# MIGRAINE AND ITS RELATION TO FOOD ALLERGY

# A THESIS

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By


*Magdy Mehanny Arsanious*

( M. B. B. Ch. )




Supervisors


Prof. Dr.
Mohamed Diaa El-Din Soliman
Prof. of Medicine

Prof. Dr.
Sameha Abdel Monem
Prof. of Neurology

Dr. Foze Abbas El-Shaib
Assist. Prof. of Medicine

Dr. Laila El-Shawarby
Lect. of Clinical Pathology

Faculty of Medicine

Ain - Shams University


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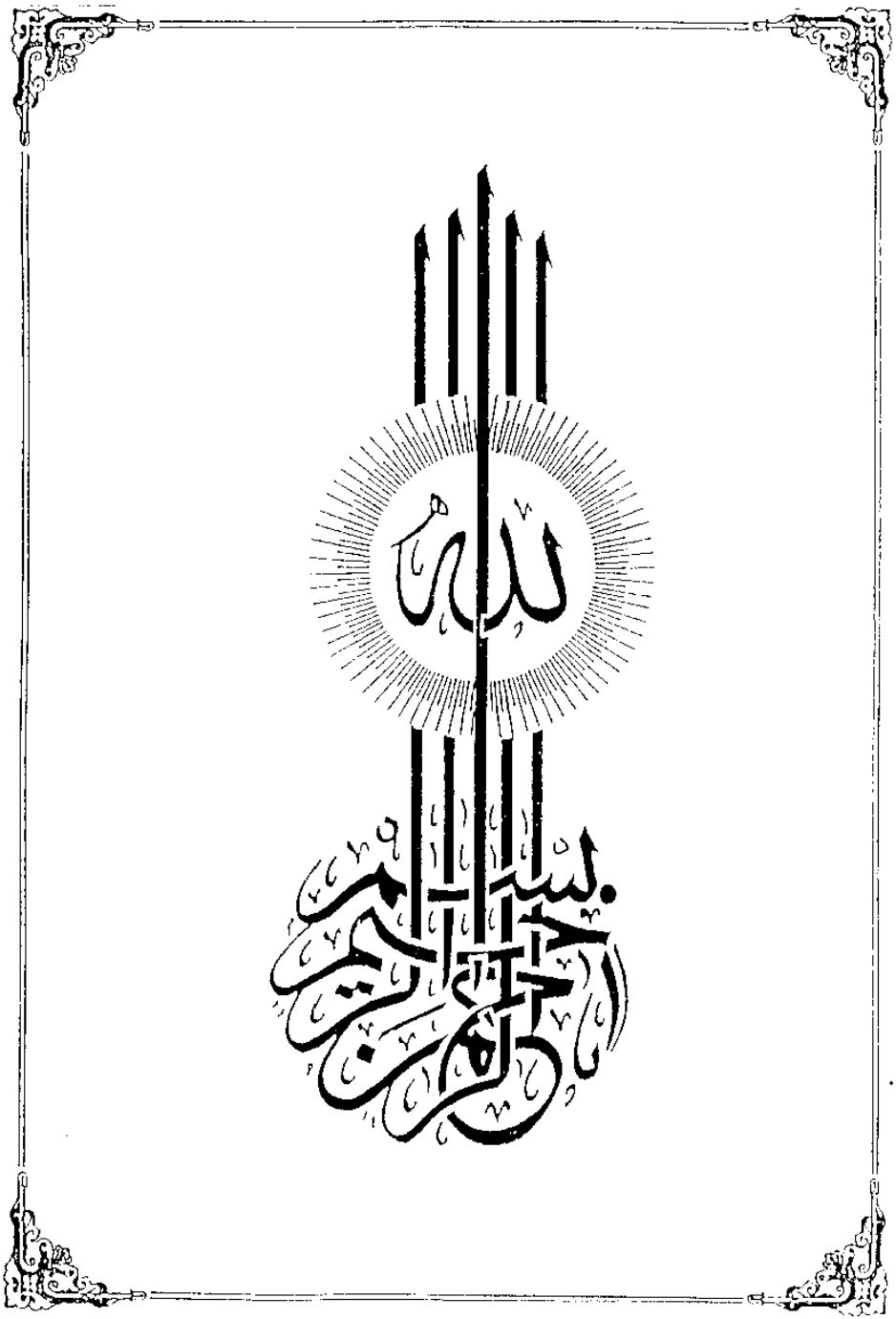

# C O N T E N T S

# INTRODUCTION

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Although the pathogenesis of migraine is well known now to be vascular, yet the aetiology is mostly undetermined. Apart from histamine and tyramine headaches, no other causative factor is definitely detected.

In recent years several reports have introduced foods as definitive causative agents. The diagnosis was based on the elimination of the suspected foods, so that complete cure, and drug independence were achieved by total elimination of one, or more articles of the causative diet. Specific gamma (E) antibodies were found to rise in these cases .

The present thesis will review, and investigate this problem, and will detect the presence of atopic constitution among the patient with migraine.

# REVIEW OF LITERATURE

# M I G R A I N E

## INTRODUCTION :

Migraine is a term derived from the Greek spavia, hemicrania. It is used by Germans(migrane), the French(migraine), and the English (megrin) to denote recurrent headaches of formerly unknown etiology.

## DEFINITION :

### Previous definition :

Few authors have committed themselves to a definition. (Lord Brain) defined migraine as: "A paroxysmal disorder characterised in its fully developed form by visual hallucinations, scotomas, and other disturbances of cerebral function, associated with unilatral headache and vomiting". He thus restricted his definition to classical migraine, which affects only I5-20 % of patients.

(Frank Elliot's, I97I) definition is " A form of vascular headache which consists essentially of episodic headache of brief duration, separated by intervals of compl-

ete freedom, and associated in some cases with transient neurological ,and gastrointestinal symptoms".

Other investigators have used criteria for delineating migraine. Thus Vahlquist's criteria were :

(I) Paroxysmal recurring headache separated by free intervals .

(2) At least two features from: unilateral headache , nausea, scotoma or related phenomena, and family history.

(Vahlquist, I955)

(Barolin, I969) used 3 criteria :

(I) Severe headache.

(2) A clear-cut beginning, and end to attacks .

(3) Periodic recurrence.

Barolin's criteria apply equally to cluster headaches.

(Horton) required two, or more of the following :

(I) Attacks of a consistent nature, and duration associated with vomiting.

(2) Prodromal symptoms .

(3) Unilateral headaches in at least two members of the. Family.

(4) Duration of a typical attack 36 hours or more.

(5) Completely pain-free intervals.

Horton omits photophobia, and emphasises unilaterality of headache. (Horton , I94I) .

The new definition of migraine :

Episodic headaches lasting 2 to 72 hours, with total freedom between attacks. The headache must be associated with visual, or gastrointestinal disturbances, or both . The visual symptoms occur as an aura before, and/or photophobia during, the headache phase. If there are no visual but only alimentary disturbances, then vomiting must feature in some attacks. (Blau , I984) .

The novel feature of this definition is the limitation of duration of attacks. Migraine headaches do not last minutes, and that an attack lasting longer than 3 days was defined as status migrainosus . (Cooke, I983).

Also the quality of the headache has been omitted because patients experience difficulty in describing what the pain was like. Further, a throbbing sensation may be absent, or present at the height of an attack, and only rarely throughout the headache phase .

INCIDENCE OF MIGRAINE :

It has been estimated that at least 70% of the population of the United States have experienced some type of headache problem in their lives (Ogden, 1952), and (Zeigler et al, 1972). The National Migraine Foundation has estimated that almost twelve million Americans experience variants of migraine (Adams et al, 1980).

(Bakal, 1975) reported the incidence to vary from 3% to 12% of the population, while epidemiologic studies in the United Kingdom reported a range from 23% to 29% in females, and 15% to 20% in males. Reasons for such differences are unclear.

(Selby, and Lance, 1960) reported 60% more female migraine sufferers than male. A recent study by (Zeigler et al, 1972), however, found very little difference in the incidence of migraines across sexes. It is also interesting to note that the higher incidence of migraines in females is not present in children before puberty (Zeigler, 1976).

The age at which headaches begin to occur is helpful in the determination of headache type. Headaches beginning

in childhood, and adolescence are frequently migraine in nature. The mean age of onset is twenty years, although migraines are relatively common at ten years of age, and have been reported as early as eighteen months (Selby , and Lance, I960). After the age of thirty, the probability of developing vascular headaches is greatly decreased (Adams et al, I980).

The frequency of headache in the majority of migraine cases varies from one to four episodes per month (Selby , and Lance, I960). It has been found that when the individual experiences more than ten headaches per month, tension headaches are also likely to be present. (Selby, and Lance, I960). The duration of pain ranges from four to twenty-four hours. Severity is commonly associated with the presence of prodromal symptoms, the unilateral/bilateral distribution of pain, and the presence of nausea (Adams et al, I980).

Spontaneous remissions may occur, and migraine tends to diminish in frequency, and severity with increasing age. Although frequency may be affected by the menopause, care should be taken in diagnosing migraine starting aft-

er 40 years of age. (Greenhall, 1983).

## CLASSIFICATION AND CLINICAL PICTURE OF MIGRAINE :

### (I) Classic migraine :

In this type, 20 to 40 minutes preceding the headache, the patient develops visual symptoms, usually referred to as photopsia, which impair vision in part of the visual field. In children the aura may be the outstanding feature, while in older patients the visual symptoms may occur without the subsequent development of headache. Visual symptoms include scintillating scotomata or "seeing stars". The prodromal symptoms of photopsia develop to a maximum just before the headache begins, and then recede. Other symptoms may include hemiparesthesias, mild hemiparesis, dysphasia, and monocular photopsia.

The headache begins as a dull ache in the supraorbital, retro-orbital, or frontotemporal area on one side. Occasionally, it develops in the parietal, or occipital region, but this is unusal. It is unilateral, and as the pain increases in intensity, it takes on a pulsating, or

throbbing character, rises to a crescendo, and then persists as an intense, constant pain. The patient is pale, nauseated ( and usually vomits). The pupils are dilated, and so the patient prefers to lie in a darkened room. Rarely, some patients develop flushing of the face, constricted puplis, and diffuse perspiration. In some cases there is marked diuresis toward the end of the attack. The headache is usually terminated by sleep. There is a feeling of relief on awakening, and being free of the headache.

Occasionally, the headache, nausea, and vomiting will last for two, or three days accompanied by increasing weakness, prostration, and distress. This may leave the patient with a feeling of fatigue, and listlessness for several days after the headache abates .

(2) Common migraine :

In this type the prodromal symptoms are sometimes absent, or consist of a brief period of photopsia, or blurred vision, and the headache is occasionally bilateral from the onset. The same degree of prostration, nausea, vomiting, and retching accompanies the headache in most

cases , and the condition is similar to classic migraine in every thing except for the lack of the prominent prodromal phase.

Calling attention to certain relationships of this type of headache to enviromental, occupational, menstrual, or other variables are such terms as : "summer", "Monday", " relaxation", "premenstrual", and "menstrual" headache. (Ad Hoc Committee on classification of headache, I962).

(3) Cluster headache :

Vascular headache predominantly unilateral on the same side, usually associated with flushing, sweating, rhinorrhea, and increased lacrimation, brief in duration, and usually occurring in closely packed groups separated by long remission. (Ad Hoc Committee on classification of headache, I962) .

(4) Hemiplegic migraine :

An occasional migraine patient may experience symptoms of numbness , and/or weakness preceding the onset of headache . The symptoms often begin in the hand, or lower limb, and spread progressively until the whole of one side