Practitioner Reported Scleral Lens Exam Components: SCOPE (Scleral Lens in Current Ophthalmic Practice Evaluation) 2020 Survey

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INTRODUCTION

The assessment of ocular health is a critical component of evaluating patients who are going to be fit with scleral lenses (SL) . Ongoing , longitudinal monitoring of these patients for complications is just as important as the initial ocular assessment. In spite of numerous case reports of potential complications of SL use, no standards exist for comprehensively evaluating these patients on follow up visits.

The SCOPE study group surveyed scleral lens practitioners to determine the type and frequency of exam components in typical follow up encounters for patients wearing SLs.

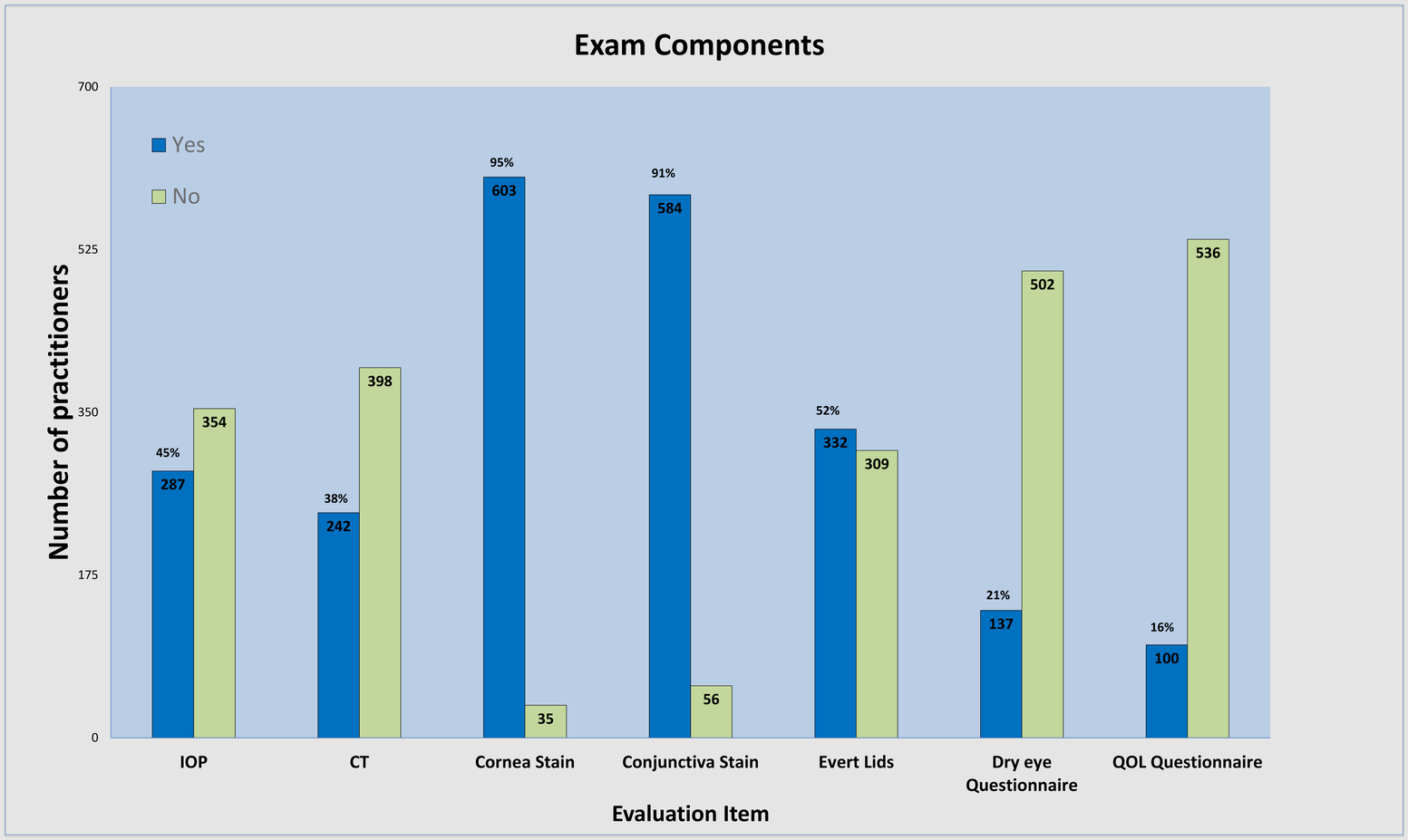
The purpose of the survey was to evaluate whether inter-examiner consistency or specific trends exist for monitoring the ocular health of patients wearing SL for extended periods of time. This information can be useful for developing best practice guidelines.

METHODS

- A REDCap (Research Electronic Data Capture) survey was distributed to potential scleral lens practitioners through an email link sent to 2020 Global Specialty Lens Symposium attendees. Practitioners had to have fit a minimum of 5 SLs in order to participate.
- Based on complications reported in the literature, the survey queried respondents which of the following were routinely performed during follow up examinations of patients wearing SLs:
  - -measurement of intraocular pressure (IOP)
  - -measurement of corneal thickness (CT)
  - -evaluation of corneal staining after SL removal (CS)
  - -evaluation of conjunctival staining after SL removal (CJS)
  - -eversion of eyelids (EL)
  - -administration of dry eye questionnaire (DEQ) and/or visual quality of life questionnaire (VQL)
- Descriptive statistics are presented.

RESULTS

- There were 781 practitioners that reported fitting at least 5 patients with SLs who were included in this analysis.
- Not all practitioners responded to each question.
- There are elements of the scleral lens exam that are routinely examined by practitioners, including staining of the cornea and conjunctiva after lens removal.
- Other elements: questionnaires on dry eye and visual quality of life are rarely evaluated.
- About half of practitioners report checking under lids of scleral lens wearers.
- Less than half of practitioners measure IOP or corneal thickness.



CONCLUSIONS

- Despite the fact that many SL users have complex anterior segment disease, there does not appear to be a consensus on best practices for monitoring ocular health during long-term follow up.
- Corneal and conjunctival staining are the most consistent follow up tests performed, which would rule out corneal complications or side effects from ill fitting lenses.
- However, significant inadequacies were identified:
  - -Measurement of intraocular pressure once lenses are removed
  - -Eversion of the upper and lower eyelids to check for giant papillary conjunctivitis and lid wiper epitheliopathy
  - -Screening for contact lens discomfort , dry eye and depression, all of which have been linked with SL use, irregular astigmatism and ocular surface disease.
- Based on the results of this survey, we recommend that efforts should be made to establish guidelines to ensure the optimal long term health of patients who wear SLs.

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