



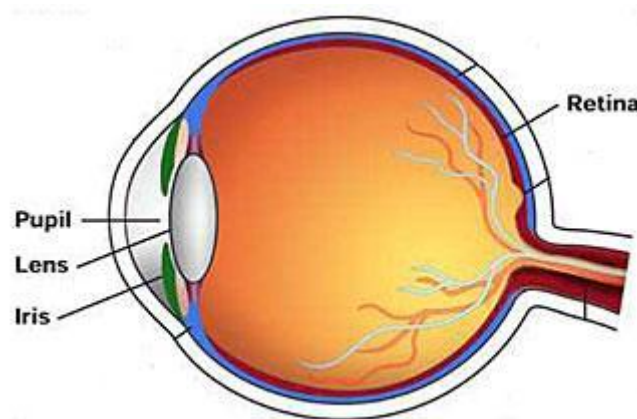
**Dr George Kong**

## **Patient Information Sheet – Combined Cataract Surgery + iStent Surgery**

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

A cataract refers to the clouding of the normally clear lens that is situated behind the pupil (dark centre) of the eye. The clouding of lens obscures and scatters light that normally focuses sharply on the retina, causes reduction of vision. A cataract usually occurs as a natural consequence of ageing but can happen earlier in life if there is a family tendency for this or if there has been an injury or previous surgery to the eye.



### **How do I know if I need cataract surgery?**

When to have surgery is a decision that you should make, based on how well you are able to see and how much the cataract(s) interferes with your daily life. You might be able to drive, watch television and work at a computer for quite a few years after cataracts are first diagnosed. Eventually though you may start to notice “ghost”

images, glare and worsening visual clarity which cannot be corrected with glasses, and colours may also start to look faded. If you feel that your sight is impaired significantly and it becomes difficult for you to perform your normal daily activities, it may be time for cataract surgery.

### **What is iStent (Trabecular Micro-Bypass Stent)?**

iStent is an elegant way to help reduce intraocular pressure for patients with open angle glaucoma. It is the world's tiniest medical device – it is 20,000 times smaller than the intraocular lens (IOL) that you will receive as part of your cataract surgery. It works by increasing your eye's ability to drain fluid, thereby safely lowers your eye pressure towards a level that will prevent damage to the optic nerve.

iStent procedure is performed at the end of a cataract operation. The procedure adds approximately 5 minutes to the cataract operation. During the operation, your surgeon will insert two small iStents into the parts of your eye that drains fluid called trabecular meshwork. The procedure is painless. The post-operative recovery from a combined cataract + iStent operation is almost identical to having cataract surgery alone.

### **Intended benefits**

Successful cataract surgery will improve the vision in the eye. Major advances have been made in the way cataract surgery is performed over the last 10 years. Your surgeon will use the most modern techniques: the cataract is broken up (using ultrasound energy) and removed from the eye through a very small incision (cut) and a new flexible lens is inserted. This results in rapid visual recovery with minimal discomfort following the procedure.

While cataract surgery by itself has been shown to have a small short-lived effect on lowering intraocular pressure, the addition of iStent will allow better intraocular lowering for longer period of time. In US clinical study 68% of patients who received iStent remained medication free at 12 months, while sustaining a target pressure of  $\leq$

21 mmHg compared to 50% of patients who underwent cataract surgery alone.

### **Before your procedure**

Most patients will receive a call from pre assessment nurse or anaesthetist. We will ask for details of your medical history and carry out any necessary clinical examinations and investigations. Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time.

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring all your medications and any packaging (if available) with you. This procedure involves the use of anaesthesia. We explain about the different types of anaesthesia or sedation we may use at the end of this leaflet.

Most people who have this type of procedure will need to stay in hospital for the whole morning or afternoon of your surgery. Your doctor will discuss the length of stay with you.

### **On the day of operation**

If your operation is in the morning, you should fast from midnight on your operation day. If your operation is in the afternoon, you may have breakfast before your appointment. Take any medications and eye drops as normal and wear comfortable clothing. Please do not wear any makeup or nail polish. You may keep your wedding ring on, but to prevent accidental loss, please leave any other jewellery and valuables at home. If you have a cough or cold on the day of operation, please phone our clinic because it might be better for you to recover from this before having surgery.

iStent + Cataract surgery is usually performed as an out-patient basis under local anaesthetic. Since you will be unable to drive after your surgery, it is important that you arrange your own transport on the day of the surgery.

You will be seen by the anaesthetist before your operation, but it may be quite close to the operation time. Please feel free to discuss your concerns with the anaesthetist as he or she will be able to help you - they are very familiar with the procedures and the processes involved. They will ask you to sign a consent form for the anaesthetic.

The anaesthetist will place a drip (a needle), usually into your hand, to administer medication through the vein and then, usually, you will have a local anaesthetic placed around the eye or into the lid, which is done under sedation. You will probably not be aware that this has occurred. Thereafter you will be moved into the theatre area and you may still feel a little bit sleepy at this stage.

Local anaesthetic operations may be memorable or not, neither of which is a concern. You may be able to see some light or not and sometimes some shapes and it is frequently possible to feel some sensations around the head but none of these should be painful. If on the rare circumstances you do feel discomfort, you need only indicate to us and it will be relieved.

### **Can I keep my hearing aid and dentures in during the surgery?**

It is necessary to take a hearing aid out if it is worn on the same side as the eye having the operation. We do this to avoid permanent damage to the hearing aid from the water used during the operation. A hearing aid which is on the other side can be kept in. You will not have to remove dentures before surgery under local anaesthetic.

### **During the procedure**

The surgery involves removing the cataract (cloudy lens) through a small incision (cut) and replacing it with a clear acrylic lens implant. The lens implant stays in place throughout your life and does not require replacement. The operation takes 20-30 minutes. Usually the incision is so small that it does not even require stitches.

Cataract surgery under local anaesthetic is not painful although you may feel a sensation of pressure in the eye at some stages during the

operation. A sterile cover will be placed over your face and the other eye to keep the area clean, but it will be kept clear from your nose and mouth by a stand with circulates fresh air. Your eye will be kept open using a special instrument, so you don't have to worry about keeping the eye open yourself. It is important that you don't move suddenly during the operation. The bright microscope light prevents you from seeing what is going on and many patients see whorls of blue or purple light during the operation. The surgeon will discuss the way to communicate with him/her: you may choose to hold a nurse's hand which you can squeeze if you need to communicate with the surgeon. If you feel you need to cough or sneeze you can tell us this, but take care not to move your head until the surgeon says it is safe to do so.

**After the cataract surgery procedure is complete, your surgeon will tilt your head approximately 30 degrees from the center.** This is done so as to improve visualization of the trabecular meshwork required to perform iStent insertion. This will only last approximately 5 minutes.

### **After the procedure**

After your operation, the nurse will take you back to the waiting area, where you may have some light refreshment. You will be able to go home approximately 30 minutes after the end of the procedure. The surgeon may wish to examine your eye before you leave the hospital. Once home, you should rest and the shield covering the eye should remain in place until the following morning. If it does come off, please tape it back using surgical tape or ordinary clear sticky tape (for example, cellotape).

***Eating and drinking.*** After this procedure, you can eat and drink as normal.

***Getting about after the procedure.*** We will help you to become mobile as soon as possible after the procedure. This helps improve your recovery and reduces the risk of certain complications.

***Resuming normal activities including work.*** You can carry out your normal daily tasks immediately after cataract surgery. You can bend over, but please be careful not to bump your eye. You can wash your hair, but avoid getting water or soap in the eye. You should avoid swimming and sport for three to four weeks after your surgery.

***Work*** We usually recommend one week off work but discuss this with your surgeon.

***How would you expect to feel?*** Discoloured, blurred or double vision is usual for the first few hours after cataract surgery and this will gradually clear. You may notice some blood stained tears. If you need to dab your eyes, do this gently using a clean disposable tissue. Do not use a cotton handkerchief and do not rub your eye. You may experience a mild grittiness, eye ache or headache for the first 24 hours after surgery. Please take your normal painkillers, for example paracetamol, if necessary. You will be given a telephone number to call if the discomfort or headache should become severe.

**When is it safe for me to drive after my cataract surgery?**

This depends on a number of factors including the vision in your other eye. It is best to ask the surgeon when you see them before the operation since he/she will be able to answer the question based on your personal circumstances.

**Special measures after the procedure:**

**What medications do I need after my cataract surgery?**

You will be given special eye drops to use after your operation. These are typically:

- Chloramphenicol (antibiotic) eye drop 4 times a day for 7 days

- Prednifrin forte (steroid) eye drop 4 times a day for 1 week, then 3 times a day for 1 week, then 2 times a day for 1 week then once a day for one week then stop.

**What happens to my other eye drops?** If you usually take eye drops for glaucoma or dry eyes you should use the same eye drops in addition to the new ones after the surgery, unless your surgeon advises otherwise.

**Will I have to wear glasses after my operation?**

In most cases the artificial lens implant is chosen to give good distance vision but it is fairly common for thin glasses to be required to fine-tune this. Glasses will definitely be required for reading following the procedure. You should visit your optometrist to get new glasses about four to six weeks after cataract surgery.

**Check-ups and results:** A post operative visit will be arranged with your surgeon within 1-3 days after the surgery, then about 3 to 4 weeks after the operation. A nurse will go through the post operative arrangements before discharged on the day of surgery.

**It is important, therefore, to have prepared transport arrangements to get to the hospital the day after your surgery should this be necessary.**

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**Check-ups and results:** A post operative visit will be arranged with your surgeon about 1-3 days after the operation, then about 3 to 4 weeks after the operation. A nurse will go through the post operative arrangements before discharged on the day of surgery. In some cases, however, your surgeon may decide that you should be seen the following day in the clinic.

**It is important, therefore, to have prepared transport arrangements to get to the hospital the day after your surgery should this be necessary.**

**Things to look out for after operation**

- Do not rub or put pressure on the eye.
- To clean your eye lids, clean gently with a clean moist face washer while keeping your eyes closed.
- Do not get soap or water into your eye.
- Do not shampoo your hair for one week.
- Wear sun glasses outside, preferably with side shields.
- Avoid dusty areas.
- Sleep with the plastic shield taped in place for one week.  
Try not to sleep on the operated side.
- Do not drive for one week.

- Do not vacuum the house for 2 weeks after the surgery.
- No swimming or hydrotherapy for 4 weeks after surgery.
- Avoid strenuous activity and heavy lifting for 4 weeks.
- **Please bring your eye drops with you to all your post operative appointments.**

### **Morning after surgery**

- Remove the dressing and discard. If there is a plastic shield, wash this and retain and you should use this at night for 1 week.
- Clean eyelids with a tissue, maybe using some water to remove any residue ointment. Wipe gently, do not press on or rub the eye.
- There are 2 bottles of drops - use them separated by a few minutes. Please read the instructions on the bottle.

### **First week after surgery**

- Clean the eye with water and a tissue when necessary. Do not press on or rub the eye.
- Eye drop(s) should be used according to instructions.
- Take your usual medications unless you have been otherwise instructed.
- The eye will be light sensitive, so sunglasses will help. If you remove a plastic shield after the operation use this at bedtime. use sticky tape to secure in place.
- Your old glasses may not work well.
- Ordinary household activities can be done as soon as you feel comfortable to do so. If an activity causes pain or discomfort in the eye, stop immediately.
- Rejoin an exercise class or gym really needs to wait a week.
- Driving can be done if you have legal driving vision with your other eye and you feel comfortable and safe. Your eye will be watery and uncomfortable for the first few days and this may be unsafe for driving. Driving is as much about your judgement.

- Hair washing and face washing may be done after three days. Keep the eye closed and try not to get soap or water into the eye. Do not press on or rub the eye.
- Swimming should not be done for four weeks unless the face is kept dry. Do not totally immerse the eye in water for four weeks.

### **Please do not ignore**

- SEVERE PAIN - Pain that stops you doing usual activities or sleeping.
- DECREASING VISION - Vision should improve after dressing is removed but may vary. Contact us if vision deteriorates a lot.
- INCREASING RED EYE - Redness and watering should also improve. Contact us if the eye becomes more red and watery.

### **Instructions for instilling eye drops**

Always wash your hands before instilling drops. Instill drops by pulling the lower eyelid down and putting the drop in the space between the eye and the eyelid. If you are instilling more than one drop, the drops should be separated by at least 5 minutes.

### **Possible complications during surgery**

Occasionally (in fewer than 2% of patients), problems occur during the operation which may prolong the procedure. This may delay the improvement or even worsen the vision during the weeks after the operation but seldom affects the long-term visual result.

Rarely (less than 1% of patients), a second operation may be necessary in the days following the procedure.

Very rarely (less than 0.1% of patients), bleeding may occur behind the retina within the eye during the operation. This serious complication occurs more frequently in patients with uncontrolled high blood pressure and can lead to permanent loss of vision in the eye.

### **Possible complications after surgery**

Minor post operative complications or problems, including:

- an increase of pressure within the eye, occur infrequently in the first week or so following surgery. These are usually temporary, easily treatable and do not affect the long-term visual outcome after surgery.
- Small amount of bleeding in the front part of your eye (anterior chamber) which rarely can occur following iStent surgery. This blood will not affect long-term visual outcome after surgery and generally clear by itself in one to two weeks.
- Prolong inflammation following operation which can cause fluid development in the retina at the center of vision (cystoid macular oedema). These are usually resolves with treatment with steroid medication and do not affect long-term visual outcomes of surgery.

Major complications: the most serious complication that can occur is an infection within the eye (endophthalmitis). This usually occurs within the first week after surgery and affects less than 1 in 1000 patients. It can lead to an irreversible loss of sight in the operated eye. The risk of infection is reduced by the use of

antibiotics during and after the operation, by treating any lid inflammation prior to surgery and keeping the eye clean following the operation.

You will be advised regarding any measures you can take to reduce your risk of infection after surgery at the pre-assessment appointment.

### **Alternative procedures that are available**

At present cataracts can only be treated by surgery. There is no laser treatment or medication available to treat cataracts.

### **Anaesthesia**

Anaesthesia means “loss of sensation”. There are three types of anaesthesia: general, regional and local. **The type of anaesthesia chosen by your surgeon depends on the nature of your surgery as well as your health and fitness.** Sometimes different types of anaesthesia are used together.

### **Local anaesthesia**

In local anaesthesia the local anaesthetic drug is injected into the skin and tissues at the site of the operation. The area of numbness will be restricted. Some sensation of pressure may be present, but there should be no pain. The local anaesthetic used may be anaesthetic drops alone or anaesthetic drops combined with a small injection of anaesthetic around the eye (sub-conjunctival or sub-tenon anaesthetic). The anaesthetic is instilled in the early stages of the operation (intra-cameral anaesthesia). The anaesthetic will numb the eye but not the skin around the eye. The numbness usually fades after a few hours. Usually a local anaesthetic will be given by the doctor performing the operation.

### **Risks of local anaesthetic**

Redness of the eye

Temporal blurred vision

Damage to the eyes  
Serious allergy to drugs  
Nerve damage  
Equipment failure.

**Information and support**

We hope you have found this information helpful. If you have any questions or anxieties,

please feel free to speak to a member of our staff on :

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