Is there a relationship between refractive errors and headaches?

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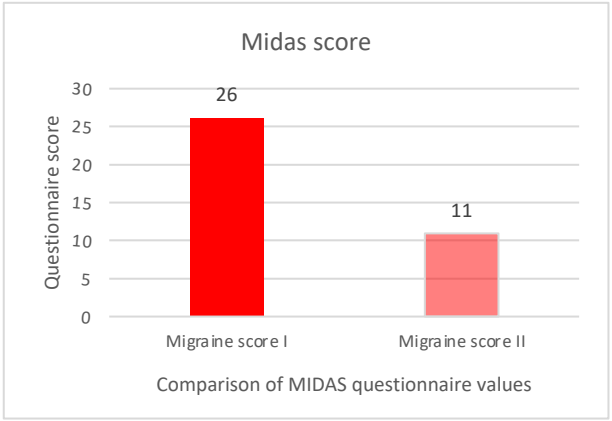
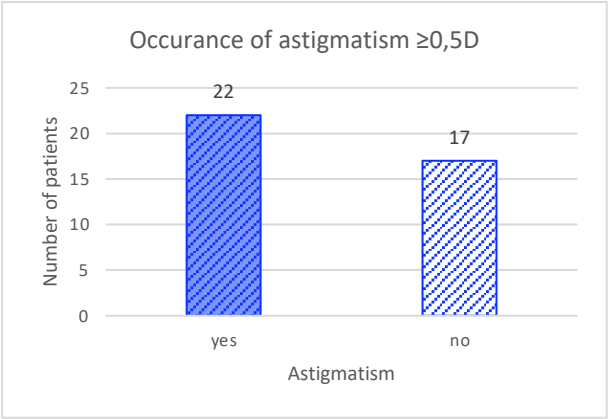
Introduction: The research focuses on the refractive errors and their possible relationship with headache. The aim of the study is to find out whether using the correct correction leads to a reduction in the frequency of difficulties. These subjects were also predicted to have astigmatism ≥0,5 D, as well as anisometropia ≥0,75 D.

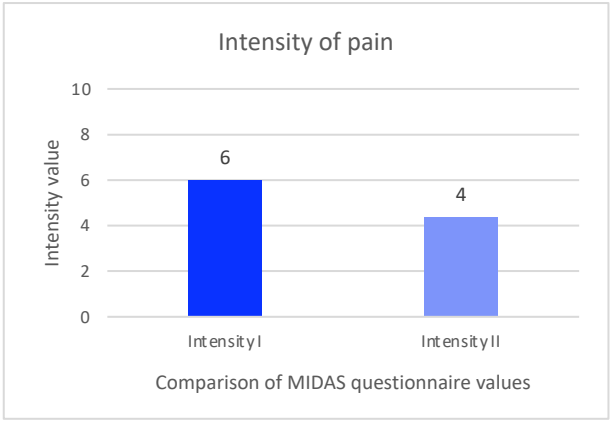
Material and methods: The study has so far involved 39 individuals (78 eyes) with an average age of 25,7 years. The group consisted of 33 females and 6 males. Pain intensity and frequency of difficulties is recorded by MIDAS questionnaire.

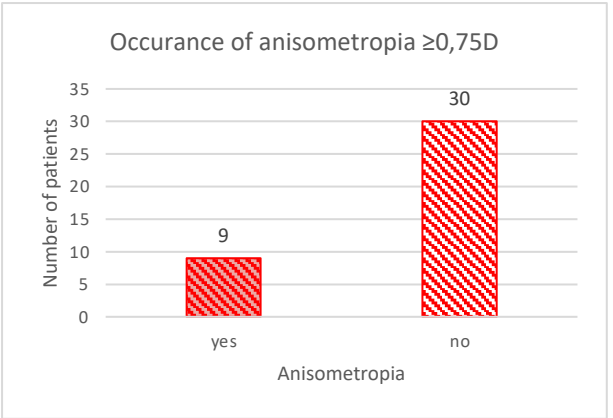
Results: The above assumptions regarding the implementation of the correct correction and its effect on the frequency and intensity of headache was confirmed in the given group of probands. The incidence decreased in all clients and there was an average improvement of 56,99±3,35%. In the case of the issue of headache intensity, 23 out of 39 patients (59%) experienced an improvement of 26,99±2,18%. The second part of the research focuses on the evaluation of the refractive error. Correction of astigmatism that takes values higher than or equal to 0,5 D is present in 44 eyes (56,4%). Finally, assessment of the difference in correction - anisometropia takes values higher than or equal to 0,75 D is present in 9 individuals out of 39 (23,1%).

Conclusion: The expectation regarding the detection of astigmatism was confirmed. The second assumption, which is about the introduction of a new correction and its effect on the frequency of migraine, was also confirmed and, in the end, the presence of anisometropia has not yet been confirmed from this group of patients. The correction of refractive error can play a significant role on the treatment of headaches.









Resources:

Gunes A, Seden D, Levent T, Ozlem T, Hasan K, Vedat AY. Refractive Errors in Patients with Migraine Headache. *Seminars in Ophthalmology*. Published online 2016:492-494. doi:10.3109/08820538.2014.962177

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Gordon G, Chronicle E, Rolan P. Why do we still not know whether refractive error causes headaches? Towards a framework for evidence based practice. *Ophthalmic Physiol Opt*. 2001;21(1):45-50.