# 7.14 Removal of Foreign Bodies from the Cornea

### Description

Patients present to optometrists with foreign bodies superficially adherent to or embedded within the surface of their cornea following known or unknown trauma. Corneal foreign bodies may be metallic, plastic, glass, wood, etc. in nature, and may result in significant pain for patients. Symptoms of corneal foreign body include, but are not limited to, foreign body sensation, tearing, redness and discharge. Optometrists possess the knowledge, skill, and judgment to diagnose, remove and manage non-perforating corneal foreign bodies.

## **Regulatory Standard**

The *Optometry Act* (1991) authorizes optometrists to perform the following controlled act:

• Performing a procedure, in or below the surface of the cornea, in order to remove a superficial foreign body from the eye.

The Professional Misconduct Regulation (O. Reg. 119/94 Part I under the *Optometry Act*) includes the following acts of professional misconduct:

- 3. Doing anything to a patient for a therapeutic, preventative, palliative, diagnostic, cosmetic or other health-related purpose in a situation in which a consent is required by law, without such a consent.
- Treating or attempting to treat an eye or vision system condition which the member recognizes or should recognize as being beyond his or her experience or competence.
- 11. Failing to refer a patient to another professional whose profession is regulated under the *Regulated Health Professions Act, 1991* when the member recognizes or should recognize a condition of the eye or vision system that appears to require such referral.
- 14. Failing to maintain the standards of practice of the profession.

### **Professional Standard**

1) Diagnosis of corneal foreign bodies involves:

- case history, with attention to the nature of any known trauma and all patient symptoms;
- measurement of visual acuity, if possible; and
- evaluation of the anterior segment (OPR 6.1).

The location, size, depth and nature of corneal foreign bodies must be documented in the patient health record (OPR 5.1).

Foreign bodies that perforate the cornea must be referred to a physician for immediate evaluation and treatment (OPR 4.6 Ocular Urgencies and Emergencies).

- 2) Removal of corneal foreign bodies involves:
  - topical anaesthesia of the cornea(s);
  - removal by irrigation with saline, if superficial; and
  - removal with an appropriate instrument, if embedded.

Members providing this service must be competent in performing these techniques and have a thorough understanding of the anatomical features of the cornea.

Appropriate infection control (OPR 4.7) must be implemented.

- 3) Post-removal management of corneal foreign bodies involves:
  - re-evaluation of the anterior segment;
  - application of topical anti-infective eye drops, cycloplegic eye drops, and/or a bandage contact lens, as clinically indicated;
  - prescribing drugs (OPR 4.4), as clinically indicated;
  - follow-up appointments, as clinically indicated;
  - further investigation of any unexplained signs or symptoms; and
  - performance of additional diagnostic testing, as indicated by the nature of any trauma.

Patients must be informed of any corneal scarring that results from foreign body injury to the corneal stroma.

#### **Clinical Guideline**

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