

Cataract Surgery

Understanding Cataracts: A cataract is a clouding of the eye's naturally clear lens, often compared to looking through a frosted or steamed-up window. This clouding is not a growth or film over the eye, but an internal change within the lens itself.

Symptoms of Cataracts Common symptoms include:

- Blurred vision
- Increased sensitivity to glare and light
- Poor night vision
- Fading or yellowing of colours
- Needing brighter light to read

If you notice any changes in your vision, it is important to have an eye examination by a doctor, optometrist or ophthalmologist.

Who Gets Cataracts? Cataracts are a normal part of the aging process, primarily affecting those over 60. While cataracts can develop at any age, their prevalence significantly increases with age, affecting nearly 99% of people in their 90's. Cataract surgery is the most commonly performed ophthalmic procedure in Australia, reflecting our aging population.

Causes of Cataracts: The most common cause of cataracts is aging. Other contributing factors include:

- Smoking
- Excessive sunlight exposure
- Diabetes
- Near-sightedness (myopia)
- Certain medications for blood pressure

Treatment for Cataracts: The primary treatment for cataracts is surgical removal of the cloudy lens, replaced with an artificial intraocular lens (IOL). Modern cataract surgery is typically an outpatient procedure, requiring no overnight hospital stay. Advanced IOL's now offer various vision correction options, potentially reducing the need for glasses. However, each type has its limitations and potential issues.

Recent Advances in Cataract Surgery: Recent advancements include:

- **Innovative Intraocular Lenses (IOLs):** Multifocal and extended depth of focus (EDoF) IOLs provide a range of vision at different distances, reducing dependence on glasses.

Prevention of Cataracts: While there is no definitive way to prevent cataracts, wearing sunglasses, using a wide-brimmed hat and not smoking can reduce your risk. Ongoing research is exploring the potential of antioxidants and other compounds to delay or prevent cataracts

Future Prospects: Exciting developments are underway, such as the use of oxysterol compounds to potentially treat cataracts non-surgically. In laboratory tests, these compounds

have shown promise in restoring lens clarity and improving its focusing ability, offering hope for non-invasive treatments in the future. Additionally, artificial intelligence (AI) is enhancing preoperative planning and predicting surgical outcomes, which can improve the safety and efficiency of cataract surgeries