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The Efficacy and Tolerability of the Use of Combined Versus Single Analgesic and Prophylactic Medications in Severe Migraine

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ABSTRACT

Background: Migraine is a common cause of primary headaches that may interfere with normal daily activities for which different modalities of treatment had been used. In the present study different types of analgesics and prophylactic medications had been evaluated for their efficacy and tolerability.

Objective: To evaluate the efficacy and tolerability of: 1. Combined analgesic, Excedrin (aspirin with paracetamol and caffeine) in comparison with single analgesic, diclofenac, as a therapy for severe migraine attack.

2. Combined prophylactic, amitriptyline, or propranolol with pizotifen in comparison with pizotifen alone as prophylactic drugs for severe migraine.

Materials & Methods: Part (1): 80 patients with severe migraine were enrolled and randomly assigned to receive an oral tablet of either Excedrin (aspirin 250 mg, acetaminophen 250mg, caffeine 65mg) four times daily when needed (n=40) or diclofenac 50mg twice daily when needed as abortive treatment for migraine attack, in addition to the use of pizotifen twice a day in both subgroups for 10 days duration. Part (2): 46 patients who showed good response from part one of the study were divided randomly into three subgroups with different prophylactic regimens.

1. oral pizotifen 0.5mg tablet twice a day, n=16.
2. oral pizotifen 0.5mg twice a day with propranolol 20mg tablet twice a day, n=15.
3. oral pizotifen 0.5mg tablet twice a day with amitriptyline 10mg tablet once at night. n=15.

Efficacy was assessed by determining the patients' number exhibiting improvement with no or mild headache. Tolerability is no or minimal side effects or interactions.

Results: Part (1): A good response to treatment was obtained in 30% of the diclofenac group vs 85% of the Excedrin group (P<0.01). Part (2): A good response to treatment was obtained in 33.3% of the pizotifen group vs 60% of pizotifen with propranolol group (P< 0.05) vs 87.5% of pizotifen with amitriptyline group (P< 0.01).

Conclusion: Combined medications are more effective than single medications in the treatment & prophylaxis of severe migraine.

Keywords: Excedrin, Diclofenac, Amitriptyline, Propranolol, Pizotifen, Severe migraine.

INTRODUCTION:

Migraine is more than a headache. It is a neurological disease with considerable social and economic impact. It affects approximately 15% of women and 6% of men. It is defined as a benign and recurring syndrome of headache, nausea, vomiting, and/or other symptoms [1,2,3,4,5,6,7,8,9].

It usually begins in childhood, adolescence, or adult life and recurs with diminishing frequency during advancing years. [2,4,6,10,11,12,13]

Migraine can often be recognized by its active activators (red wine, stress, menses, hunger, lack of sleep, citrus fruits, some cheeses, and perfumes) and its

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deactivators (sleep, pregnancy, triptans) [2,3,5,13,14,15,16,17,18].

The word migraine was derived from the Latin word "hemicrania" meaning "half" (Hemi) "skull" (crania) [19]. This term was first used by Galenus of Pergamon, a Greek physician, surgeon, and philosopher in the Roman Empire, to describe the pain felt across one side of the head during a migraine. He also suggested that the pain originated in the meninges and vasculature of the head. In addition, he pointed towards a connection between the stomach and the brain due to the vomiting that seemed to be related to migraines [19,20].

The mainstay of pharmacologic therapy is the judicious use of one or more of the many drugs that are effective in migraines [3,4,5,8,11,13,21,22]. The selection of the optional regimens of migraine patients depends on several factors, the most important of which is the severity of the attack (table 1) [2,3]

The occurrence of three or more attacks per month is an indication for prophylactic treatment. [3,4,6] The criteria for preferring one prophylactic drug to another are based upon: [14]

- Evidence of efficacy [4,8,23]
- Comorbidity and the anticipated effect of the drug upon it [2,3,4,23]
- Contraindications including risk in pregnancy [5,23]
- Good evidence that poor compliance is a major factor in impairing the efficacy of migraine prophylaxis and that once-daily dosing is preferable [23]

The formal evidence – base for efficacy is good for beta-blockers and adequate for amitriptyline [3,4,6,21,23]

Other drugs include cyproheptadine, sodium valproate, gabapentin, methysergide & verapamil can be used [3,23]

Table (1) classification of migraine according to the severity [24] Note NSAIDs, non-steroidal anti-inflammatory drugs 5HT, 5 hydroxytryptamine

Stage	Diagnosis	Therapies
Mild migraine	Occasional throbbing headaches No major impairment of functioning	NSAIDs
Moderate migraine	Moderate or severe headaches Nausea common Some impairment of functioning	Combination analgesics, oral 5HT, agonists Oral, nasal or SC5HT, agonists Oral dopamine antagonists
Severe migraine	Severe headaches >3 times per month Significant functional impairment Marked nausea and/or vomiting	SC, IM, or IV5HT$_1$ agonists IM or IV dopamine antagonists Prophylactic medications

Methods:

This prospective clinical study was performed on 80 patients with severe migraines among those who attended the neurologic consultation in Al-Hussein general hospital in Karbala which is affiliated with The University of Al-Ameed. The study started in January 2007; patient admittance was completed in October 2007. Subjects were considered potentially eligible if they were at least 16 years old; were in good general health; and not pregnant.

The efficacy and **tolerability** in this study was assessed as rapid and consistent freedom from pain and other symptoms, return to normal function, minimal need for repeat dosing, and minimal adverse events. If this happens, it is considered as a **good response**.

For each included patient a detailed history was taken including name, age, sex, residence, marital status,

aggravating factors (food, stress) history of contraceptive pills, menstruation, and family history (regarding migraine) (Data not shown).

Statistical methods: - student paired t-test (for dependent data), student unpaired t-test (for independent data), or chi-square (x^2) were used accordingly to assess whether the obtained differences could be accepted as insignificant (if $p > 0.05$) or significant if ($0.01 \leq p \leq 0.05$) or highly significant if ($p < 0.01$).

First Part of the study

The enrolled patients were randomly assigned into 2 treatment groups, for each group the follow up duration was 10 days: -

1. Single oral analgesic group (n=40). Patients of this group received a common medication of treating migraine attack which is diclofenac, the dose is 50 mg tablet twice day when needed which is the usual dose of diclofenac. [25]

2. Combined oral analgesics (Excedrin) n=40. Patients of this group received a tablet that consists of (aspirin 250 mg + acetaminophen 250 mg + caffeine 65 mg) this tablet is commercially called Excedrin which was given four times/day when needed as a maximus dose [26] and the patient is informed about the possible side effects.

Both these two groups were given additionally pizotifen tablet 0.5 mg twice daily as a prophylactic drug because all enrolled patients were suffering from severe migraine which necessitates a prophylactic medication [27,28,29]. Pizotifen is available in the market and not expensive for that reason this medication was chosen.

Second Part of the study

The 2 groups from the first part of the study were followed up to see the response to the prophylactic treatment regimen. The patients who showed good response in the **first part (n=46)** out of the two groups were divided randomly into **three groups** with different prophylactic regimens: -

1. Oral **pizotifen** 0.5 mg tablet twice daily, **n=15**.

2. Oral **pizotifen** 0.5 mg tablet twice daily + **propranolol** 20 mg tablet twice daily, **n=15**.

3. Oral **pizotifen** 0.5 mg tablet twice daily + **amitriptyline** 10 mg only at night, **n=16**.

The enrolled patients were followed up for the **next four months** to be seen at each month during the follow-up period to evaluate the efficacy of these prophylactic regimens in preventing the recurrence of the attack of the migraine. However, each patient was advised to use Excedrin or diclofenac tablet when needed as abortive to migraine attack.

A preventive migraine drug is considered successful if it reduces migraine attack frequency or days by at least 50% within 3 months. [30]

RESULTS:

Subject population characteristics

Of the 80 subjects enrolled in the study, 64 (80%) were aged 16-40 years with a mean age of 25.33 ± 0.8 years while only 16 (20%) patients were older than 40 years with a mean age of 44.0 ± 0.7 years. The sex distribution shows 68 (85%) patients were females while 12 (15%) patients were males (Table 1).

The efficacy of single versus combined analgesics in the treatment of severe migraine

The percentage of patients who showed good response to the therapy (good response means rapid and consistent freedom from pain and other symptoms, return to normal function, minimal need for repeat dosing, and minimal adverse events) was significantly higher in the Excedrin group (85%). While only (30%) of patients showed a good response with diclofenac therapy ($p \leq 0.01$) (Table 3).

The response of the enrolled patients to the different prophylactic regimens used

There was a significant difference ($p \leq 0.05$) between the pizotifen alone group and pizotifen + propranolol

group, where 60% showed good response with pizotifen + propranolol and 33.3% showed good response with pizotifen only.

On the other hand, the difference between the pizotifen alone group and pizotifen + amitriptyline group was found to be highly significant p≤0.01. 87.5% showed good response with pizotifen +amitriptyline group (Table 4).

All of these prophylactic regimens were well tolerated along the trial period (i.e., 4 months) without noticeable side effects among the included patients in this prospective study apart from sedation noticed with the pizotifen +amitriptyline group.

Table (2): Demographics of patients

Age of patients	Number of patients	Sex	
		Male	Female
16 – 40 y	64	8	54
More than 40 y	16	4	12
Total number and percentage	80 100%	12 15%	68 85%

Table (3): Distribution of patients according to therapy-induced improvement in diclofenac and Excedrin groups.
^{H5} Highly Significant difference (P≤ 0.01)

Treatment group	Number of patients	Number of patients with good response	Percentage
Diclofenac	40	12	30%
Excedrin	40	34^{HS}	85%

Table (4): Patients response according to different prophylactic treatment regimens

^{S}: Significant difference (P<0.05) when compared with the pizotifen group

^{H5}: Highly Significant difference (P≤ 0.01) when compared with pizotifen group

Treatment group	No. of patient	No. of the patient with good response	Percentage
pizotifen	15	5	33.3%
Pizotifen + propranolol	15	9^{s}	60%
Pizotifen + amitriptyline	16	14^{HS}	87.5%

DISCUSSION:

Migraine is a common neurological disease that causes a variety of symptoms, being headache the hallmark [3,15,16,28]. It can interfere significantly with the patient's life and severe attacks can lead to significant functional impairment [3,10,13,30,31]. Its aetiology is largely unknown. [15,16,28]

Although migraine can occur in all ages, it usually begins in adolescence. In more than 80% of patients, the onset is before 30 years of age and the frequency of the attacks largely decreases in elderlies [3,15,16]

In this prospective study, 80% of the included patients have aged 16-40 yrs. with a mean age of 25.3 years, while only 20% of the patients were aged above 40 years which is similar to other studies [3,15,16]. Migraine is three times more common in women than men. [28,31] In the present study, the ratio of females to males was 5.5:1 which can be because this study deals with severe migraine only which is more common among female patients. [31]

Patients without contraindications should be offered

acute therapy for migraine, starting with NSAIDs. Those who do not respond after appropriate trial periods should be offered another therapy. [4,27,28,29] Drug treatment should be selected for each patient according to his or her need. [27,28,29]

There is good quality of evidence supporting the use of Non-Steroidal Anti-inflammatory drugs (NSAIDs) such as acetaminophen, diclofenac and acetylsalicylic acid which can reduce both the severity and the duration of migraine attacks significantly [5,9,14]. Non-Steroidal Anti-inflammatory drugs (NSAIDs) are most effective when given early in migraine attack [5,9,14,28]. Diclofenac-potassium 50-100 mg in non-delayed-release with or without intramuscular injection can be used for the treatment of migraine. [5,9,19]

Most migraine headaches respond to analgesics such as paracetamol [5,8] or aspirin [5,8,9,22] but because intestinal peristalsis is often reduced during migraine attack the medication may not be sufficiently well absorbed to be effective. [5,8,22] Caffeine is thought to enhance analgesics absorption and possibly to have a vasoconstrictor activity. [7] Excedrin is a combination of paracetamol, aspirin and the therapeutically active caffeine approved by FDA to treat all of the symptoms of migraine. NSAIDs offer several advantages over prescription drugs, including easy access, lower cost, and fewer adverse effects [8,22]

In the first part of the present study, a comparison was made between 10 days course of therapy with either diclofenac with pizotifen for 40 patients or Excedrin with pizotifen on another 40 patients suffering from severe migraine. The percentage of patients with good response to treatment with either Excedrin or diclofenac were 85% and 30% respectively and the difference between the two treatment groups was highly significant ($P \leq 0.01$).

Excedrin was well tolerated by the patients during the 10 days of the therapy apart from slight gastric irritation experienced by some. The studied patients showed:

- A noticeable reduction in pain within 30 minutes after treatment initiation.
- Major improvement in their ability to take part in normal daily activities (at an affordable price).

These results indicate that it is worth trying to prescribe Excedrin for the management of acute migraine attacks before prescribing more expensive drugs with the potential for severe side effects and drug interaction.

The second part of the study dealt with the prophylactic treatment of migraine. Whereas the goal of acute therapy is to abort a migraine attack once it has started, the goals of prophylactic treatment are to prevent attacks, thereby reducing headache frequency, severity and associated disability and decreasing reliance on acute treatment, which may be contributing to concurrent medication over use headache [25].

The occurrence of three or more severe attacks per month is an indication for prophylactic treatment [4,27,28,29,30,31]. These drugs must be taken daily and there is usually a lag of 2-6 weeks before an effect is seen and they should be continued for 4-6 months [4,27] Pizotifen has been widely used for many years but clinical trials evidence of its efficacy is limited [4,29], however in our hospital, pizotifen is available and free for patients in the hospital and for that reason it was chosen to be given to all patients. Beta-blockers are considered the first line if not contraindicated. Of these, propranolol (40-240mg) is the most evidence-based and widely used drug. [4,29]. Antidepressants, amitriptyline 10-75 mg the most widely prescribed, are considered the first line when migraine coexists with trouble some tension-type headache, another chronic pain condition, disturbed sleep or depression. However, antidepressants can be used to prevent migraine even if there is no underlying depression [4,6,23].

Although many patients benefit from these therapies, studies have shown that patient adherence to existing oral preventives is low, often because of suboptimal efficacy and poor tolerability. There is still unmet need for more effective, better tolerated prophylactic therapies [23].

We have demonstrated that the use of combination prophylactics is superior to single agent in the prevention of migraine attacks. While only 33.3% of the patients showed good response with pizotifen alone, 60% showed good response when pizotifen combined with propranolol. Nevertheless, interestingly 87.5% of the patients showed good response with the combination of pizotifen and amitriptyline. The difference was significant between pizotifen alone and pizotifen and propranolol groups ($P \leq 0.05$) and highly significant between the first group and the pizotifen+ amitriptyline group. A synergistic effect might explain the improved efficacy of the combination of prophylactic medications in this study. Our observations parallel, to some extent, those in a report by Rao and colleagues in which they demonstrated that the combination of propranolol and cyproheptadine is more efficacious than propranolol alone in the prevention of migraine. [33, 34,35]

Further investigations are necessary to assess whether using the maximum dose of these prophylactic agents would result in any better outcomes.

CONCLUSION

1. Combined analgesic, Excedrin, is better than the single analgesic, diclofenac, in the treatment of migraine headache attacks.

2. Combined prophylactic drugs (amitriptyline or propranolol with pizotifen) are better than pizotifen alone in the prophylaxis of severe migraine.

Study limitations:

1. Sample size.
2. Single-center study.
3. Needs more duration for follow-up.

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Conflict of interests

The authors declare no conflicts of interest.

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Data availability

The data analyzed during this study are available from the corresponding author upon request.

REFERENCES

1. Zargaran, A., Borhani-Haghighi, A., Faridi, P. *et al.* A review on the management of migraine in the Avicenna's *Canon of Medicine*. *Neurol Sci* 37, 471–478 (2016). https://doi.org/10.1007/s10072-016-2498-9
2. The International Classification of Headache Disorders, 3rd edition (beta version). *Cephalalgia*. 2013;33(9):629-808. https://doi.org/10.1177/0333102413485658
3. Danesh, A., Gottschalk, P.C.H. Beta-Blockers for Migraine Prevention: a Review Article.*Curr Treat Options Neurol* 21, 20 (2019). https://doi.org/10.1007/s11940-019-0556-3
4. Sprenger, T., Viana, M. & Tassorelli, C. Current Prophylactic Medications for Migraine and Their Potential Mechanisms of Action. *Neurotherapeutics* 15, 313–323 (2018). https://doi.org/10.1007/s13311-018-0621-8
5. Goadsby PJ, Sprenger T. Current practice and future directions in the prevention and acute management of migraine. Lancet Neurol 2010;9(3):285–98.

6. Jackson JL, Cogbill E, Santana-Davila R, Eldredge C, Collier W, Gradall A, et al. A comparative effectiveness meta-analysis of drugs for the prophylaxis of migraine headache. PLoS One 2015;10(7):e0130733.
7. Nowaczewska, M.; Wiciński, M.; Kaźmierczak, W. The Ambiguous Role of Caffeine in Migraine Headache: From Trigger to Treatment. **Nutrients** 2020, **12**, 2259. https://doi.org/10.3390/nu12082259
8. Derry S, Moore RA. Paracetamol (acetaminophen) with or without an antiemetic for acute migraine headaches in adults. Cochrane Database of Systematic Reviews 2013, Issue 4. Art. No.: CD008040. https://doi.org/10.1002/14651858.CD008040.pub3 Accessed 18 August 2021.
9. Richard B. Lipton MD, Jerome Goldstein MD, Jeffrey S. Baggish MD, Alberto R. Yataco MD, James V. Sorrentino Ph.D., John N. Quiring Ph.D., Aspirin Is Efficacious for the Treatment of Acute Migraine, 05 April 2005, https://doi.org/10.1111/j.1526-4610.2005.05065.x
10. Sauro, K.M. and Becker, W.J. (2009), The Stress and Migraine Interaction. Headache: The Journal of Head and Face Pain, 49: 1378-1386. https://doi.org/10.1111/j.1526-4610.2009.01486.x
11. Finocchi, C., Sivori, G. Food as a trigger and aggravating factor of migraine. *Neurol Sci* 33, 77–80 (2012). https://doi.org/10.1007/s10072-012-1046-5
12. Samaneh Hajjarzadeh, Reza Mahdavi, Davood Shalilahmadi & Zeinab Nikniaz (2020) The association of dietary patterns with migraine attack frequency in migrainous women, Nutritional Neuroscience, 23:9, 724-730, https://doi.org/10.1080/1028415X.2018.1550890
13. Maasumi, K., Tepper, S.J. and Kriegler, J.S. (2017), Menstrual Migraine and Treatment Options: Review. Headache: The Journal of Head and Face Pain, 57: 194-208. https://doi.org/10.1111/head.12978
14. Derry S, Rabbie R, Moore RA. Diclofenac with or without an antiemetic for acute migraine headaches in adults. Cochrane Database of Systematic Reviews 2013, Issue 4. Art. No.: CD008783. https://doi.org/10.1002/14651858.CD008783.pub3 Accessed 18 August 2021.
15. Sutherland, H.G. and Griffiths, L.R. (2017), Genetics of Migraine: Insights into the Molecular Basis of Migraine Disorders. Headache: The Journal of Head and Face Pain, 57: 537-569. https://doi.org/10.1111/head.13053
16. Merikangas, K.R. (2012), Update on the Genetics of Migraine. Headache: The Journal of Head and Face Pain, 52: 521-522. https://doi.org/10.1111/j.1526-4610.2012.02107.x
17. Carlo Lisotto, Lidia Savi, Lorenzo Pinessi, Mario Guidotti, Stefano Omboni and Giorgio Zanchin, Efficacy of Frovatriptan vs. Other Triptans in Weekend Migraine: Pooled Analysis of Three Double-Blind, Randomized, Crossover, Multicenter Studies, Lisotto, et al., Brain Disord Ther 2014, 3:3 ISSN: 2168-975X https:// https://doi.org/10.4172/2168-975X.1000128
18. Massiou H, MacGregor EA. Evolution and Treatment of Migraine With Oral Contraceptives. Cephalalgia. 2000; 20(3):170-174. https://doi.org/10.1046/j.1468-2982.2000.00038.x
19. Souza WPO, Sousa-Santos PM, Silva-Néto RP. A Historical Review of Headaches: Who First Described Them and When Did This Occur? Headache. 2020 Sep; 60(8):1535-1541. https://doi.org/10.1111/head.13906 . Epub 2020 Aug 7. PMID: 32767765.
20. Rose FC. The neurology of ancient Greece--an overview. J Hist Neurosci. 1994 Oct;3(4):237-60. https://doi.org/10.1080/09647049409525617 . PMID: 11618825
21. Boyer N, Signoret-Genest J, Artola A, Dallel R, Monconduit L. Propranolol treatment prevents chronic central sensitization induced by repeated dural stimulation. Pain 2017;158(10):2025–34.

22. Baena, Cristina Pellegrino, et al. The effectiveness of aspirin for migraine prophylaxis: a systematic review. Sao Paulo Medical Journal [online]. 2017, v. 135, n. 01 [Accessed 18 August 2021], pp. 42-49. Available from: https://doi.org/10.1590/1516-3180.2016.0165050916 . ISSN 1806-9460. https://doi.org/10.1590/1516-3180.2016.0165050916
23. Azize Esra GÜRSOY and Mustafa ERTAŞ, "Prophylactic Treatment of Migraine" Noro Psikiyatr Ars. 2013 Aug; 50(Suppl 1): S30–S35.Published online 2013 Aug 1. https://doi:10.4274/NPA.y7199
24. Stephen L. Hauser, Tinsley Randolph Harrison, Scott Andrew Josephson, Joey D. English, John W. Engstrom, Harrison's Neurology in Clinical Medicine, McGraw Hill Professional, 2006, Page 62, 0071457453, 9780071457453
25. Todd, P.A., Sorkin, E.M. Diclofenac Sodium. *Drugs* **35,** 244–285 (1988). https://doi.org/10.2165/00003495-198835030-00004
26. Kirthi, V., Derry, S., Moore, R.A. and McQuay, H.J., 2010. Aspirin with or without an antiemetic for acute migraine headaches in adults. *Cochrane database of systematic reviews*.
27. Khalid W. Al-Quliti and Ekhlas S. Assaedi, New advances in the prevention of migraine, Review of current practice and recent advances, Neurosciences Journal July 2016, 21(3) 207-214; DOI:https://doi.org/10.17712/nsj.2016.3.20150506
28. Zsolt Hepp, Lisa M. Bloudek, and Sepideh F. Varon, Systematic Review of Migraine Prophylaxis Adherence and Persistence, Journal of Managed Care Pharmacy 2014 20:1, 22-33, https://www.jmcp.org/action/showCitFormats?doi=10.18553%2Fjmcp.2014.20.1.2
29. Khalil El-Chammas, MD, Jill Keyes, MD and Jeffrey L Jackson, MD MPH, A comparative effectiveness meta-analysis of drugs for the prophylaxis of pediatric migraine headache, *JAMA Pediatr*. 2013 March 1; 167(3): 250–258. doi:10.1001/jamapediatrics.2013.508.
30. Silberstein SD. Preventive Migraine Treatment. Continuum (Minneap Minn). 2015 Aug;21(4 Headache):973-89. https://doi.org/10.1212/CON.0000000000000199. PMID: 26252585; PMCID: PMC4640499.
31. Munvar Miya Shaik, Norul Badriah Hassan, Huay Lin Tan, and Siew Hua Gan, Quality of Life and Migraine Disability among Female Migraine Patients in a Tertiary Hospital in Malaysia, BioMed Research International, Volume 2015, Article ID 523717, 9 pages http://dx.doi.org/10.1155/2015/523717
32. Goadsby PJ, Sprenger T. Current practice and future directions in the prevention and acute management of migraine. Lancet Neurol 2010;9(3):285–98.
33. Rao BS, Das D G, Taraknath V R, Sarma Y, A double-blind controlled study of propranolol and cyproheptadine in migraine prophylaxis Neurology India, Year: 2000 | Volume: 48 | Issue Number: 3 | Page: 223-6, https://www.neurologyindia.com/citation.asp?issn=0028
34. Eman Elayeh, Eman Abu-rish, Al-Moutassem Yousef, Effect of Dividing Low Dose Aspirin on Platelet Reactivity and the Correlation with Patient-related Factors , Jordan Journal of Pharmaceutical Sciences, Volume 13, No. 2, 2020
35. Safaa Al Awawdeh, Ahmad Naddaf, Abuirmeileh, Amjad,(Errors of Omission in Outpatient Prescriptions in Jordan), Jordan Journal of Pharmaceutical Sciences, Volume 10, No. 3, 2017.

فعالية وتحمل استخدام الأدوية المركبة مقابل المسكنات الفردية والأدوية الوقائية في حالات الصداع النصفي الشديد

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ملخص

الخلفية: الصداع النصفي هو سبب شائع للصداع الأولي الذي قد يتداخل مع الأنشطة اليومية العادية التي يتم استخدام طرق مختلفة من العلاج لها. في الدراسة الحالية، تم تقييم أنواع مختلفة من المسكنات والأدوية الوقائية من حيث فعاليتها وتحملها.

الهدف: تقييم الفعالية والتحمل لما يلي:

1. مسكن مشترك، إكسدرين (أسبرين مع باراسيتامول وكافيين) بالمقارنة مع مسكن واحد، ديكلوفيناك، كعلاج لنوبة الصداع النصفي الشديدة.

2. الجمع بين الأدوية الوقائية، أميتريبتيلين، أو بروبرانولول مع البيزوتيفين بالمقارنة مع البيزوتيفين وحده كأدوية وقائية للصداع النصفي الشديد.

المواد والطرق: الجزء (1): تم تسجيل 80 مريضًا يعانون من الصداع النصفي الشديد وتعيينهم عشوائيًا لتلقي قرص فموي إما من Excedrin الأسبرين 250 ملغم، والأسيتامينوفين 250 ملغم، والكافيين 65 ملغم) أربع مرات يوميًا عند الحاجة أو ديكلوفيناك 50 ملغم مرتين يوميًا عند الحاجة كعلاج لنوبة الصداع النصفي، بالإضافة إلى استخدام البيزوتيفين مرتين في اليوم في كلا المجموعتين الفرعيتين لمدة 10 أيام. الجزء (2): تم تقسيم 46 مريضًا ممن أظهروا استجابة جيدة من الجزء الأول من الدراسة بشكل عشوائي إلى ثلاث مجموعات فرعية مع أنظمة وقائية مختلفة.

1. قرص pizotifen 0.5 ملغم عن طريق الفم مرتين في اليوم، (16 مريضا).

2. pizotifen عن طريق الفم 0.5 ملغم مرتين في اليوم مع بروبرانولول 20 ملغ قرص مرتين في اليوم، (15 مريضا).

3. قرص بيزوتيفين 0.5 ملغم مرتين يومياً مع أميتريبتيلين 10 ملغم قرص مرة واحدة ليلاً. (15 مريضا). تم تقييم الفعالية من خلال تحديد عدد المرضى الذين يظهرون تحسنًا مع عدم وجود صداع أو صداع خفيف. معنى التحمل في هذا البحث هو عدم ظهور آثار جانبية او القليل منها .

النتائج: الجزء (1): تم الحصول على استجابة جيدة للعلاج في 30٪ من مجموعة الديكلوفيناك مقابل 85٪ من مجموعة الاكسدرين.($p<0.01$). الجزء (2): تم الحصول على استجابة جيدة للعلاج في 33.3٪ من مجموعة البيزوتيفين مقابل 60٪ من البيزوتيفين مع مجموعة البروبرانولول ($P< 0.05$) مقابل 87.5٪ من البيزوتيفين مع مجموعة الأميتريبتيلين .($p<0.01$)

الخلاصة: الأدوية المركبة أكثر فعالية من الأدوية المنفردة في علاج الصداع النصفي الشديد والوقاية منه.

الكلمات الدالة: إكسيدرين، ديكلوفيناك، أميتريبتيلين، بروبرانولول، بيزوتيفين، صداع نصفي شديد.

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