

Migraine as a common problem in adult age group in Baiji

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Abstract

Migraine is a medical condition, most people who suffer from migraine get headache that can be quite severe. Data was collected randomly in Baiji hospital from June 2009 to September 2009 from 100 adult cases suffering from migraine (50 male and 50 female). The data was obtained by using questionnaire which contained many questions concerning the occurrence of headache. It was found that in 55% of male cases the attack of migraine started at age of 20 years, 26% at age of 30 years and 19% at age of above 30 years, while in female, the attack started at age of 20 years in 70% of cases, 18% at age of 30 years and 12% at age of above 30 years. About the aggravating factors of attack, in female the menstrual factor is most common cause as the menstruation is one of the most significant physiological factors that may trigger migraine, while in male, the stress and tension is most common cause of migraine attack. About the duration of attack, in most common cases the duration is less than one week in male and female. About the self management which is used by these cases to relieve the headache, it was found that the most common cases in male was treated by avoiding the aggravating factors while in female treated by medication.

الصداع النصفي كمشكلة أكثر شيوعاً في الأشخاص البالغين في ببجي

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المستخلص

الصداع النصفي هو من الحالات المرضية الأكثر شيوعاً ومعظم الأشخاص المصابين به يعانون من صداع شديد وفي هذا البحث تم جمع المعلومات من الأشخاص البالغين والمصابين فعلاً بالصداع النصفي في مستشفى ببجي العام للفترة من شهر حزيران 2009 إلى أيلول من نفس العام وشملت الدراسة 100 شخص مصاب بالمرض (50 ذكور و50 إناث). نتائج الدراسة أثبتت بأن 55% من الذكور أصابهم المرض وهم في عمر 20 سنة و26% في عمر 30 سنة و 19% للأعمار أكثر من 30 سنة. أما في الإناث فالنتيجة هي 70% في عمر 20 سنة و 18% في عمر 30 سنة و 12% للأعمار أكثر من 30 سنة. أما بالنسبة للعوامل المسببة للمرض والأكثر شيوعاً فتشمل في الإناث الدورة الشهرية وذلك لأن الدورة الشهرية من العوامل الفسيولوجية المهمة التي تساعد على زيادة نوبات الصداع النصفي وذلك نتيجة التغيرات الهرمونية التي تحصل خلال هذه الفترة مثل هرمون البروجيسترون والايستروجين. أما في الذكور فإن الشد العصبي والضغط النفسية تعتبر من العوامل التي تساعد على زيادة نوبات الصداع. أما ما يتعلق بفترة استمرار هذه النوبات فإنها تستمر أقل من أسبوع في غالبية المرضى. معالجة نوبات الصداع في الذكور تكون بتجنب العوامل المسببة في الغالبية العظمى منهم، أما في الإناث فتكون بالأدوية في معظم الحالات.

Introduction

Migraine is a medical condition, most people who suffer from migraines get headache that can be quite severe. A migraine headache is usually an intense, throbbing pain on one, or some times, both sides of the head. Most people with migraine headache feel the pain in the temples or behind one eye or ear, although any part of the head can be involved beside pain, migraine also can cause nausea, vomiting and sensitivity to light and sound. Some people also may see spots or flashing lights or have a temporary loss of vision.^[1] Migraine can occur any time of the day, though it often starts in the morning and the pain can last a few hours or up to one or two days and some people get migraines once or twice a year, most of the time migraines are not a threat to year overall health but migraine attack can interfere with year day-to- day life, the exact cause of migraine is not fully understood, most researchers think that migraine is due to abnormal changes in levels of substances that are naturally produced in the brain.^[1] When the levels of these substances increase, they can cause inflammation and this inflammation then cause blood vessels in the brain to swell and press on nearby nerves, causing pain, people with migraine react to a variety of factors and events called triggers, these triggers can vary from person to person and don't always lead to migraine, and a combination of triggers not a single one or event is more likely to set off an attack, the response to triggers can vary from person to person.^[1] There are many forms of migraine, the two forms seen most often are migraine with aura and migraine without aura. Migraine with aura (previously called classical migraine. With a migraine with aura, a person might have these sensory symptoms (the so called aura) 10 to 30 minutes before an attack:

A- seeing flashing lights, zigzag lines or blind spots

B- numbness or tingling in the face or hands.

C- disturbed sense of smell, taste, or touch^[2]

Migraine has no cure, but the migraine can be managed with doctor's help, there are two types of treatment of migraine; with drugs: stopping migraine progress (called abortive or acute treatment) and prevention, many people with migraine use both forms of treatment. Acute treatment include pain relieve drugs such as aspirin, acetaminophen or non-steroidal anti-inflammatory drugs like ibuprofen, mefenamic acid and other, if these drugs don't work, two classes of drugs that often used:

-Triptans which work by balancing the chemicals in the brain like sumatriptan, rizatriptan, and frofatriptan.

-Ergot derivatives (ergotamine tartrate and dihydroergotamine) which work in the same way as triptans.

Prevention include some medication that used daily prevent attacks, many of these drugs were designed to treat the other health conditions such as epilepsy and depression like antidepressant, anticonvulsants, beta-blockers and calcium channel blockers.^[2] The aim of this study is to identify the prevalence of migraine in adult age group (female and male), most common aggravating factors of migraine attack, and types of treatment of this attack.

Materials and Methods

Data was collected from 100 adult cases (20-40 years) suffering from migraine (50 male and 50 female), the whole population of these cases was collected randomly in Baiji hospital from June 2009 to September 2009. The data was obtained by using a questionnaire which contain many questions concerning the occurrence of headache, questionnaire include the following data:

- 1-Name
- 2- Age and sex
- 3-Duration of disease
- 4- Duration of attack
- 5- Aggravating factors which include:
 - A-Stress and tension
 - B- Hormonal changes
 - C- Lack of sleeping
 - D-Certain foods
 - E- Excessive noise
 - F-Head trauma
- 6-Any family history of migraine
- 7-Type of treatment

Results

The study population classified according to sex, 55% of male cases the attack started at age of 20 years, 26 % at age of 30 years and 19 % at age more than the 30 years, while in 70% of female cases the migraine started at age of 20 years, 18%at age of 30 years,

and 12% at age more than 30 years (Table 1). About the aggravating factors of migraine, in male the stress and tension is most common cause of attack (85%) and (15%) related to type of occupation and work, while in female the menstrual cycle is most common cause of attack (65%) within a few days before or after the onset of menstruation, before the cycle begins levels of the female hormones, estrogen and progesterone go down sharply. This drop in hormones may trigger a migraine, because estrogen controls chemicals in the brain that affect a woman's pain sensation. [2] stress and tension is a second aggravating factor for attack (27% from the cases), and (8%) due to certain types of food, chess and chocolate if food take in large amount. Regarding the duration of attack, in 95% of male cases the duration of attack is less than one week and 5% more than one week. In female the duration of attack is less than one week in 85% of cases and in 15% of cases from one week to two week (Table 2). About the treatment of migraine, in 30% of male cases the attack treated by medical treatment and 70% by avoiding the aggravating factors and rest. In female cases the attack treated by medical treatment in about 90% of cases and other cases (10%) treated by avoiding the aggravating factors only (Table3).

Table (1):- Show the Start of Migrain According to Sex and age

Age	Male	Female
20 year	55%	70%
30 year	26%	18%
> 30 year	19%	12%

Table (2) Show the Duration of Migraine Attack According to Sex

Duration	Male	Female
< One Week	95%	85%
> One Week	5%	15%

Table (3) Show the Treatment of Migraine Attack According to Sex

Treatment	Male	female
Medical	30%	90%
Avoid the Aggravating factors	70%	10%

Discussion

According to the data obtained in this study, in male it was found that in 55% of male cases the attack started at age of 20 years, 26% at age of 30 years and 19% at age above 30 years. The adjusted prevalence of migrant is two time higher in men aged 25 to 35 years than in age of 12 to 18 years [3]. In female cases 70% started at age of 20 years, 18% at age of 30 years, and 12% at age of 35 years. Prevalence of migraine in female is highest during childbearing years rising through early adulthood and peaking between age 30 to 45 years after which it is decrease [4]. About the aggravating factors of migraine in male, the stress and tension is most common cause of attack (85%) and (15%) related to occupation and work. Stress can trigger migraine attack, events like getting married; moving to a new home can cause stress. But studies show that everyday

stresses not major life changes cause most headaches. Some thing can do to help prevent or reduce stress include eating healthy food, doing relaxation exercise and getting enough sleep. while in female the menstrual cycle is most common cause of attack (65%), stress and tension is second factor (27%) and (8%) due to certain types of food (cheese and chocolate) if this food take in large amount.[4]. Blau found that 50% of male patient with migraine suffered from stress and tension as aggravating factor of attack and can reduce the frequency of it by eliminating these trigger [5], the menstrual cycle is most common cause of attack (60%) within few days before or after the menstruation. Levels of serum estrogen and progesterone fluctuate widely during menstrual cycle, serum estradiol levels peak toward the end of the follicular phase and again in the middle of luteal phase while serum progesterone peaks in the middle luteal phase. Just prior to menstruation serums level of

estrogen and progesterone fall precipitously^[6], also the menstruation is one of the most significant physiological factors that trigger migraine^[7]. Regarding the duration of attack, in 95% of male cases the duration of attack is below one week and 5% more than one week, while in female cases, in 85% the duration of attack is below one week and in 15% from one week to two weeks. About the self management which is used by these cases to relieve the headache, 30% of male cases the attack treated by medication and 70% by avoiding the aggravating factors, while in female 90% of cases treated by medication and 10% treated by avoiding the aggravating factors. Majority of migraines only obtain 55%-65% reduction in headache frequency on preventive medication an estimated, 6% of man and 15-17% of women in united state have migraine but only 3%- 5% of them receive preventive therapy^[8]. The most common drug that used by these cases (female and male) to treat a migraine attack at the moment when it occur to provide quick relief of the headache and other symptoms include non-steroidal anti-inflammatory drugs are used to relief pain and reduce inflammation e.g. (aspirin and ibuprofen), paracetamol, codeine, anti-nausea drug like Metaclopramid, ergotamine and Beta-blockers are not commonly used by this cases^[9]. About the preventive measures that used by this cases include avoid tension, fatigue, constant physical and mental stress, avoid drinking(coffee and tea in large amount), not watch television for long duration, and avoid some types of food like cheese and chocolate.^[4] we conclude that:

1- The most common cases of migraine started at age of 20 years.

2-The most common aggravating factors of migraine attack are stress, tension, and menstrual cycle.

3-The most common type of treatment of migraine in male by avoiding the aggravating Factors while in female by medication. We recommend the following:

1-To avoid the aggravating factors of migraine attack by eating healthy food, doing relaxation, exercise and getting enough sleep

2- To avoid the stress and tension during the work activities because the stress can trigger the migraine attack by making time and finding healthy ways to deal with stress which are important.

3- To use the medication only at need.

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