

## [Sri Ramana Eye Centre](#)



**Dr. K. Ravishankar** after having served Sankara Nethralaya, a premier exclusive Eye Hospital in Chennai for more than two decades, started a state of the art Sri Ramana Eye Centre providing Personalized Comprehensive Eye Care in April 2006. The Founder Director Dr K Ravishankar has more than three decades of experience in Eye Care & is well recognized & respected in the field of Ophthalmology.



### [Clinic & Facilities](#)

#### [Our Clinic](#)

From your very first visit to Sri Ramana Eye Centre, you will understand what makes us so different. Our Clinic have been specially designed to provide a calm, comfortable environment in which our patients can feel relaxed and well cared for.

If you want more information about eye conditions or would like to ask us about any of the eye treatments and eye surgery procedures we offer, or if you have any questions about our eye care contact us.

Our contact details are as follows:

### [General Inquiries](#)

Phone: 91-44-28155454

Mobile No: 98408 77296

E-mail: [drkrs@sriramanaeye.com](mailto:drkrs@sriramanaeye.com)

Working Hours:

Mon-Sat 9:00 am-8:00 pm

### [Our Clinic](#)

11, Gopala Krishna Street

T. Nagar

Chennai

Tamil Nadu 600017

### [Our Facilities](#)

Facilities that were designed with you in mind.

#### **A Calm Reception**

From start to finish, we want to ensure that all of our patients feel relaxed, reassured and well-cared-for.

Our reception area is light, airy and peaceful, with a friendly team of staff to welcome you. Our team makes sure everything you require is being provided.

#### **Hi-tech treatment rooms**

The Standard of equipment in our consultation room and theatre is world-class.

All of our rooms are fitted with state-of-the-art equipment and technology, most technically advanced instruments for cataract, retinal and glaucoma surgical techniques and procedures.

### [Our Technology and Equipment](#)

Your eyes are a work of art. Our technology reflects this.

**We work with the leading manufacturers and suppliers of ophthalmic equipment and instruments, and constantly monitor and assess the quality and performance of the equipment to ensure that the very highest standards are maintained.**

**What's more, we consult with leading surgeons regularly to gain their views on the latest technology and treatments. If these experts believe that new equipment has become available that will help them provide even higher levels of care and treatment, we research this carefully and, where appropriate, we make the investment.**

### **Individually Tailored Treatment**

**Every eye is unique and that's why we tailor your treatment exactly to your eye's specific needs.**



### **[About Dr. K. Ravishankar](#)**

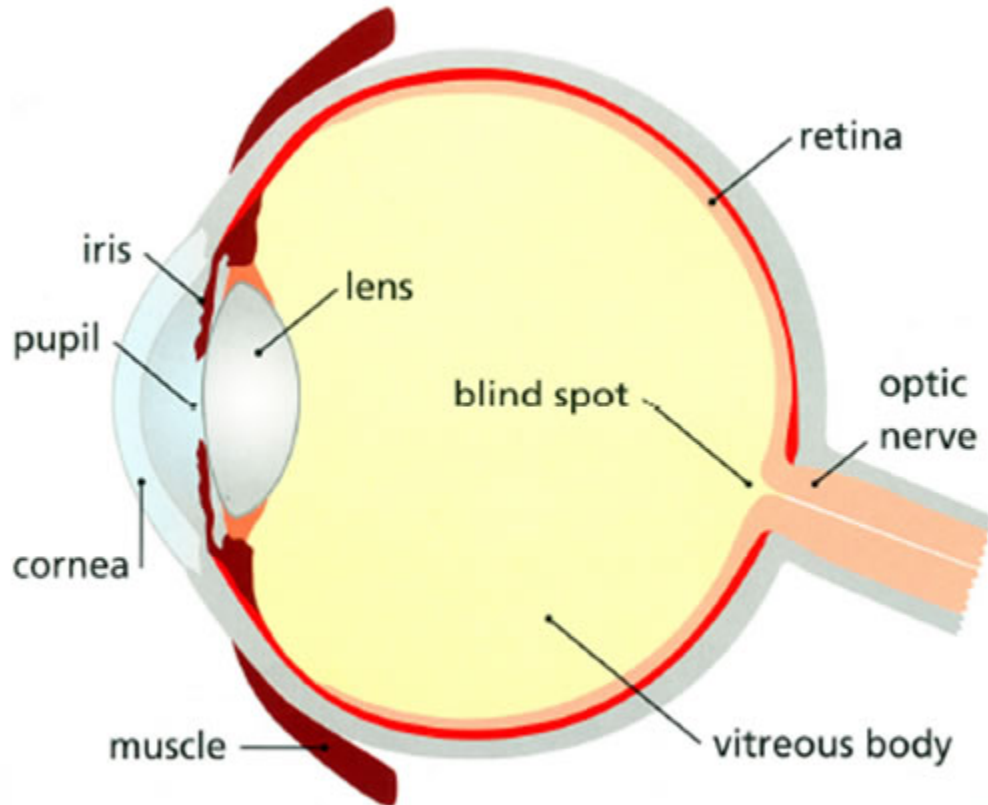
**Dr K Ravishankar is a Fellow of Royal College of Surgeons (FRCS), Edinburgh, UK and Alumnus of National University of Singapore (NUS). He is the Founder and Medical Director of Sri Ramana Eye Centre.**

**Dr K Ravishankar is backed with more than 3 decades of experience in Ophthalmology. He has served a major part of his professional career with Sankara Nethralaya, Asia's leading tertiary care eye hospital. He last held the position of CEO and Medical Director with this esteemed institution.**

**Dr K Ravishankar has a distinct record of performing more than 30,000 surgeries till date. He is a specialist in Phacoemulsification, Micro Incision Cataract surgery (MICS) and Small Incision cataract surgery (SICS) and treatment of retinal disorders, Pediatric eye care, Squint and Contact lens.**

## Know Your Eye

How do we see?



*Anatomy of the normal eye*

The eye is like a camera. When you take a picture with a camera, the lens allows the light to pass through & focuses on the film present behind in the camera. When the light hits the film, picture is taken.

The eye works in the same way. The light ray from the object passes through the Cornea, where it is bent & passes through the Lens. There it is further focused & passes through a gel like fluid , the Vitreous before it falls finally on the Retina. On the retina we have an inverted image of the object formed. Once the light hits the retina, a chain of reaction sets in resulting in conversion of the light energy into electrical impulses. These impulses travel through the Optic tract & reach the Brain. The brain then reads the information & fuses both the images & makes the inverted images erect.

## Master Eye Check up

Comprehensive eye examination is a complete evaluation of all the structures of the eye like the lids, cornea, anterior chamber, angle, lens, retina, optic nerve etc.

This evaluation helps in identifying any

1. Refractive error like myopia(short sight), hypermetropia(long sight) or astigmatism
2. Amblyopia or lazy eye
3. Squint or cross eyes
4. Cataract
5. Glaucoma
6. Retinal disorders like diabetic retinopathy, age related macular degeneration (ARMD), retinitis pigmentosa (RP) etc
7. Optic nerve disorders
8. Any other disorder affecting the eye

Early detection of these disorders helps in the initiation of treatment which either improves vision or helps in containing the damage thereby maintaining the existing vision.

It is recommended that children at a very early age, even less than 2-3 years should have an eye exam.

It is mandatory that everyone around the age of 40 years should have an eye check up and yearly follow up as advised.

Complete eye check up in most cases would take about an hour.

## Cataract Eye Surgery

### **What is a cataract?**

A cataract is a condition affecting the lens of the eye which causes the normally clear lens to become cloudy. This restricts the amount of light that is able to enter the eye, which results in blurred vision, and often dazzle and glare.

The lens is situated inside the eye behind the pupil and iris and is responsible for providing a clear image. The cause of cataracts is most commonly related to old age but can occur at any age for numerous

reasons. The common belief that a cataract has to be “ripe” for it to be removed is incorrect. Cataract surgery can be undertaken at any stage of cataract formation, but generally this is done when reduced vision affects your life style.

Usually cataracts develop gradually and can often go unnoticed at first.

## **Treatment**

The only way a cataract can be treated is by an operation to remove the cloudy lens. This is a keyhole type operation using a very small incision (cut) into the eye. This procedure is called Phacoemulsification (Phaco Surgery). This does not involve the use of lasers. A lens implant is inserted into the eye to replace the natural lens. A stitch or two may be used in the eye as part of the surgery, but often none are needed.

The operation is normally carried out as a day case procedure under a local anaesthetic (you will be awake). Some patients may need to stay overnight for medical or social reasons. If you have cataracts in both eyes we will only operate on one eye at a time in order to give the first eye time to heal.

## **Pre-operative assessment and preparing for your operation**

You will have a pre-operative assessment before your surgery. This will take place a couple of weeks before the expected surgery. At this appointment we will give you Instructions on how to prepare for your operation. Consent for surgery will be taken by the doctor and the risks of the operation will be explained to you at this time. The doctor will also conduct “Biometry” measurements which calculate the power of lens implant that is best suited to your eye. Everyone’s eye needs a slightly different implant power and we take considerable effort to make sure the measurements are correct. Sometimes this involves a more in depth measurement process.

## **How long does the operation take?**

The operation usually takes about 15 to 20 minutes to perform.

## **After the operation**

The eye will be covered with an eye pad for a short time. This will be removed an hour after the surgery. The eye is then examined and a

protective eye shield placed over the eye to be worn at night for the next 2 weeks. We will give you eye drops to put into the eye after surgery 4 times a day, beginning the next day. You will usually need to continue using the drops for 2-3 weeks after the operation. The eye drops help to prevent infection and reduce swelling.

There is very little pain associated with this operation, but some patients find that painkillers such as paracetamol tablets help to reduce any mild pain. You may notice that your eye is more sensitive to light after the operation. This is a normal complication and the use of ordinary sun glasses is recommended in this case.

### [How will my vision be after the operation?](#)

In the majority of cases an improvement in vision is noticeable within the first few days of surgery. However, the time it takes can vary widely between patients and greatly depends on your eye health – e.g. any other eye problems. Your best vision may not be achieved until glasses are prescribed by the Doctor. This does not happen until the eye has had time to heal, approximately 4-6 weeks after surgery.

### Instructions to follow after the Operation

1. Do not rub or touch the eye.
2. Avoid situations where the eye could be knocked. It is OK to look and bend down.
3. Avoid contact sports and swimming for about one month.
4. It is OK to read and watch television – they will do no harm to the eye.
5. Protect the eye with an eye shield at night time and when washing your face for at least the first two weeks after the operation.
6. Sunglasses may be helpful if the eye is sensitive to light.
7. Keep putting in the prescribed eye drops until the Doctor tells you when to stop.

### Follow up

You will have an eye check with doctor within 2-3 weeks of the operation.

### [Diabetic Eye Care](#)

Diabetes is a disease characterized by increased levels of sugar in the blood stream. Blood sugar is normally regulated by the hormone insulin.

Diabetes occurs either when the pancreas fails to secrete insulin or the tissues of the body fail to respond correctly. Diabetes affects both young and old people.

### [Diabetic Retinopathy](#)

Patients with diabetes are more likely to develop eye problems such as cataracts or glaucoma, but the principal threat to vision is through diabetic retinopathy. Most patients will have developed some signs of diabetic change in the retina after 20 years.

With time, diabetes affects the blood vessels of the retina, causing impaired circulation and weakness of the vessel walls. In the earliest phase of the disease, 'background diabetic retinopathy' - small dot-like haemorrhages - may be visible, but vision is not threatened.

If leakage from blood vessels progresses, the central macular area of the retina becomes swollen and visual symptoms develop. This appearance is described medically as macular oedema and this phase of the disease is known as 'diabetic maculopathy'. If left untreated, it may permanently damage central vision. Maculopathy is common in Type II diabetes, the form of the disease usually occurring later in life.

Sight may also be threatened by proliferative diabetic retinopathy, in which there is a serious danger of haemorrhage into the vitreous gel which fills the eye. The cause of proliferation is inadequate oxygenation of the tissues of the retina, sometimes referred to as 'ischaemia'. The retina responds by growing abnormal 'new vessels', which are both unhelpful and dangerous and their fragility results in sudden bleeding. This type of retinopathy is often seen in Type I diabetes and, without adequate screening, may go unnoticed until severe haemorrhage occurs.

The most serious form of diabetic retinopathy occurs when proliferation and bleeding result in scarring between the retina and the gel within the eye. Contracting scar tissue can pull the retina away from the eye wall, resulting in permanent blindness.

### [Diabetic Retinopathy Treatment at Sri Ramana Eye Centre](#)

Modern screening methods will alert us to diabetic eye disease before the onset of symptoms. The decision to treat is made on the basis of clinical examination and special tests, including fluorescein angiography and OCT

retinal scanning. Maculopathy threatening the centre of vision is treated with small numbers of laser burns, which 'dry up' the water-logged retina. Injections into the eye (for example steroid treatment) may also be helpful. Proliferative diabetic retinopathy is treated by the application of hundreds, or even thousands, of laser burns to the periphery of the retina. This reduces the volume of sick retina, whilst saving a blood supply for the important central macular area.

Bleeding into the vitreous of the eye may require vitrectomy, a surgical procedure in which the blood-stained gel is safely removed. Bleeding points are treated and laser applied to prevent the development of more abnormal 'new vessels'. Modern vitrectomy surgery has revolutionised the treatment of severe proliferative diabetic retinopathy, giving hope to the most desperate of cases.

### [Child Eye Care & Childhood Blindness](#)

Dr K Ravishankar, Medical Director, Sri Ramana Eye Centre has a rich experience of treating young children and newborns with eye disorders.

Squint (Strabismus is the scientific term), Congenital and Pediatric cataracts, Refractive errors, Amblyopia are some of the disorders which affect the children. Dr KRS has performed more than 5000 squint correction and cataract surgeries in children and newborn during the last thirty years.

In this section we will understand these disorders in detail. For your convenience of reading, the entire section has been done in a question and answer format.

### [Refractive Errors: Refractive Errors can affect the Childs vision –](#)

What are refractive errors?

The following are the most common refractive errors, all of which affect vision and may require corrective lenses for correction or improvement:

#### **Astigmatism**

Astigmatism is a condition in which an abnormal curvature of the cornea can cause two focal points to fall in two different locations - making objects up close and at a distance appear blurry. Astigmatism may cause eye strain and may be combined with nearsightedness or farsightedness.

Astigmatism can start in childhood or in adulthood. Some symptoms include headache, eye strain, and/or fatigue. Eye rubbing, lack of interest in school, and difficulty in reading are often seen in children with astigmatism. Depending upon the severity, eyeglasses or contact lenses may be required.

### Hyperopia

Commonly known as farsightedness, hyperopia is the refractive error in which an image of a distant object becomes focused behind the retina, either because the eyeball axis is too short, or because the refractive power of the eye is too weak. This condition makes close objects appear out of focus and may cause headaches, eye strain, and/or fatigue. Squinting, eye rubbing, lack of interest in school, and difficulty in reading are often seen in children with hyperopia. This condition is uncommon in children. Eyeglasses or contact lenses may help to correct or improve hyperopia by adjusting the focusing power to the retina.

### Myopia

Commonly known as nearsightedness, myopia is a condition in which, opposite of hyperopia, an image of a distant object becomes focused in front the retina, either because the eyeball axis is too long, or because the refractive power of the eye is too strong. Myopia is the most common refractive error seen in children. This condition makes distant objects appear out of focus and may cause headaches and/or eye strain. You may notice that your child is holding books too close to his/her face and writing with his/her head very close to the table. Eyeglasses or contact lenses may help to correct or improve myopia by adjusting the focusing power to the retina.

### What causes refractive errors?

Refractive errors (myopia and hyperopia) have been found to cluster in families. A variety of inheritance patterns have been observed including dominant (one gene passed from a parent with a refractive error to a child), recessive (caused by two genes, one inherited from each parent who may/may not have a refractive error), and multifactorial (combination of genes and environment). Refractive errors are present in a number of genetic disorders, such as Marfan syndrome and Down syndrome.

### Treatment

Correction using spectacle is the best option available. Though children may initially refuse to accept glasses, they will become fond of them once they realise they can see better with them on. The power of the glasses may change depending on the growth of the eye ball. An eye checkup and change of glasses if necessary, has to be done once in 6 months for children under 5 years of age and once a year thereafter. Making a child wear glasses regularly is the duty and responsibility of the parents. Failure to wear glasses in childhood will retard the development of vision in that eye. Children older than 15 years can use contact lenses if they don't want spectacles. Those over 18 to 20 years of age with stable power also have the option of LASIK, a laser refractive surgery apart from contact lenses. Failure to correct the refractive errors and the eventual loss of vision may hamper the academic activities of the child. So an ophthalmic consultation is essential for children, for especially with symptoms of refractive errors. Finally, nutrition deficiency is not related to refractive error. So loading these children with Vitamin A will not help them. Sometimes this may lead on to other complications.

[Lazy eye: In this case child's vision does not develop properly after a certain age](#)

## Introduction

Amblyopia is an early childhood condition where the child's vision does not develop properly. It usually occurs in one eye, but it can occur in both eyes. Sometimes referred to as lazy eye, amblyopia affects about 1 in 25 children.

A baby is able to see as soon as it is born, and vision continues to develop up until around the age of seven or eight. After this, no further development occurs until sight deteriorates with age, or after eye injury or disease.

Light rays travel through the lens at the front of the eye, and form images on the retina, which is a light sensitive surface at the back of the eye. The retina sends messages to the brain so that it recognises the objects we are seeing.

During early childhood, it is important that clear images are formed in the eye and are sent to the brain, so that the child's vision develops normally. If there is a problem with this development, it may result in impaired vision (amblyopia).

**Squint Management:** It is a condition of the eye that causes one of the eyes to turn inwards

### **What is a squint?**

A squint (strabismus) is a condition of the eye that causes one of the eyes to turn inwards (converge), outwards (diverge) or sometimes upwards, while the other eye looks forward.

The cause, severity, and direction of a squint varies from person to person. It is usually spotted in childhood, sometimes within weeks of a baby being born, and affects 5-8% of children (1-2 in every 30).

### **What are the Symptoms?**

The most common symptom of a squint is one of the eyes not looking straight ahead. In newborn babies it is quite normal for their eyes to 'cross' occasionally, particularly if they are tired. However, if you notice that this happens to your child beyond three months of age, it is advisable to bring the child for a check up with your Ophthalmologist.

Your child may also look at you with one eye closed, or with their head turned to one side, or have photo phobia [difficulty in facing light]. These may be clues that they are experiencing double vision, and could be a sign that they have a squint.

### **Why does it happen?**

There are different types of squint, and the cause is not always known. A baby can have a congenital squint (born with the condition), particularly if it runs in the family.

The squint can occur due to muscle or nerve problems in the eye, as a result of a childhood illness such as measles or chickenpox or high fever, or sometimes as a result of being long sighted (difficulty seeing close-up objects). When a child is very long sighted, their eyes will attempt to focus so much that double vision occurs. This can have a knock-on effect, causing one eye to turn away to avoid using it.

### **How is Squint treated?**

Treatment

A squint is a condition that should be treated as soon as possible after it is detected. Treatment is most effective in very young children. A squint will not disappear as the child gets older, and in fact the sight in the affected eye will gradually get worse. Some people are superstitious to believe that having squint is lucky. This is a myth. Detection and early medical intervention is of paramount importance.

There are several types of treatment available:

1. If your child is long sighted, glasses may be prescribed which can often correct the long sight and the squint.
2. Alternatively, a patch may need to be worn over the good eye, to encourage the eye with the squint to work harder and become trained to work properly.
3. In some cases, the squint can be treated with special eye drops, or with eye exercises.

If none of these treatments help, then surgery may be required. Surgery for a squint involves moving the muscles attached to the outside of the eye to a new position. It may sometimes be necessary to operate on both eyes in order to 'balance' them effectively, even if the squint is only in one eye.

There is no chance of the child's eyesight being damaged by this operation, as the surgery does not touch the focussing part of the eye. When your child has returned home, they will need to use eye drops for a short time.

### **Are there any complications?**

A complication that can develop if a squint is untreated is amblyopia [Lazy eye]. Vision in the affected eye gradually gets worse because the brain starts to ignore the weaker message being sent from that eye. Once this has occurred, it is not possible to correct the damage, which is why it is so important that any squint is treated.

1. Light enters the eye through the cornea, the clear, dome-shaped surface that covers the front of the eye.
2. From the cornea, the light passes through the pupil. The amount of light passing through is regulated by the iris, or the colored part of your eye.
3. From there, the light then hits the lens, the transparent structure inside the eye that focuses light rays onto the retina.

4. Next, it passes through the vitreous humor, the clear, jelly-like substance that fills the center of the eye and helps to keep the eye round in shape.
5. Finally, it reaches the retina, the light-sensitive nerve layer that lines the back of the eye, where the image appears inverted.
6. The optic nerve carries signals of light, dark, and colors to the area of the brain (the visual cortex), which assembles the signals into images (our vision).

**Cataract in Children: Cataracts can interfere with visual development of the child**

### **What is a cataract?**

The eye works similar to a camera. There is a lens that helps to focus the visual image. This lens is normally clear and brings objects into focus on the lining inside the eye called the retina. The retina acts like the film in a camera.

When the lens becomes cloudy and interferes with vision, it is called a cataract. When a cataract occurs in a child, it may interfere with visual development. If the cataract is present in just one eye, the child will usually prefer the normal eye and ignore the eye with a cataract, leading to the development of amblyopia (lazy eye) and strabismus (wandering eye).

### **What causes cataracts in children?**

Some cataracts are present at birth, and others develop during the first few months or years of life. Some cataracts will be inherited, and others will be related to metabolic or systemic abnormalities. In many cases, the cause is unknown. In the older child, cataracts are often related to injuries or ocular inflammation related to juvenile rheumatoid arthritis. When a visually significant cataract occurs in a child, prompt surgery and rehabilitation are required to maximize visual development. The visual outcome for children with cataracts is much more optimistic now than it was a few years ago. However, some eyes will have associated abnormalities, which limit the visual potential that can be obtained, despite early surgery and adequate visual rehabilitation.

## How are cataracts in children treated?

There are three important parts in the management of the child with a cataract: Preoperative evaluation, surgery, and visual rehabilitation.

**Preoperative evaluation:** A complete preoperative evaluation of both eyes is required. Some cataracts are unilateral and the health of the apparently normal eye requires careful evaluation as well. An eye with a cataract may have other associated abnormalities, for example: inflammation, abnormal tissue behind the lens of the eye, and glaucoma, which require assessment preoperatively in order to provide the most reasonable expectation for visual outcome. An ultrasound (sound waves), used to image the inside structure of the eyes, is needed in some cases.

**Surgery:** Unlike adults, cataract surgery in children requires general anesthesia. This is usually very well tolerated even in the youngest babies. Microsurgical techniques are used to remove the cataract with a small instrument. This allows almost complete removal of the cataract that decreases the chance of it recurring. Children are usually allowed to return home the day of surgery, after recovery from anesthesia. You may notice slight redness of the eye for a few days or weeks as the incision heals. Different types of eye drops will be prescribed to help the eye heal. For the next few weeks rubbing the eye should be avoided. A protective shield, worn over the operated eye, will be required for several days or weeks.

**Visual rehabilitation:** There are two essential components to visual rehabilitation:

1. Replacing the lens, and
2. Restoring the vision.

Usually, a "new" lens is required to help focus the visual image once the lens with the cataract has been removed. This may be accomplished with glasses, contact lenses, or an intraocular lens implant (IOL) placed inside the eye at the time of the cataract surgery. Your doctor will discuss with you which option(s) are best for your child as the decision is influenced by the type of cataract present and by your child's age. If contact lens or glasses are selected, these are fitted within several days or weeks following surgery, and should be worn on a full-time basis. Parents are taught how to carefully insert and remove contact lenses. Even when an IOL is implanted, glasses and, occasionally, contact lenses may still be required.

Frequently, patching therapy is needed to encourage the development of vision in the operated eye and to prevent amblyopia (poor vision that occurs as a consequence of not using the eye). This is particularly true in the child who has a cataract in only one eye. Sometimes an opaque contact lens or atropine drops (which blur the vision) are used in the good eye if patching is not working or if the child is intolerant of the patch.

Some children who have had cataract surgery when they were younger, but who did not receive an IOL implant, may benefit from lens implant surgery at a later date. This option is not always possible, and depends, to some extent, on how the original surgery was performed, and on the visual potential of the eye.

What post-operative issues should we be aware of?

Despite adequate optical rehabilitation (a new lens) and patching therapy, misalignment of the eyes (strabismus) often develops. This may require eye muscle surgery to improve the alignment. Periodic evaluations are required to detect any other post-operative complications (for example, secondary cataract, inflammation, glaucoma, retinal detachment). A child who has undergone cataract surgery requires close monitoring of visual development and will need changes in glasses or contact lenses as the eye matures. The parents must accept the responsibility for the optical rehabilitation, patching therapy, and continued follow-up care that is required to maximize the visual development in the operated eye. Without the participation of parents, optimal vision will not be realized.

## [Glaucoma Treatment](#)

### [What is Glaucoma?](#)

Glaucoma, often a symptomless condition in its early stages is known as the 'Silent thief of vision'.

It occurs due to a blockage in the drainage system of the eye, due to which the intraocular fluid gets accumulated leading to the development of high pressure within the eye. This high pressure can damage the sensitive optic nerve, thereby leading to loss of vision.

### [What are the symptoms of glaucoma?](#)

Glaucoma can remain asymptomatic till the late stages, when it presents as loss of vision owing to damage to the optic nerve.

In acute stages, it can present with severe pain, redness, headache and prostration.

### **What are the different types of glaucoma?**

Broadly, glaucoma can be classified as primary or secondary.

Primary glaucoma can further be subdivided into:

**1. Open angle glaucoma**

This is the most common form, where the eye's natural drainage canals become clogged over time. This is dangerous, because most people have no symptoms or early warning signs. If it is not diagnosed and treated, it can cause a gradual loss of vision. However, when diagnosed, it responds well to medication.

**2. Angle Closure Glaucoma**

In this type, the iris is not as wide and open as it should be. This usually presents very acutely with severe eye pain, and redness.

**3. Normal Tension Glaucoma**

Also known as low-tension glaucoma or normal pressure glaucoma. In this type, the optic nerve is damaged, despite the pressure remaining normal. Those at high risk for this form include patients with a family history of glaucoma, history of systemic heart diseases, especially rhythm abnormalities.

The secondary form of glaucoma usually occurs as a result of an insult to the eye that can include injury, inflammation, tumors, or advanced cases of cataract and diabetes, and certain drugs such as steroids. This again, can be either open angle or closed again, and varies in severity of presentation.

Who is at risk for glaucoma?

- 1. People over the age of 40**
- 2. Family history of glaucoma**
- 3. Steroid users**
- 4. Eye injury**
- 5. High myopes**
- 6. Diabetes and hypertension**

### **What is recommended for people with high risk?**

People at high risk of glaucoma should get a complete eye exam, including eye dilation, once every year. Tests include- applanation tonometry, gonioscopy, ophthalmoscopy and field tests.

### **What are the investigations for glaucoma available at Sri Ramana Eye Centre?**

1. Tonometry- to measure the inner pressure of the eye
2. Ophthalmoscopy- to examine the retina, and the optic nerve
3. Computerised perimetry- Also called as the visual field test. The centre is equipped with the latest Octopus Perimetry
4. Gonioscopy- This is a painless eye test, that checks the angle between the iris and the cornea, thereby helping to classify the disease

### **What are the modes of treatment available for glaucoma?**

Glaucoma can be treated both medically and surgically.

A number of drugs are available that either help to decrease the rate of formation of the intraocular fluid or increase its outflow, thereby reducing the intraocular pressure.

Surgical treatment includes both filtration procedures as well as LASER.

### **How does LASER help in the treatment?**

There are various procedures involving LASER for the treatment of glaucoma, depending on the type diagnoses

1. LASER peripheral Iridotomy (LPI)  
This is used for the treatment of narrow angle/closed angle glaucoma. In this procedure, a hole is made in the iris at its periphery, with the help of a LASER beam, which helps to increase the drainage of the intraocular fluid.
2. Argon LASER trabeculoplasty  
This is done for cases of open angle glaucoma, where the laser is used to open up additional channels for outflow of the fluid. This can be done in 2 or more sittings, and is an OPD procedure, with the patient being discharged the same day.

### **3. NdYag photocoagulation**

This is usually a last resort procedure, reserved for cases of intractable severe pain associated with glaucoma not responding to treatment. In this procedure, the LASER is used to destroy part of the ciliary body that produces the intraocular fluid.

## **Dry Eye Syndrome**

### **What is dry eye syndrome?**

Dry eye syndrome is also known as keratoconjunctivitis sicca, which when translated means dry inflammation of the conjunctiva and the cornea. It occurs as a result of insufficient tear production or due to increased evaporation of the tears.

### **What is the normal tear fluid mechanism?**

The tear film is spread over the surface of the cornea and the conjunctiva, and keeps the eye moist and smooth. It is composed of three layers, namely-

1. Lipid layer (oily)- produced by the meibomian glands is the outermost
2. Aqueous layer (water)- produced by the lacrimal glands
3. Mucous layer- produced by the conjunctiva is the innermost layer

### **What are the causes of Dry Eye Syndrome?**

It is usually caused due to

1. Insufficient tear production- Age related, hormonal, autoimmune conditions, certain medications
2. Increased tear evaporation
3. Abnormal/ insufficient mucin production- autoimmune diseases/meibomian gland dysfunction

### **What are the symptoms?**

Usual symptoms include

1. Stinging or burning sensation in the eyes
2. Itching
3. Stringy mucus in/around the eyes

#### 4. Discomfort wearing contact lenses

##### How can this condition be diagnosed?

Apart from a good clinical history, followed by a thorough eye examination, some of the additional tests that maybe required are:

1. Tear break up time (to assess tear stability)
2. Staining of the bulbar conjunctiva and cornea (to assess ocular damage)
3. Schirmer's test
4. Rose Bengal staining
5. Oil gland assessment
6. Additional tests maybe required, if there is a suspicion of autoimmune diseases.

##### How can this condition be treated?

Symptomatic treatment, with the use of lubricating eye drops/ointment along with precautionary measures is usually sufficient to treat this condition.

Precautionary measures include frequent blinking, adequate hydration, avoidance of exposure of the eye to dry, warm wind, and cessation of smoking.

##### Is there a role for surgery?

Minor surgical procedures for punctual occlusion maybe tried.

##### What are the complications that are likely to occur with this condition?

When severe, and untreated, complications such as infection and conjunctival and corneal scarring can occur.

### Computer Vision Syndrome

##### What is computer vision syndrome?

Tiredness of eyes, temporary weak vision, dry, irritated eyes, light sensitivity and muscular problems are the symptoms that occur due to excessive and prolonged computer use is known as computer vision syndrome.

**Are there any predisposing conditions to develop this syndrome?**

**People with refractive errors are more prone to this condition. Dry eyes, and dry environment also aggravate the condition.**

**How can I protect myself from this condition?**

- 1. Focus on a distant object for 5-10 seconds every 10-15 min by looking away from the computer.**
- 2. Take a break or a short walk every one hour.**
- 3. Maintain proper posture by keeping the back straight, the shoulders relaxed, with the chair adjusted to the right height.**
- 4. Frequent blinking while using the computer and lubricating eye drops also help.**
- 5. Using glare screen filters, antireflective coating on the lenses, proper lighting can reduce the eyestrain.**
- 6. Adjust the contrast between the background and the characters on the screen by adjusting the brightness on the computer screen.**
- 7. Prescription glasses that correct blurred vision are also available, and they help by reducing the symptoms caused by struggling to focus.**

### **LASIK / Refractive Surgery**

**Wearing glasses or contact lenses may hamper the active life you lead. Undergoing laser eye surgery could ensure that you will be able to enjoy vision without spectacles or contact lenses.**

**Laser Eye Surgery is currently the most frequently performed elective procedure in the world where a laser light from an excimer laser reshapes the front surface (cornea) of your eye. This procedure improves vision and could give you complete freedom from glasses and contact lenses. Over 22 Million laser eye surgery procedures have been carried out worldwide helping to change people's lives for the better.**

**We use the most advanced equipment which makes the procedure safer and more accurate, with better results and faster recovery.**

### **LASIK (Laser assisted in-situ keratomileusis)**

**This is the most popular and well-known type of Laser Vision Correction performed for myopia, hyperopia, astigmatism and wavefront abnormalities. LASIK surgery uses the latest computer technology in a**

fast, painless procedure that improves the eye's focusing power, producing clearer, sharper vision. LASIK surgery uses the state-of-the-art Excimer laser to focus thousands of tiny laser spots within the cornea, after a thin corneal flap created. The cornea is then reshaped using the latest available technology to correct the eye's refractive error. The LASIK procedure gives patients rapid visual recovery.

### Contact Lenses

Contact lenses, like eyeglasses or refractive surgery, can correct your nearsightedness, farsightedness, and astigmatism.

While some people enjoy the fashion statement of eyeglasses, others prefer their appearance without them. Contact lenses can achieve this without irreversible surgery. Contact lenses can also provide a full field of unobstructed vision, which is good for participation in sports.

If you're new to contact lenses, your first step is to see an eye doctor. Contact lenses must be prescribed and properly fitted by an eye care professional (ECP). He will evaluate your visual needs, your eye structure, and your lifestyle to help determine the best type of lens for you.

Sri Ramana Eye Centre offers a wide range of contact lenses to choose from. We offer Disposable contact lenses (Daily & Monthly), coloured lenses, therapeutic [bandage] contact lenses to suit your need.

### Red Eye

Majority of acute eye problems presenting to an Ophthalmologist can be related to either Red Eye, Painful Eye or Sudden diminution of vision. This article aims at understanding the causes & management of a Red Eye.

#### Causes of a Red Eye

1. Adnexal ( lid & other adjoining structures) causes – Eyelid deformity leading to misdirection of the eye lashes, floppy eyes, inflammation of the eye lid margin , inflammation of the lacrimal sac
2. Conjunctival causes – Ophthalmic neonatorum, Conjunctivitis ( bacterial, viral, chemical, allergic, medication toxicity), subconjunctival hemorrhage, injected pterygium or pinguecula, superior limbic keratoconjunctivitis, giant papillary conjunctivitis, conjunctival foreign body, dry eye syndrome, conjunctival neoplasia

3. Others – Trauma, postoperative, endophthalmitis, anterior uveitis, episcleritis, scleritis, anti glaucoma medications, angle closure glaucoma, carotid cavernous fistula, cluster headache

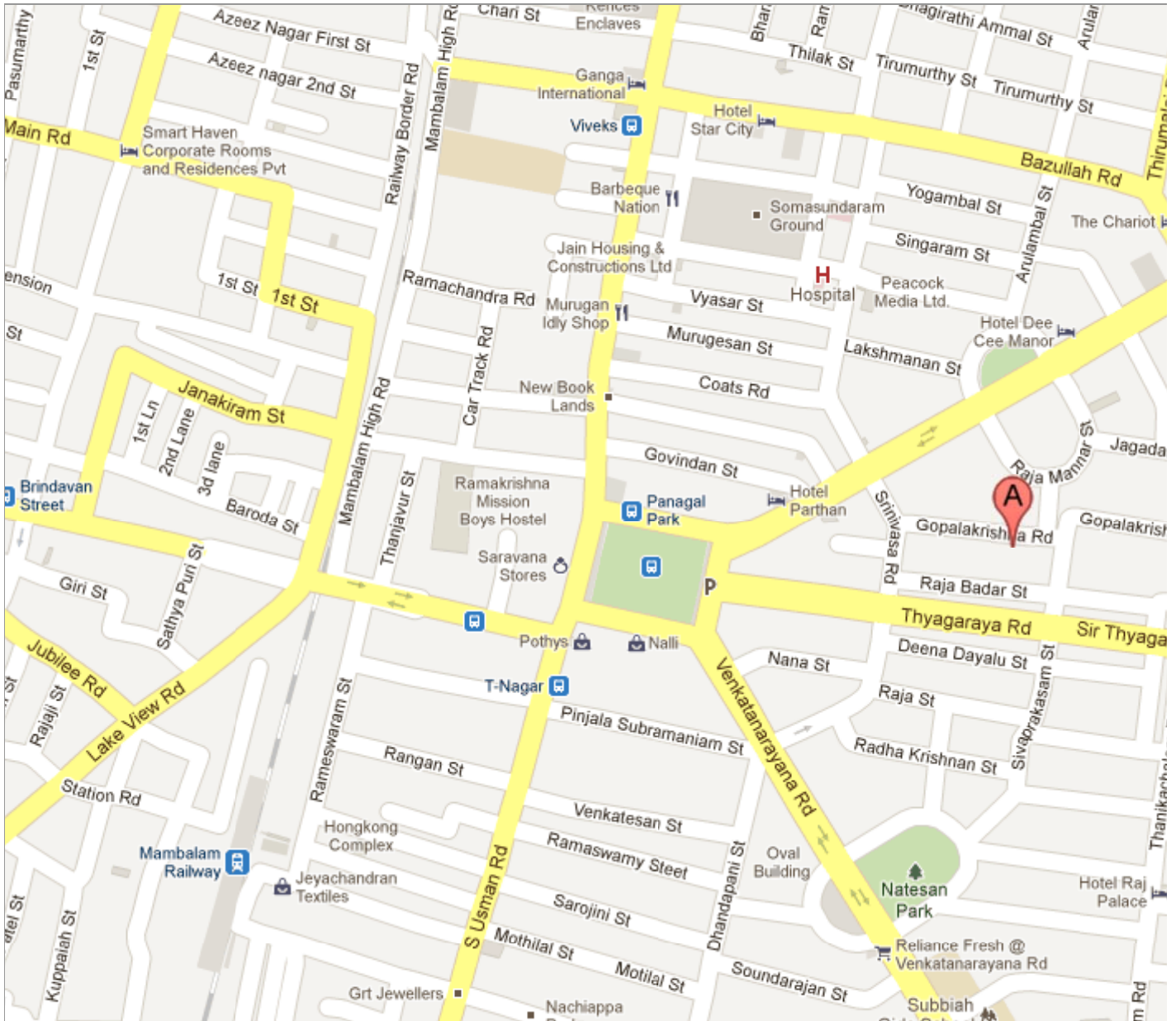
### **Management of a Red Eye**

Complete eye examination is mandatory to rule out the various causes as listed & treat the cause.

Treatment varies from observation in case of subconjunctival hemorrhage, improvement of lid hygiene in cases of lid disorders, antibiotics with frequent washing of eyes, avoidance of steroid drops, wearing dark glasses, frequent handwashing with soap & water to avoid spread to others in cases of conjunctivitis, use of steroid drops in cases of uveitis, episcleritis & scleritis, yag laser in cases due to angle closure glaucoma, treating the infection in cases due to postoperative endophthamilitis, surgery in cases of pterygium or neoplasia.



To see all the details that are visible on the screen, use the Print link next to the map.



Sri Ramana Eye Centre - www.justdial.com - Get phone,address,ratings & reviews for Sri Ramana Eye Centre Ad