

Comparison of subjective responses to cyclosporine 0.05% versus lifitegrast 5.0% in individuals with dry eye disease



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INTRODUCTION

- Dry Eye Disease (DED) can have various presentations and therapeutic responses depending on the underlying etiology.
- While inflammation is a core mechanism of DED, different anti-inflammatory agents have varying effects on patients.
- To date, no studies have compared patient preferences to the two agents head-to-head.

PURPOSE

- To examine subjective patient preferences and tolerability profiles to two anti-inflammatory agents used to treat DED, cyclosporine (CsA) 0.05% and lifitegrast 5%.

METHODS

RETROSPECTIVE STUDY

- 64 individuals with clinically diagnosed DED treated with both CsA 0.05% and lifitegrast 5% over the course of their disease.
- Information collected included demographics, comorbidities, and DED symptoms and signs.
- The primary outcome measure was patient-reported medication preference.
 - Preferences were noted as mild or strong for a particular medication, no preference, or unable to tolerate either medication.
- The secondary outcome measure was an examination of individual and eye factors that related to medication preference.

RESULTS

TABLE 1. Population Characteristics

PARAMETER	n=64
Age (years)	
Mean	66.7±13.2
Sex (%)	
Male	82.8%
Race (%)	
White	71.9%
Ethnicity (%)	
Hispanic	29.7%

TABLE 2. Patient-Reported Subjective Improvement of Pain and Vision by medication

	None	Mild	Moderate	Marked
Ocular Pain/discomfort Improvement % (n)				
cyclosporine	34.4% (22)	26.6% (17)	23.4% (15)	15.6% (10)
lifitegrast	62.5% (40)	18.8% (12)	10.9% (7)	7.8% (5)
Visual Improvement % (n)				
cyclosporine	65.6% (42)	15.6% (10)	12.5% (8)	6.3% (4)
lifitegrast	78.1% (50)	14.1% (9)	4.7% (3)	3.1% (2)

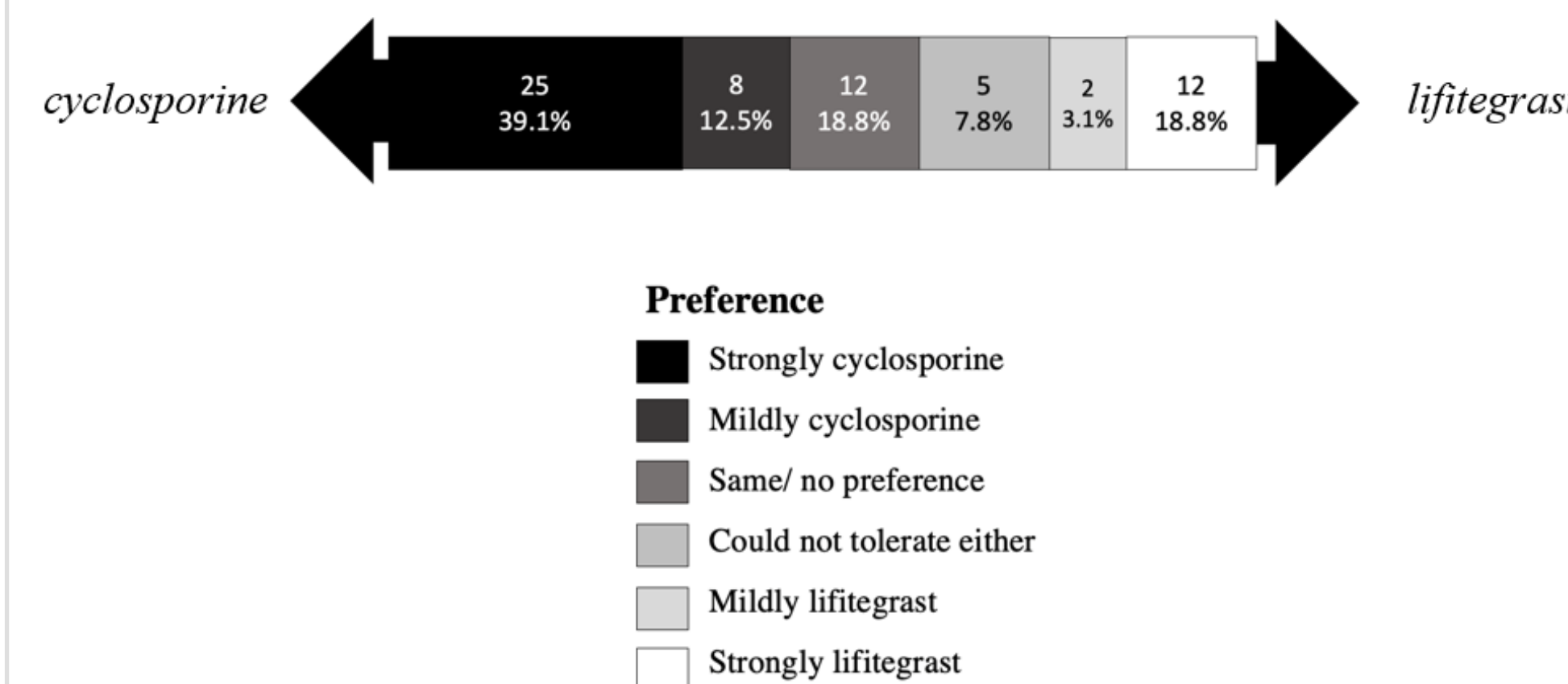


FIGURE 1. Individual preferences were varied, with a degree of the population indicating a strong preference for both agents. Cyclosporine was preferred strongly (far left) by 25 of 64 and Lifitegrast was preferred strongly (far right) by 12 of 64 individuals.

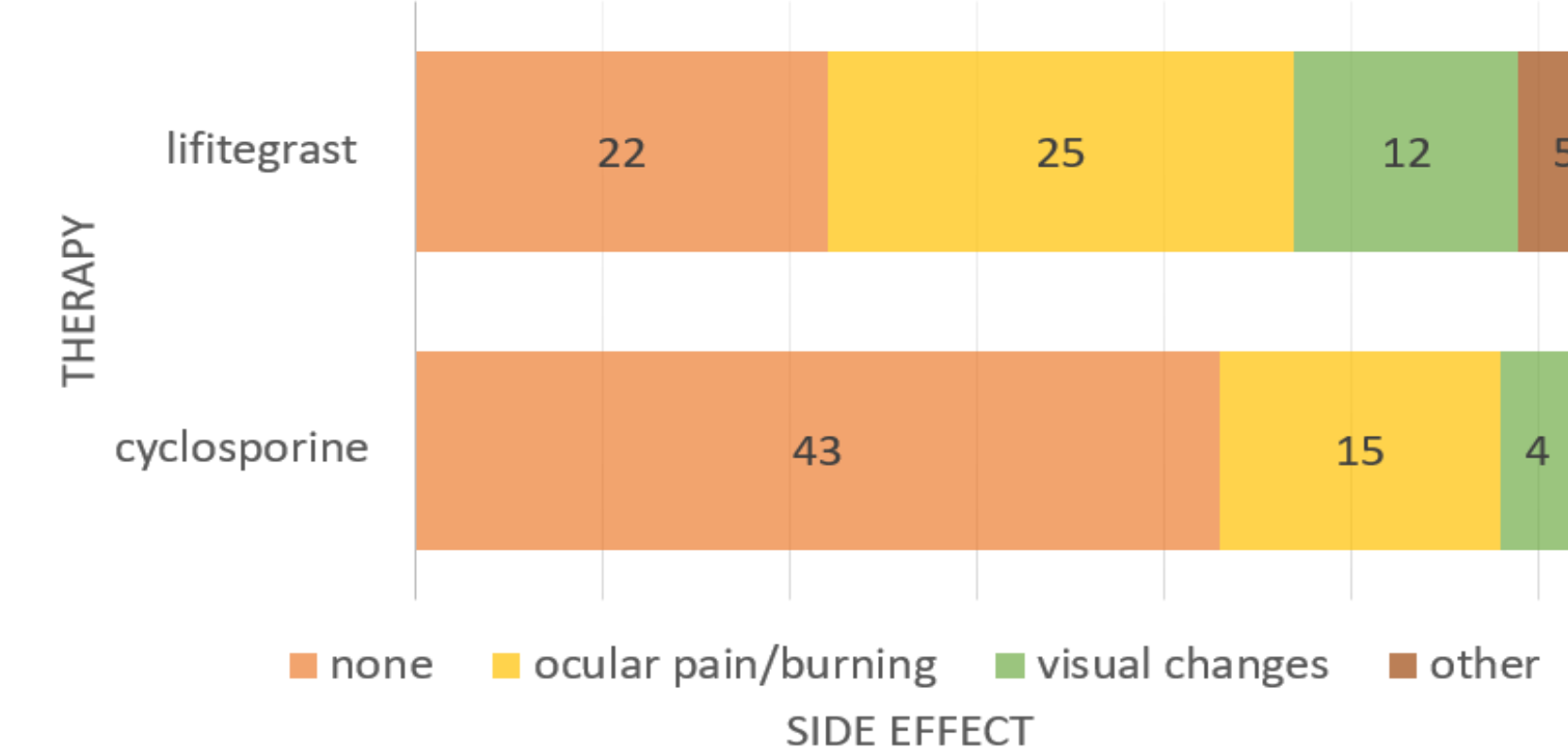


FIGURE 2. Comparison of the side effects experienced while using lifitegrast (top) and cyclosporine (bottom). The most common side effect experienced with both agents was ocular pain or burning.

CONCLUSION

- In individuals who used both CsA 0.05% and lifitegrast 5% over the course of their disease, a higher frequency of individuals preferred CsA.
- No clinical factors correlated with medication preference, suggesting that factors beyond demographics, comorbidities, and DED symptoms and signs may need consideration for optimal therapeutic management. This is an important avenue for future work.

SUPPORT

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