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Epidemiological study of migraine in the state of São Paulo between 2019-2023 and the interference of oral contraceptives

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Introduction
Migraine, a chronic neurovascular disease, manifests as a primary headache disorder with varying degrees of severity. During menstruation, a rapid decrease in estrogen levels often triggers migraine attacks without aura, affecting approximately 50-60% of women. Conversely, high estrogen levels can lead to migraine attacks with aura. Women with a history of migraine with aura are advised not to use combined oral contraceptives (COCs) due to the increased risk of stroke and thromboembolic events. Additionally, those who develop migraines while on medication are recommended to discontinue its use.

Objectives
This study aims to analyze the epidemiological patterns of migraine-related hospitalizations in the state of São Paulo and investigate the influence of oral contraceptives in patients with a prior history of migraine.

Methodology
Conducted as an ecological, retrospective, and descriptive study from DATASUS regarding the epidemiology of migraine in the state of São Paulo from 2019 to 2023, focusing on variables such as hospitalizations, age groups, race/ethnicity, and year of treatment. Articles from the past 10 years in english and portuguese were selected, and a comprehensive literature review on the interference of oral contraceptive use was conducted using the databases PubMed, Scielo, and Electronic Journal Collection Health.

Results
There were a total of 9,316 hospitalizations due to migraine in the state of São Paulo between 2019-2023, with a total of 2,101 in 2023, and the lowest rate in 2021, with 1,517 hospitalizations. There was a predominance of females and white individuals, corresponding to 68.9% (N=6,424) and 58.7% (N=5,476) of cases, respectively. Additionally, research found that around 70% of women in Brazil use some form of contraceptive method, with 23% corresponding to COCs and female sterilization.

Conclusion
The epidemiological profile highlighted a higher prevalence among women and white individuals. The use of combined oral contraceptives emerged as a contributing factor to the occurrence of migraines in women, attributed to estrogen-induced vasoconstriction triggering migraine attacks. Consequently, women with this medical history face a risk of stroke, necessitating careful consideration of contraceptive options.