IAGNOSIS AND MANAGEMENT OF [illegible]
IN INFANCY AND CHILDHOOD

A REVIEW

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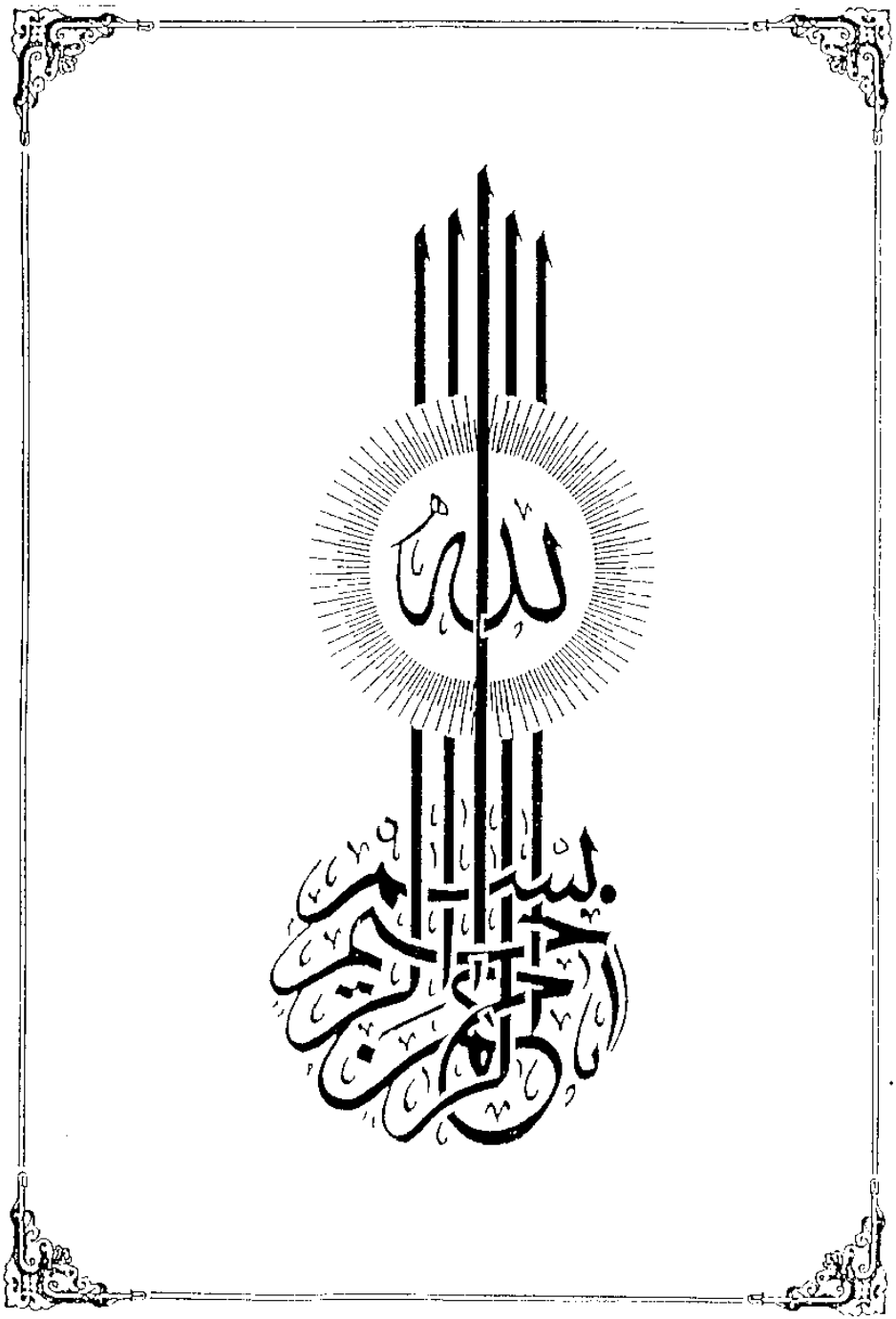

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CHAPTER I

CHAPTER (1):

Statement of the problem:

1. Introduction and importance of the study.

2. Aim of the work.

INTRODUCTION AND IMPORTANCE OF THE STUDY

Epilepsy is among the most frequent symptoms in pediatrics and constitutes the commonest symptom of all those presenting to the pediatric neurologists (Tunessen WW, 1988)

Definition of Epilepsy:

Epilepsy could be defined as recurrent attacks, primary cerebral in origin, in which there is disturbance of movement, feeling or consciousness. Physiologically it could be defined as paroxysmal cerebral dysrhythmia (Tunnessen WW, 1988)

History of Epilepsy:

Epilepsy is one of the oldest recorded medical conditions known to mankind. It has been always impressive because its alarming and dramatic appearance. The early writings on this subject contributed little to either the understanding or the treatment of this disorder (Sander JW, 1986 and Ewart A,Louis S, 1972).

In the very early days, it was not recognized as a disease,but an omen,an evil curse, a spell that has been casted upon the unlucky victim. The idea that

epilepsy is a disease have been proposed by physicians long before the time of Hippocrates (Gordon H,1964). Arabs mentioned that epilepsy affects young ages. They recognized visual and auditory auras as well as twitches of the face and eye lids. They mentioned that epilepsy frequently occurs without noticeable convulsions and may lead to hemiplegia and may be caused by parasitic worms (Hussein MK, 1977).

In the first half of sixteenth century Jean Fermel emphasized the hereditary tendency in the pathogenesis of epilepsy but did not exclude possession. (Sorour AH,1982).

Jackson, the father of the modern concepts of epilepsy, proposed that seizures were caused by occasional, sudden,excessive, rapid and local disharges of the gray matter and that generalized convulsions resulted when normal brain tissue was invaded by seizures actively initiated in the abnormal focus. (Gower WR, 1974).

In 1929, Electroencephallography (EEG) was discovered by Hans, Berger. He found that electrical activity of the brain can be detected through the unopened skull and scalp and recorded when adequately amplified. It was found that different patterns of

abnormal discharges are associated with different types of seizures. (Gordon H, 1964).

The first drug found to be effective in the management of epilepsy was bromides introduced by Sir Charles Locock in 1857.Barbiturates were not introduced until 1912, and did not come into general use as anticonvulsant till about ten years later (Dixon M, 1972).

In 1932 Meritte and Putarran initiated a new era in the pharmacotherapy of epileptic by their discovery of diphenyl hydantoin (DPH).(Gordon H, 1964).

Uptill now,the diagnosis of epilepsy still carries a heavy burden in most societies. It is viewed with differing degrees of fear, dread and suspicions through all human races. However, epilepsy has remained an enigma and many questions, the answers to which are fundamental to understanding of epilepsy and essential to effective treatment, remain unanswered.

AIM OF THE WORK

This study has the following aims (objectives);

1. To find out the most recent classification of epileptic seizures.
2. To find out the proper ways of diagnosis and management of epilepsy in infants and children.

CHAPTER II

CHAPTER : 2

Review of Literature:

1. Classification of epileptic seizures.
2. Aetiology of epilepsy.
3. Investigations of epilepsy.
4. Treatment of epilepsy.
5. Prognosis of epilepsy.
6. Side-effects of anticonvulsant drugs.
7. Status epilepticus.
8. Febrile convulsions.

REVIEW OF LITERATURE

Classification of Epileptic Seizures

The need for an agreed classification of epileptic phenomena has been increasingly reecognized.

According to Masland,"The development of a uniform and generally accepted classification of disease is an essential step in the understanding of the underlying processes and in establishing communication through which the result of scientific investigation may be compared and evaluated (Wright ES, 1984).

Classification of epileptic phenomena is also of practical importance, medication should be prescribed according to seizure type (Ahmed A, 1987) Traditionally attacks of epilepsy were divided into major epilepsy (grand mal), minor epilepsy (petit-mal), focal epilepsy (Jacksonian epilepsy), temporal-lobe epilepsy (psychomotor epilepsy), and myoclonic attacks. However, this descriptive classification has become increasingly unsatisfactory.

Many new classifications have been proposed by using various parameters; etiology, symptomatology,

duration, precipitation factors, postictal phenomena and aura.

the International League Against pilepsy (ILAE) under the chairmanship of Henri Gastant (1981) gave a comprehensive classification of epilepsy (Sender JW, 1986 and Aicardi J, 1986 and Huttenlocher PR, 1987).

It divides epileptic seizures into two major groups (Table I):

1. Partial seizures.
2. Generalized seizures.

Depending upon the clinical presentation plus information yielded by EEG data (Table I).

Clinical characteristics of the different types of seizures according to the previous classification:

I. Partial seizures:

Affect only one cerebral hemisphere in part (i.e. a small focus of the cerebrum) or totally (Sander JW, 1986).

Consciousness is preserved but certain cognitive functions may be transiently impaired, such as speech in seizures involving the dominent hemisphere (Huttenlocher PR, 1987).

These types of seizures are possible at all ages but more frequent with increasing age (Aicardi J,1986).

A partial seizure discharge may spread to both hemispheres,and the seizure is then said to be secondarily generalized (Sander JW, 1986). This seizure starts focallly as evidenced by an EEG focus or by the clinical features of the seizure, and then develop into one of the form of generalized seizure. The presence of aura indicates a partial seizures,it means that a focus of discharge is in the cerebral cortex, the content of an aura depends on the location of lesion in the cerebral cortex (Ahmed A,1987) In certain cases, spread of discharge from a focus is so rapid that the patient does not have an aura but looses consciousness, and then has a generalized seizures. Such cases may be difficult to differentiate from primary generalized seizures, but the EEG may help. In the secondarily generalized type there is a focal abnormality seen (Sander JW, 1986).

II. Generalized seizures:

Afffect the brain as a whole:They are characterized by initial imparment of consciousness, (but the period of loss may be so short as to be hardly noticeable, example in generalized myoclonic seizures), motor