**NCC 'GET CONNECTED 2026'**
**Organization Section: NCC/ BCLA**
**Poster Abstracts**
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## Management of corneal trauma and scarring with semi-scleral contact lenses: case reports

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**Introduction**: Almost half a million people worldwide suffer from vision loss due to ocular trauma; males exhibit a higher prevalence compared to females. Cornea is the most frequently affected structure: the incidence of corneal abrasion is higher among individuals of working age, with automotive workers aged between 20-29 years demonstrating the greatest risk. Management of visual impairment due to corneal trauma or scarring presents a great challenge, especially in cases of high irregular astigmatism, where spectacles and soft contact lenses (CLs) often fail to provide satisfactory visual acuity. In such cases, rigid corneal, semi-scleral and scleral lenses form the preferred option.

**Case Reports:**

**Case 1** A 26-year-old male was referred for CL fitting due to a corneal scar in the right eye (see corneal topography), resulting from childhood trauma caused by a toy. The scar induced high irregular corneal astigmatism (~16.00 DC), with suspicion of amblyopia. His BCVA with glasses was 0.1. A semi-scleral CL was fitted on the eye, resulting in a decimal visual acuity of 0.5+ and excellent comfort; the other eye was fitted with a soft CL to improve binocular visual performance.

**Case 2** A 77-year-old male, formal marine engineer, with a history of corneal trauma in the left eye (see corneal topography), presented complaining of significant discomfort with his rigid corneal CL, although his BCVA was satisfactory, ~0.7. A semi-scleral lens was fitted on the eye, improving vision to 0.8 and enhancing comfort. Since the patient faced some difficulties with lens handling, he needed more chair time (two extra visits) to get familiarised with the lens fitting procedure.

**Conclusions**: The case reports demonstrate the efficacy of semi-scleral CLs in the visual rehabilitation of patients with corneal trauma / scarring, providing satisfactory visual outcomes, excellent comfort, and high oxygen flux to the cornea. Patient age may affect lens handling and daily wearability.

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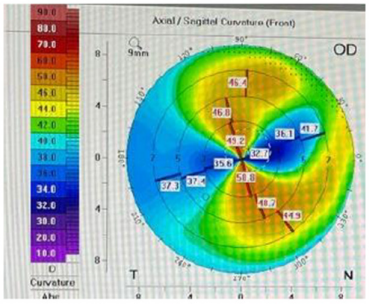
Case 1




Case 2