



Optometric educators' guidelines for fitting scleral lenses



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INTRODUCTION

Scleral lenses are widely available and utilized for the management of corneal irregularity, ocular surface disease and refractive error. However, there is no established standard on ideal fitting guidelines. Scleral lens fitting and evaluation are now a component of optometric education.

The purpose of this study is to describe current education provided for scleral lens evaluation.

METHODS

Contact lens educators (members of the AOCLE Association of Optometric Contact Lens Educators) were invited to complete an electronic REDCap survey regarding scleral lens fitting and evaluation at their schools between June 2019 and August 2019. This project was approved by the University of Illinois at Chicago IRB. Data will be summarized using descriptive statistics.

RESULTS

192 email invitations were sent to members of the AOCLE and 61 surveys were completed.

Of those, 53 reported being actively involved in scleral lens education at their institution.

- Educators report ideal central scleral lens clearance to be 206 microns \pm 44 (mean \pm SD, n=40); with ideal limbal scleral lens clearance 62 microns \pm 23 (n=36).

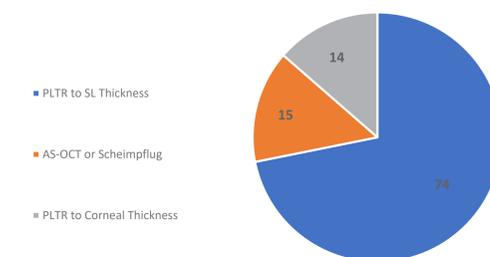
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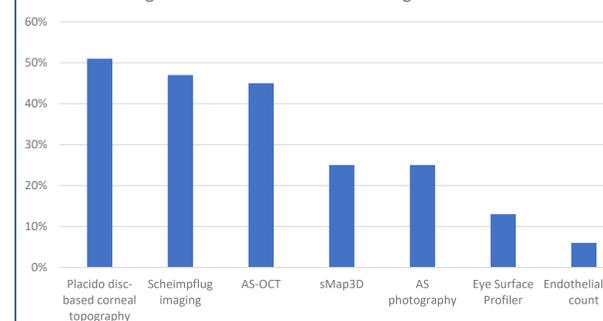
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Figure 1: Assessment of Scleral Lens Central Clearance



- Educators report teaching students the maximum amount of acceptable conjunctival blanching/compression beneath the haptic of a settled scleral lens to be: one clock dial (30 degrees; 46%), none (39%), followed by one quadrant (15%; n=41).
- The maximum acceptable amount of conjunctival prolapse (entrapment, billowing) with a settled scleral lens was one clock dial (30 degrees; 43%), followed one quadrant (25%), and none (20%, n=40).

Figure 2: Instruments Used During SL Evaluation



- Most educators, 92%, are teaching students to remove lenses to evaluate the anterior segment at each follow up visit.

CONCLUSION

Despite the lack of formal established standards, there is a general consensus among optometric educators on ideal scleral lens central and limbal clearance. Importantly, almost all educators are teaching students to remove lenses to evaluate ocular health at each follow up examination.

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