5) The different I.Q scores of both groups lie in the below average level of the standards.
- (6) Clinical and EEG manifestations in the form of long duration of epilepsy, more frequent seizures, status

- epilepticus and abnormal electrical activity are significantly correlated with limitations of cognitive abilities (decrease of I.Qs. and increase of deterioratrion indices).
- (7) There is a correlation between more EEG lateralization to the left hemispheric side of the brain and lowering of the verbal I.Q.
- (8) There is also, a significant correlation between more incidence of right sided hemispheric foci and more lowering of the performane I.Q.
- (9) There is a significant difference between both groups on the anxiety, psychosomatic and depressive traits of Middlesex Hospital Questionnaire, the CPS group showed higher scores than the GME group.
- (10) The duration of epilepsy, frequency of fits and the EEG laterality are significantly corrlated with more incidence of neurotic traits.
- (11) The right hemispheric focus subgroup has the significantly worse (higher) scores on the anxiety and depressive scales of the CPS group and on the anxiety and psychosomatic scales of the GME group.
- (12) There is no significante difference between both groups on the schizophrenic, pranoia, and psychopathic

scales of the Minnesota Multiphasic Personality Inventory.

- (13) These personality traits were not significantly correlated with the duration of epilepsy and the frequency ofits but the incidence of schizoid and psychopathic traits were significantly higher in the left hemispheric focus group.
- (14) Further studies are recommended to uncover the underlying aetiological factors of these autonomic changes, intellectual deterioration and psychiatric manifestations of epilepsy whether it is due to ictal or interictal brain activities, an effect of prolonged antiepileptic drugs or diffuse brain damage.