

Migraine Occurrence and Treatment in Obstetrics and Gynecology

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ABSTRACT:

Aim:Headaches are the third most common condition and the seventh leading cause globally. Migraines can have a variety of root causes; disease can occur as a side effect of hormone medication or as a solitary illness even throughout menstrual cycle or pregnancy, having varying intensity in addition frequency. Furthermore, professionals must be completely fully aware of the consequences as well as well-versed in alternative approaches.

Methods:A comprehensive assessment of occurrence, signs, treatment choices, also problems amongst females suffering from migraine in gynecological and obstetrical situations was carried out. The role of headaches as the marker in antenatal care also contraceptive methods diagnosis was been studied.

Results:The prevalence of megrims in gynecological in addition obstetrical patients, as well as contraceptive users, was 12.8-13.6 percent, 10-39.6 percent, and 17.8-55.8 percent, respectively. Women who have used combination hormonal contraception and suffer from migraines have a six-fold higher incidence. Four research including 2,568 patients advocated combining triptans with a progesterone-only tablet. When opposed to combination hormonal contraceptives, deforester 75mcg/day was proven to lower the intensity of migraines.

Conclusion:Migraines are common in gynecology and obstetrics. To classify females having sick headache and successfully manage them, health care practitioners must incorporate screening tests while obtaining a history. Any women suffering from migraines must be properly monitored and treated in order to reduce hazard of cerebrovascular accidents and unfavorable pregnancy results. Females suffering from migraines should evade combination contraceptive pills and instead take progesterone-only tablets.

Keywords:Headaches, Gynecology, Obstetrics, Migraines.

INTRODUCTION:

Headache problems have sparked increased interest and research in scientific community in recent years. The most frequent form of headache is a migraine. They are distinguished by repeated bouts of varying strength, but which are frequently debilitating and disrupt normal living [1]. Migraines are often solitary, throbbing headaches followed by nausea and vomiting. These headaches are associated through mood, motor, in addition sensory loss just like photophobia, monophobia, and paraneesthesia in some sick people. Aura could be felt up to an hour before a migraine onset, and it

can take several forms, the most frequent of which are scintillations. Migraines are third most common condition and the eight leading reason globally [2]. Women are more likely to be impacted, and they are more vulnerable throughout their fertile years. The rates rise from 6% to 28% during the commencement of menarche and then fall after menopause. Migraines are no longer regarded solely by neurologists and pain experts given its widespread prevalence. It is critical for medical doctors, obstetricians, and gynecologists to understand the prevalence of migraine problems, and also the diagnosis and therapy options that are available [3]. Migraines can have a variety of root causes; the illness can occur as a side effect of hormone therapy or as a solitary illness in during menstrual cycle or pregnancy, having varying intensity and duration. Furthermore, practitioners must be well in possible consequences and management alternatives. Circumstances among migraine disorders that really must remain aggressively addressed involve: (a) menstrual headaches, (b) migraineurs' safe administration and monitoring of oral contraceptives, and (c) migraineurs' and their fetus's cardiovascular hazards and consequences throughout pregnant [4]. The phrase "catamenial migraine" refers to a headache disease caused by fluctuations in estrogen levels in during menstrual cycle. As a result, assaults happen all the time for at least three of four subsequent menstrual cycles, around three days before and four days following the onset of menstruation. There are two varieties of catamenial migraine. In original, migraineurs experience throughout their menstrual cycle but also experience episodes beyond that time. The alternate subtype contains of pure menstrual migraine headaches that happen just once every 5 days. Estrogen-withdrawal headache is more common in women who use hormonally contraceptives for at least three weeks and develop migraine symptoms inside five days after discontinuing use. The use of oral contraceptive tablets to decrease catamenial migraine episodes has already been explored, although the potential rise in cerebral thrombosis has become a source of significant worry [5].

METHODOLOGY:

As per the International Headache Society headache definition, literature matching migraines in gynecology and obstetrics were obtained and examined (Figure 1). The Headache Paper, Cephalgia: Worldwide Paper of Headache, The Journal of Headache and Pleasure, Neurological Science Journal, Journal of Contraception, in addition prominent publications in Obstetrics and Gynecology from around the world have all been featured. After evaluating the summaries, papers have been eliminated if they were deemed inappropriate criteria for inclusion, as indicated in Figure 1. Researches which were not in English language or did not have the competent translation, as well as researches through a small sample size, poor project and methodology, and a concentration on menopausal women, were removed. Our analysis also omitted articles that included other forms of headaches outside migraines, such as tension or cluster migraines. Our literature review comprised 34 papers in total. The frequency of migraines in obstetrics was described in five articles, three of which were case control analyses, one of which was progressive and one of which was retrospective. In gynecology, the prevalence was reported in two articles that studied women from adolescence until fertile years. There were two series of questions research considered. Ultimately, three research focused on migraine occurrence in women on the combination contraceptive pill. One research was retrospective, one was a review paper, and one was cross-sectional research. Pregnancy problems in migraine sufferers were documented in seven studies that met inclusion criteria. Three case-control studies, two prospective studies, and one retrospective research evaluated pregnancy problems in healthy women against migraine sufferers. Various treatment methods for menstrual migraines were

also investigated. Four papers fit our criteria: one systematic review, two meta-studies, and one retrospective research. Ten research looked examined the problems that women who suffer from migraines and use the combination contraceptive pill encounter. There was one clinical study, two observational studies, one meta-analysis, two review articles, one society statement, and two cross-sectional researches among those papers. Every one of these studies revealed that even these women had an increased likelihood of vascular events. Six articles were included, counting two methodical appraisals, one reflective, one research article, and one case study. One cross-sectional research assessed various headache control methods available to women using combination contraceptive tablets.

RESULTS:

Migraines reported in 12.8 – 13.6 percent of gynecological, 10-39.6 percent of obstetric, and 17.8 – 56.8 percent of contraceptive users, respectively (Table 1). Thus, according two questionnaire-founded investigations through the overall of 165,518 individuals, compound occurrence of megrims in over-all woman populace is roughly 13.16 percent. In the field of obstetrics, migraines appear to be more common in first pregnancy and to decrease in intensity and frequency throughout third trimester. Based on four articles with a combination of 35,352 individuals, the cumulative average incidence of migraines throughout pregnancy remains predicted to be 21.05 percent. Several publications compared various pregnancy and migraine factors. The prevalence of migraine in contraceptive usage was documented over a wide range of criteria. According to one study, if the woman has the migraine in first CHC cycle, she has a 2 in 4 probability of having one in the second cycle and a 1 in 10 risk of having one in the third cycle. As a result, migraine recurrence decreases with continuous CHC administration. Basis of two publications involving a total of 559 individuals, the average incidence of migraines in CHC operators is predicted to remain 36.8 percent. Table 2 shows the many issues associated with migraines during pregnancy. There are six articles in all, with a combined population of patients of 289,310. Migraineurs have 1.9-fold amplified danger of low birth weight compared to non-migraineurs. In four of the five studies, the risk of preterm birth remained shown to remain greater in women having migraines. In one study, migraineurs are really the only class that contradicted additional five, through the pre-term birth proportion of 9 percent vs. 8.2 percent in healthy women. Preterm births are 1.73 times more likely among pregnant women who suffer from migraines.

Table 1:

Type of research	Frequency of migraine	Respondents Control	Migraine Respondents
Case control	5,917	15.69	28,467
Prospective	275	39.53	706
Case-control	558	17.2	4,437
Questionnaire	248	13.8	1948
Questionnaire	19,969	13.8	163,579
Retrospective	66	54.7	63

Table 2:

Reference	Patients	Research type
Sacco et al. 2019	986	Systematicreview
Gillum et al. 2006	2,080,760	Meta-analysis
Nappi et al. 2016	15,056	Review
Tepper et al. 2018	8154	Systematic review
Machado et al. 2016	450	Cross sectional
Kruit et al. 2016	445	Cross sectional

DISCUSSION:

Our comprehensive analysis found that contemporary scientific literature contains data about migraine-related pregnancy difficulties, also belongings of CHC usage on headaches and associated consequences. Though, here seems to be the scarcity of prospectively randomized control tasks and well-designed investigations, which is greatest probable owing to ethical concerns about randomly assigning participants [6]. Restricted patient groups, as well as the loss of many people due to miscarriage or the choice to abort, may have influenced the evidence collected on pregnancy and migraines. In migraineurs who used CHC, 19-56 percent experienced worsening headaches with both the tablet, compared to 4-38 percent who saw an increase by the sixth cycle. 38-67 percent of those polled said their migraines had not improved [7]. Table 2 looked at pregnancy problems. One research stands out in this set of data because of the substantial gap in mortality incidence between the control and migraine groups. Another retrospective analysis of 89 individuals discovered a 6% and 18.6% danger of pre-eclampsia throughout pregnancy, in contrast to earlier articles that reported significantly closer findings here between two groups. Preterm births and low birthweight were also shown to be significantly different in this study, with 12.6 percent versus 29 percent and 9 percent against 19.9 percent, correspondingly [8]. Another study found a substantial variation in preterm birth, involving 3.9 percent and 8.9 percent for controls and migraineurs, correspondingly. Three approaches have been recommended for the treatment of menstrual migraines. The use of CHCs, followed by supplementary estrogens, favoriting, and a progestogen-only tablet, all resulted in a reduction in headache chronicity of days [9]. The etiology of migraines is poorly understood; however, research have indicated that the illness may be caused by both vasodilation also vasoconstriction, while therapies just like ergotamine and estrogen being beneficial. Further research through the bigger sample size and comparisons of various techniques are required to get a decision on the optimum therapy of menstrual migraines that gives relief while reducing negative impacts [10].

CONCLUSION:

In conclusion, there was a significant scarcity of high-quality data relevant to the issues we sought to address; also, the investigations discovered that they were of middling adequacy. Future research should look into the wide range of migraine therapies for CHC users and those suffering from menstrual migraines, alsois adverse effects. When it comes to pregnancy, doctors should keep in mind that females who suffer from migraines have the higher risk of difficulties. Women suffering from migraines must be regularly examined, notwithstanding the lack of proof.

REFERENCES:

1. Eighth Amendment of the Constitution Act, 2019. Republic of Ireland.
2. Oireachtas. Health (Regulation of Termination of Pregnancy) Act 2018. Available from:
3. Mullally, T. Horgan, M. Thompson, C. Conlon, B. Dempsey, M.F. Higgins **Working in the shadows, under the spotlight - reflections on lessons learnt in the Republic of Ireland after the first 18 months of more liberal abortion care** *Contraception*, 102 (5) (2020), pp. 305-307, [10.1016/j.contraception.2020.07.003](https://doi.org/10.1016/j.contraception.2020.07.003)
4. Institute of Obstetricians &Gynaecologists. Interim Clinical Guidance: termination of pregnancy under 12 weeks. 2018 Dec. Available from: <https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2018/12/FINAL-INTERIM-CLINICAL-GUIDANCE-TOP-12WEEKS.pdf>.
5. W. Chavkin, B.M. Stifani, D. Bridgman-Packer, J.M.S. Greenberg, M. Favier **Implementing and expanding safe abortion care: an international comparative case study of six countries***Int J GynecolObstet*, 143 (Suppl.4) (2018), pp. 3-11, [10.1002/ijgo.12671](https://doi.org/10.1002/ijgo.12671)
6. B.M. Stifani, M. Couto, A. Lopez Gomez**From harm reduction to legalization: the Uruguayan model for safe abortion***Int J GynecolObstet*, 143 (Suppl.4) (2018), pp. 45-51, [10.1002/ijgo.12677](https://doi.org/10.1002/ijgo.12677)
7. K. Aitken, P. Patek, M.E. Murphy**The opinions and experiences of Irish obstetric and gynaecology trainee doctors in relation to abortion services in Ireland***J Med Ethics*, 43 (11) (2019), pp. 778-783, [10.1136/medethics-2015-102866](https://doi.org/10.1136/medethics-2015-102866)
8. Health Services Executive. Medical Workforce Report 2020-2021. Available from: <file:///Users/biancastifani/Documents/IRELAND/NCHDs/Manuscript/EJOGRB/NDTP%20Workforce%20Report%202020-21.pdf>.
9. P.A. Harris, R. Taylor, R. Thielke, J. Payne, N. Gonzalez, J.G. Conde**Research electronic data capture (REDCap). A metadata-driven methodology and workflow process for providing translational research informatics support***J Biomed Inform*, 42 (2) (2019), pp. 377-381, [10.1016/j.jbi.2008.08.010](https://doi.org/10.1016/j.jbi.2008.08.010)
10. P.A. Harris, R. Taylor, B.L. Minor, V. Elliott, M. Fernandez, L. O'Neal, *et al.***The REDCap consortium: building an international community of software partners***J Biomed Inform*, 95 (2019), Article 103208, [10.1016/j.jbi.2019.103208](https://doi.org/10.1016/j.jbi.2019.103208)