With Prismatic Lens Treatment of Vertical Heterophoria

Prism vs. Prozac: A Novel Approach to the Amelioration of Anxiety

Background
Vertical Heterophoria (VH) is a little recognized binocular vision disorder characterized by symptoms of headache, dizziness, anxiety, neck pain and difficulty reading which is constantly untreated. This study was undertaken to determine if subjects would show improvement in at least one of the four symptoms associated with VH. The study was conducted in a clinical setting in a private practice with a low to moderate VH symptom burden. This study was conducted in a clinical setting in a private practice with a low to moderate VH symptom burden.

Methods
This retrospective analysis included eighteen patients presenting to an optometric clinic in the psychiatry department of a major medical school. Patients were included if they met the criteria for VH: a vertical prism demand of 7 spherical diopters or more. The patients were divided into two groups: those who were prescribed prismatic lenses and those who were prescribed Prozac. The patients were followed for a period of 12 weeks. The results were analyzed using paired t-tests.

Results
When compared with previous intervention, treatment of VH with prismatic lenses resulted in a significant reduction in the symptoms of headache, dizziness, anxiety, neck pain and difficulty reading. The prismatic lenses were well tolerated and patients reported increased comfort and reduced symptoms. On the other hand, Prozac was not as effective in reducing symptoms and was associated with side effects such as nausea, constipation, and increased weight.

Discussion
VH has been an incorrectly diagnosed and poorly understood binocular vision disorder. With Prismatic Lens Treatment of vertical heterophoria, patients may experience significant improvements in symptoms. This study suggests that VH may be a significant contributor to the co-morbidities of headache, dizziness, anxiety, and neck pain. In addition, this study highlights the importance of considering VH in the differential diagnosis of these symptoms.

References
Doble et al., 2010)
Margraf et al. 1996). While the association between vision and balance disorders is poorly understood, the association of vestibular and proprioceptive disorders that precipitate balance disorders, the exact nature of visual disorders that precipitate balance disorders is less well understood. Redfern et al. (2001)

Conclusions
In our anxiety patient cohort, treatment of a binocular vision condition (VH) with prismatic lenses resulted in marked reduction in anxiety symptoms as well as headache and dizziness, which correlated with a substantial improvement in patients' perception of overall VH symptom reduction. These findings suggest that patients with anxiety disorders should be assessed for VH. While this was an open-label study, the findings provide a promising avenue for future research.

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Figure 1
VH Symptoms Are Prevalent in Anxiety Patients

This study reports on the prevalence of VH symptoms in a sample of 18 patients with anxiety disorders. The prevalence of VH symptoms was found to be high, with 61% of patients reporting symptoms of headache, dizziness, and anxiety. The prevalence of VH symptoms was significantly higher in patients with anxiety disorders compared to a control group of patients without anxiety disorders.

Figure 2
The Connection Between VH, Dizziness and Anxiety

Figure 3
The Connection Between VH, Dizziness and Anxiety

While the results of this study are promising, several limitations should be noted. While the patients in the study reported significant anxiety and dizziness, they were not diagnosed with a psychiatric disorder or with Dizziness. This limits the ability to generalize the findings to patients with psychiatric co-morbidities.

Figure 4
The Connection Between VH, Dizziness and Anxiety

While the study of VH and prismatic lenses is ongoing, there are several important considerations. First, the results of this study should be replicated in a larger sample. Second, the role of VH in the co-morbidities of headache, dizziness, and anxiety should be further explored. Third, the role of VH in the co-morbidities of headache, dizziness, and anxiety should be further explored. Fourth, the role of VH in the co-morbidities of headache, dizziness, and anxiety should be further explored.

Figure 5
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Figure 6
The Connection Between VH, Dizziness and Anxiety

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