

# Cataracts

[Disclaimer](#)

## **COVID-19 note**

*The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) and The Royal Australian College of General Practitioners (RACGP) have made recommendations regarding eye examination during the COVID-19 pandemic. See RANZCO – COVID-19: Practical Guidance for General Practitioners Performing Eye Examinations.*

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## Red Flags

- Sudden and marked change in vision with a known cataract.

## Background – About Cataracts

- Cataracts are not infrequent in patients aged < 60 years, but are very common in patients aged ≥ 60 years.
- Types of cataracts:
  - Nuclear sclerotic cataract – decreased distance vision but well preserved near vision.
  - Cortical cataract.
  - Posterior sub-capsular cataract – may be associated with significant glare symptoms despite normal visual acuity.
- A sudden reduction in vision is unlikely to be due to cataract. The duration of the vision loss should be reflected in the urgency of the review.
- Their significance and the indication for cataract surgery depends on symptoms:
  - A moderate cataract in some older patients may be tolerated quite well.
  - A smaller posterior opacity can make details difficult to see and cause marked glare, making driving difficult.
  - Visual acuity impairment threshold for surgery is variable.

## Assessment

### Preoperative

1. Take a history of **symptoms** and **risk factors**.

#### **Risk factors**

- *Diabetes*
- *Smokers*
- *Long exposure to ultraviolet (UV) light*
- *Long-term use of corticosteroids*
- *Previous eye injuries*
- *Family history of cataracts*

#### **Symptoms**

- *Gradual decrease in distance and/or near vision – smudgy or film in vision*
- *Difficulty with low-light vision*
- *Trouble driving at night*
- *Poor vision despite recent glasses prescription change*
- *Monocular diplopia and haloes:*
  - *Double vision from one eye or*
  - *Hazing of the image rather than true separation*

2. Assess **degree of visual disability**.

**Degree of visual disability**

- Consider symptoms that affect activities of daily living:
  - Light or glare sensitivity
  - Ability to drive
  - Ability to recognise faces
  - Ability to work or self care
  - Risk of falls
  - Change in colour perception
  - Change in contrast sensitivity
  
- Consider lifestyle, study, occupation.

3. Examine the patient:

- Measure **visual acuity** – presume any sudden change in vision in patient with a known cataract, to be due to another cause. See [Sudden or Recent Vision Loss](#).

**Visual acuity**

1. Ask if the patient has distance glasses with them, and if either eye has had known poor vision i.e., a lazy eye.
  2. Test their distance vision in each eye, while wearing glasses, using a 3 or 4 m chart.
  3. Check each eye separately, with distance glasses if worn.
  4. If acuity is subnormal, check with a pinhole.
  5. If vision improves with a pinhole, and no cataract is present, then the patient requires a review of their glasses.
  6. If unable to read any letters on chart, assess the following in descending order:
    - Finger counting
    - Hand movements
    - Light perception
  
  7. Test near vision while patient is wearing reading glasses.
- Check near vision.

4. Perform:

- **direct ophthalmoscopy** to assess lens opacity (red reflex) and co-existing ocular pathology.

**Direct ophthalmoscopy**

- Use a direct ophthalmoscope set to maximum brightness, power set at zero, and held at a distance of 30 to 60 cm in a dark room.
- Appearance:
  - An overall reduction of the red reflex brightness suggests a nuclear sclerotic cataract. This can sometimes be difficult to detect due to its uniformity.
  - Dark, radiating focal opacities indicate cortical cataract.
  - A dark central defect indicates posterior subcapsular cataract (PSCC).

See the University of Iowa – [Eye Rounds Atlas](#) for images of different types of cataract.

- Perform fundus examination with direct ophthalmoscope. Check optic disc and macula in each eye, particularly looking for macular haemorrhage or exudates.

➤ slit lamp examination (if available) to assess lens opacity and co-existing ocular pathology.

5. Arrange assessment by an [optometrist](#) for:

- slit lamp and retinal examination, and
- more detailed assessment of lens opacities, and
- **other eye abnormalities**, detected on direct ophthalmoscopy.

#### **Other eye abnormalities**

- [Macular degeneration](#) if:
  - any recent rapid change in vision.
  - very poor reading vision more so than distance vision.
- [Diabetic retinopathy](#)

## Post Cataract Surgery

1. Mild redness and epiphora are common initially.

2. Postoperative complications are rare:

➤ **Endophthalmitis**

#### **Endophthalmitis**

- Can develop during first week postoperatively
- Rapid loss of vision
- Ocular pain
- Increased redness of eye
- Photophobia

➤ Post operative infection (discharge from wound, injected blood vessels)

## Management

### Practice Point

#### **Arrange optometry monitoring**

Optometrists can safely and effectively perform the role of screening and monitoring of cataracts.

1. If not done during assessment, and cataracts suspected, refer for [optometry assessment](#) for a slit lamp and retinal examination.
  - The optometrist will then arrange referral for ophthalmology assessment for surgery if appropriate.
  - All referrals for public cataract surgery must include a comprehensive eye and vision assessment with slit lamp examination, refraction and dilated retinal examination that

includes best-corrected visual acuity for both eyes and performed in last three months.

2. If nuclear cataracts, encourage patient to see an optometrist to review their glasses prescription, as this can sometimes improve vision enough to defer surgery.
3. Recommend the patient see an optometrist yearly to monitor eyesight.
4. Advise on conservative management:
  - It is common for patients to only require glasses to manage early cataracts for up to 10 years.
  - Consider good focal lighting from behind to assist with reading.
5. Advise on preventative management:
  - [Smoking cessation](#), if appropriate.
  - Avoiding overexposure to sunlight by wearing a hat and sunglasses.
6. If vision in better eye is < 6/12, instruct patient not to drive.
7. If considering cataract surgery (based on optometry assessment, visual impairment, potential for functional benefits and patient preference), refer [urgent or routine ophthalmology assessment](#).
8. For untreatable low vision and legal blindness, consider [Vision Australia assessment](#).

## Post Cataract Surgery

Arrange [immediate ophthalmology assessment](#) if:

- decline in vision.
- pain.
- evidence of infection.

## Referral

- If suspected cataract, refer for [optometry assessment](#) for eye and vision examination.
- If considering cataract surgery (based on optometry assessment, visual impairment, potential for functional benefits and patient preference), refer for [urgent or routine ophthalmology assessment](#).
- Arrange [immediate ophthalmology assessment](#) post-cataract surgery if:
  - decline in vision.
  - pain.
  - evidence of infection.

## For patients

- Better Health Channel Victoria – [Cataracts](#)
- Optometry Australia – [Good Vision for Life: Cataract](#)
- Vision Australia – [Cataracts](#)

### Printable resources:

- Guide Dogs – [Cataracts](#)
- Vision Initiative – [Cataracts](#)

### [Disclaimer](#)

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