



Initial Scleral Contact Lens Wearing Experience

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INTRODUCTION

- Scleral lenses (SL) are the fastest growing specialty contact lens modality.¹
- SL are frequently prescribed to patients with corneal irregularity, dry eye, and those with relatively normal refractive errors.²
- The process of SL insertion and removal is unique compared to other contact lens modalities as it involves the use of non-preserved saline and other devices.
- The initial adaptation and wearing experience of patients fit in SL is not well understood.
- The purpose of this study was to develop a better understanding of a patient's initial SL wearing experience and to gain insight into SL adaptation and ease of lens use.

METHODS

- Patients who have worn SL for two years or less were invited to complete a web-based questionnaire (Qualtrics), which asked them to recall their initial experience with:
 - SL
 - Ease of SL insertion and removal
 - Preferred insertion method
- Descriptive statistics were determined with Microsoft Excel

Demographic	Percentage
Age (years)	49.9 ± 11.7
Male	45.5%
Ethnicity: Non-hispanic	86.7%
Race	
American Indian or Alaskan Native	0.0%
Asian	4.6%
Native Hawaiian or Pacific Islander	0.0%
Black or African American	4.6%
White	81.8%
More than one race	9.1%

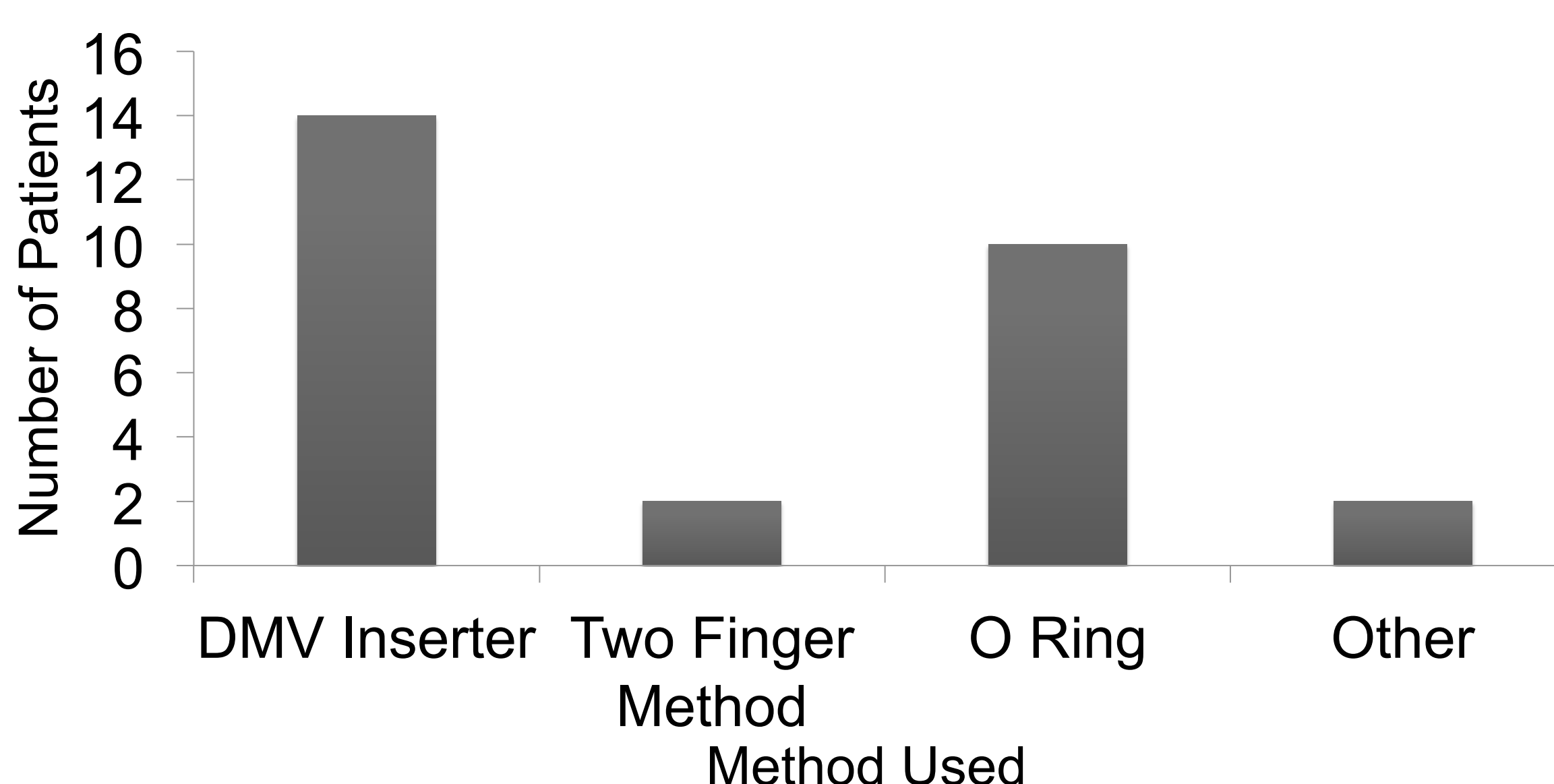


Figure 3. All Methods Used to Insert SL (Subjects could choose more than one method)

RESULTS

- 22 patients met the criteria for the study and completed the questionnaire
- 81.8% of patients were able to wear their SL for >8 hours/day

Impression	Percentage
No hesitation to try SL	72.7%
Some hesitation to try SL	27.3%
A lot of hesitation to try SL	0.0%

Number of Visits Required to Learn How to Use SL	Percentage
One	63.6%
Two	27.3%
Three	4.6%
Four	4.6%
Ease of Learning How To Use SL	
Easy to Learn	68.2%
Some Trouble	31.8%
A Lot of Trouble	0.0%

Frequency of Insertion Bubbles During the First Week of Wearing SL	Percentage
No bubbles on first try	36.4%
Bubbles noticed on first try	27.3%
Bubbles noticed after 2 or more tries	36.4%
Frequency of Insertion Bubbles During the First Week of Wearing SL	
No bubbles on first try	59.1%
Bubbles noticed on first try	22.7%
Bubbles noticed after 2 or more tries	18.2%

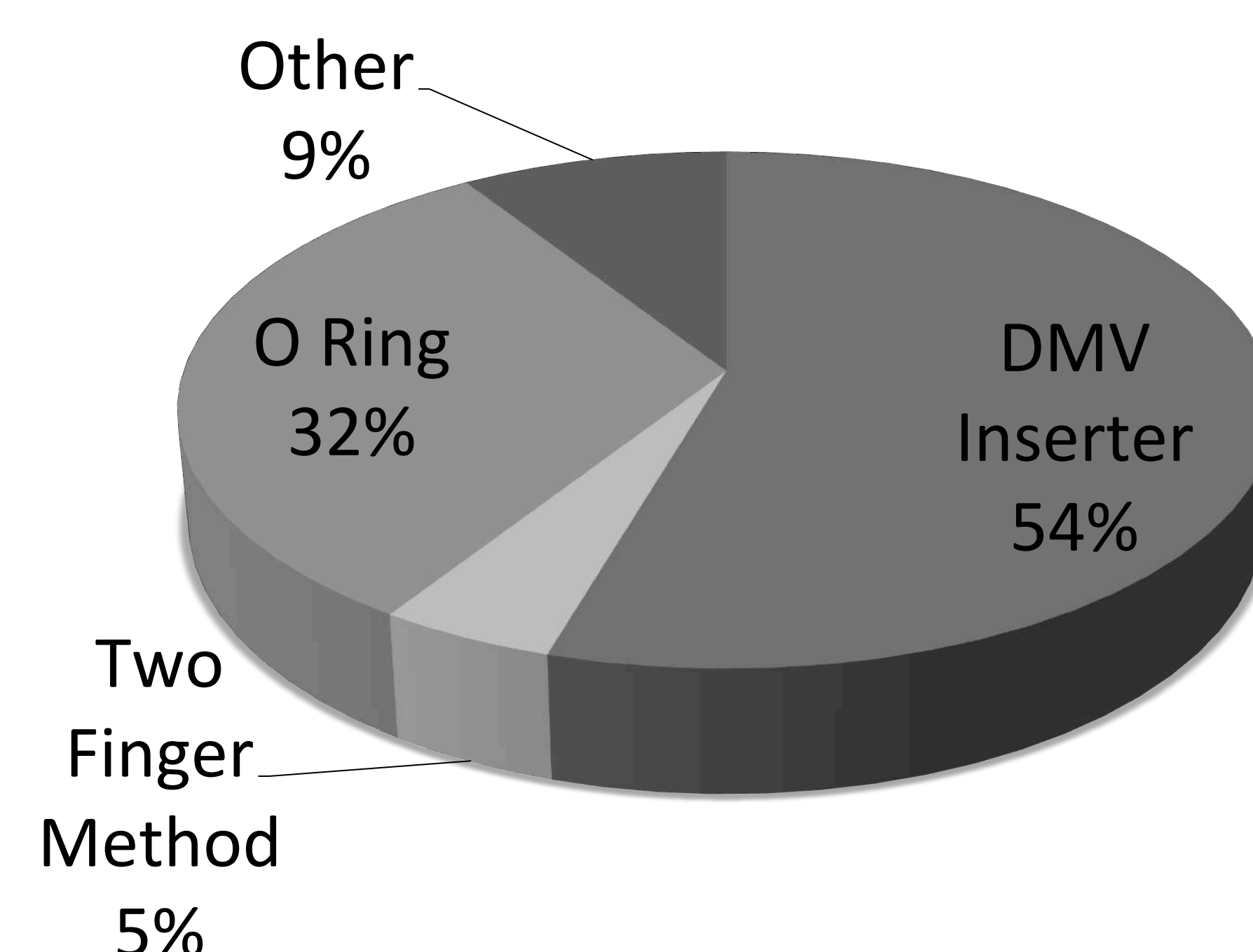


Figure 4. Preferred Method to Insert SL

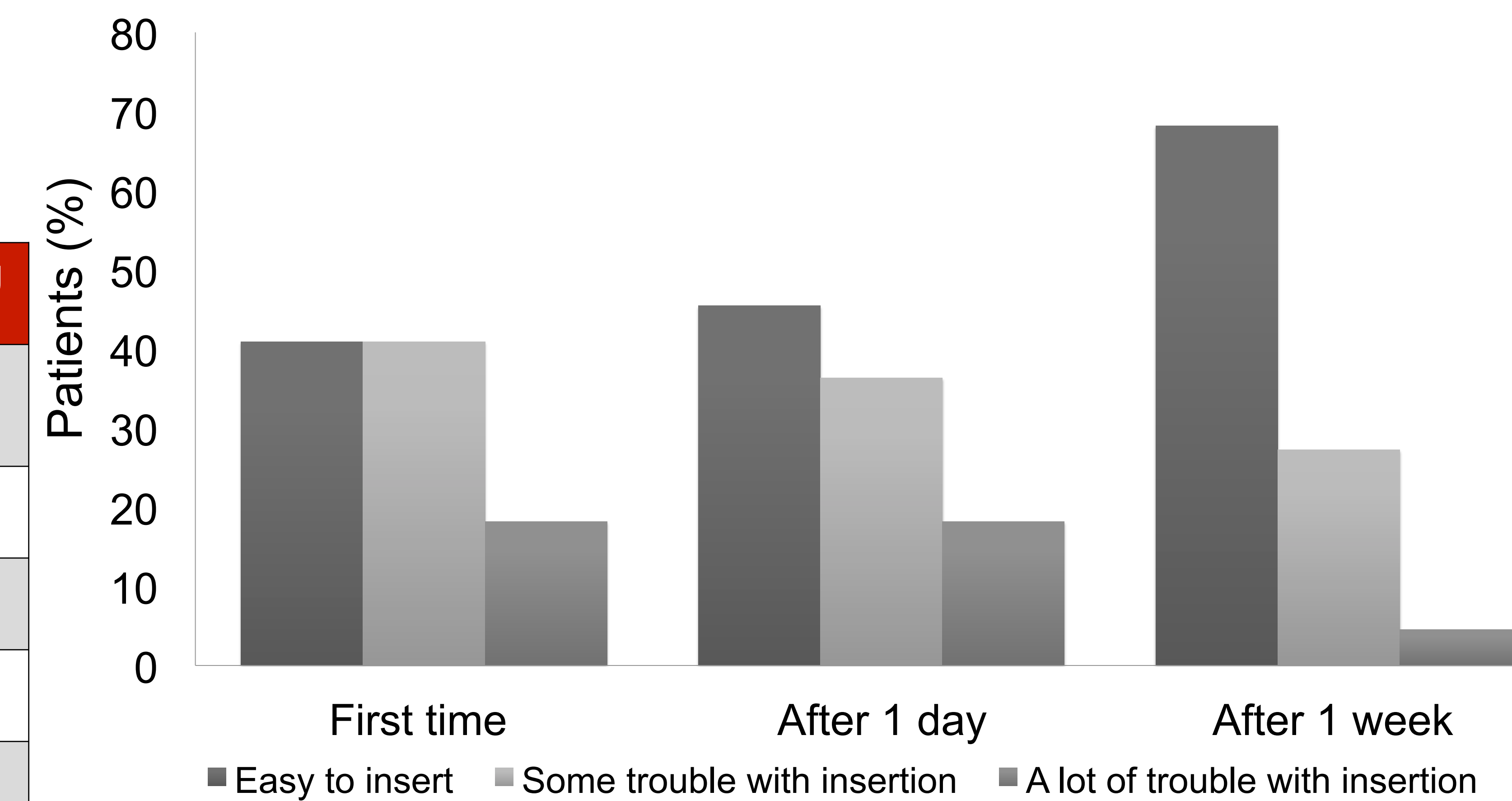


Figure 1. Ease of SL Insertion

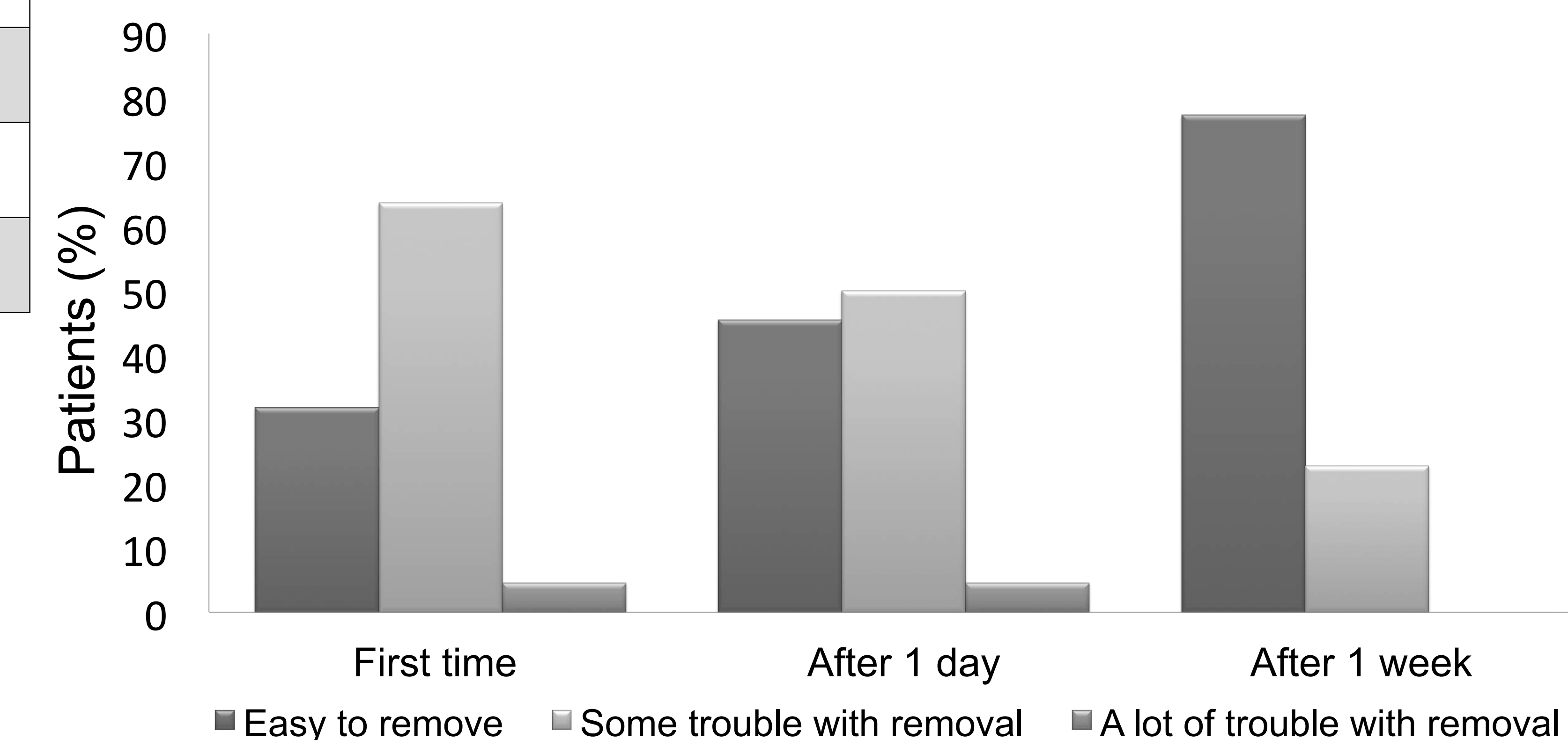


Figure 2. Ease of SL removal

Satisfaction with SL	Percentage
Very satisfied	72.7%
Satisfied	18.2%
Neither satisfied nor dissatisfied	4.6%
Unsatisfied	4.6%
Very unsatisfied	0.0%
Recommend SL to others	
Very likely	72.7%
Likely	22.7%
Neither likely nor unlikely	4.6%
Unlikely	0.0%
Very unlikely	0.0%

CONCLUSIONS

- Patients overall reported that they learned how to insert and remove their SL within 1 week of lens wear.
- More than half of the patients preferred to use the DMV inserter.
- The majority of patients were able to wear their lenses for at least 8 hours/day.
- Even though 27% had some hesitation to try SL, 90.9% are satisfied with their SL and 95.5% would recommend SL to others.

REFERENCES

- Harthan J, Nau CB, Barr J, et al. Scleral lens prescription and management practices: The SCOPE study. *Eye Contact Lens*. 2018;44 (Suppl 1):S228-S232.
- Bergmanson JP, Barnett M, Naroo SA. Scleral gas permeable lenses have come of age. *Cont Lens Anterior Eye*. 2016;39(4):247-248.