Refractive lens exchange





This leaflet gives you information that will help you decide whether to have Refractive Lens Exchange surgery. You might want to discuss the contents of this leaflet with a friend or relative. Before you undergo the procedure, you will be asked to sign consent forms confirming that you understand the nature of the procedure and specifically the risks involved. If you have any questions regarding the procedure, please do not hesitate to ask your surgeon.

Refractive lens exchange (RLE) is a procedure designed to change the spectacle correction of your eye, typically with the goal of reducing your dependence on spectacles. Some people undergo the procedure to reduce their shortsightedness, some their long-sightedness, but astigmatism can also be effectively treated. These concepts will be explored in more detail below.

RLE is an example of a refractive surgical procedure, other such procedures including laser eye surgery and implantable contact lenses, all of which change your spectacle correction (refractive error). We have recommended RLE for you, rather than other procedures, as your eyes and goals are more suited to this procedure than other refractive techniques.

Short- and long-sightedness

If an eye is longer in length (diameter), or more curved, than usual, the eye is too powerful from an optical point of view and light rays are focused in front of the retina, rather than on the retina. This is short-sightedness, or 'myopia', and means that people would need to wear glasses or contact lenses in order to see in the distance, although such people can typically read without glasses. The higher the degree of short-sightedness, the closer to the eye that objects need to be held to be seen clearly. If an eye is too short, or not curved enough, the eye is optically too weak to see clearly even distant objects and the eye is categorized as being long-sighted, or 'hypermetropic.' In youth, the lens of the eye is able to provide additional focusing power, which allows distant objects to be seen by long-sighted people without glasses. However, as one ages, the ability of the lens to focus diminishes and there will come a point in time that reading becomes impossible without glasses, followed by difficulties in seeing even in the distance without glasses.

Presbyopia

Presbyopia is the normal age-related decline in focusing power described above. While its onset is typically noticed by long-sighted people first, it affects us all and explains why the majority of people in their late 40s start to need reading glasses; as the focusing power diminishes, people have to hold books etc. further and further away from them. Shortsighted people have the option of taking off their glasses for reading.

Treatments for presbyopia include wearing reading glasses, varifocal glasses, the use of contact lenses in one or both eyes and surgical treatments. Continuing in contact lenses is the main alternative for patients considering RLE surgery; if you follow advice, the risk of contact lens wear is low, however, one in 3000 wearers per year will develop a serious corneal infection from contact lens wear.

Surgical treatments include refractive lens exchange (RLE), replacing the lens of each eye with:

- multifocal lenses, see below; or
- different powered lenses in each eye, giving one eye distance vision and one eye near vision (monovision, or blended

monovision, depending on the individual, see below).

Another treatment is the placement of a corneal inlay (e.g. KAMRA) in the centre of the cornea, which utilizes the pinhole effect to enhance depth of field; HerefordVision does not offer this procedure but we are happy to advise you of a suitable surgeon if this procedure appeals.

Astigmatism

When most people think of an eye's shape, they think of a round structure, like a football. In truth, most eyes are more rugby ball-shaped, with the eye being a little squashed in one direction. This irregularity is known as astigmatism and is easily corrected with glasses, but, if marked, a patient's vision without glasses will be quite poor.

Astigmatism can be corrected surgically either by laser eye surgery, or by using an astigmatic correction lens as part of the RLE procedure. More information regarding this is given below.

Why RLE for me? I thought I needed laser...

When many people think of vision correction, they automatically assume this will be done with a laser and are surprised when RLE is recommended instead. Laser eye surgery is a good, safe treatment for patients who wish to simply change their distance spectacle correction, but does not effectively treat presbyopia (see above). In addition, the amount of short– and especially longsightedness that can be safely treated is limited to a narrow range when using laser. Furthermore, if there is the earliest hint of cataract, then laser eye surgery can complicate subsequent required cataract procedures and lead to suboptimal results.

Although there are minor changes in the cornea with the passage of time, which can lead to minor changes in spectacle prescriptions after RLE (and laser), most changes in spectacle prescription in patients' 50s and beyond is lens/cataract-related and RLE removes this change, resulting in a more stable prescription as you age.

RLE - The procedure

The procedure is identical in many respects to the long-established technique of small- or micro-incision keyhole cataract surgery, where the contents of the native lens of the eye are removed, before a new lens is inserted into the eye. In RLE, the lens contents are removed before becoming cloudy, effectively preventing a cataract from ever forming.

The total time in the hospital is often less than 2 hours, with most of this time being taken up with eye drops being administered in preparation for the procedure. We recommend a small sedative pill for the overwhelming majority of patients, as most people are naturally anxious regarding their eyes; this usually makes the whole procedure much more relaxed. Immediately prior to the procedure, further eye drops (local anaesthetic) are given, and the eye may be marked with a special pen if certain types of lens implant are to be used (see below).

For the procedure itself, a nurse will hold your hand throughout, to allay your concerns but also to act as a line of communication to your surgeon, as talking during the procedure is not to be encouraged. You will generally be offered a selection of music to listen to for the 15-20 minutes that the procedure takes. Once you are comfortable in the reclining chair, your eye will be cleaned with special antiseptic and a drape will be placed over your eye to keep the area clean. A small clip is then placed, which means that you will not have to worry about blinking at all.

During the procedure, you will not be able to see what is happening, but you will be aware of a bright light and unless directed otherwise we would like you to look straight at the light itself. You should not feel any pain, but, when using anaesthetic eye drops alone (the preferred technique), you may at various times be aware of a pressure sensation in the eye, although we will always warn you when these sensations are expected. In addition, many patients are aware of a lot of fluid running over the eye at various stages in the procedure.

Some patients may require more anaesthetic than simply eye drops alone; fortunately, it is nearly always possible to tell in advance which patients may benefit from extra anaesthetic and this is easily administered with a noneedle technique. Alternatively, for some patients, a general anaesthetic (going to sleep) may be appropriate and this is easily arranged in advance, if desired. In the unlikely event of you feeling any discomfort, you should squeeze the nurse's hand and we will happily give you extra anaesthetic.

The RLE procedure itself involves the creation of a small incision 2.2mm in width at the junction of the white of the eye and the clear cornea at the front. Through this tiny, selfsealing hole the front surface of the lens is carefully opened and the contents of the lens are removed, typically with the help of a stateof-the-art ultrasound probe. A new lens is placed into the lens bag that is left behind, carefully centred and the eye is then sealed. Throughout most of the procedure, the eye is bathed in a special fluid containing a powerful antibiotic.

After the procedure, the clip and drape are removed and we will then place a clear plastic shield over your eye, in order to keep the eye clean for your journey home, and in some cases overnight. You will be given 2 different types of eye drops to use in the eye, each four times a day, the purpose of which is to reduce normal postoperative inflammation and the remote risk of infection. Before you leave hospital, we will issue you with an information leaflet and will confirm your telephone number with you, as your surgeon or a member of the HerefordVision team will ring you the following day. In addition, you will be given the surgeon's personal telephone number, should you have any concerns.

Which lenses are used in RLE?

A wide range of lenses can be placed within the eye, although typically the measurements that are taken of your eye prior to surgery guide the placement of an intraocular lens (IOL) of the correct power in order to achieve the appropriate vision desired in your eye after surgery. Most people choose to have a lens placed in the eye that allows them clear distance vision without glasses, but, with the placement of a standard, monofocal IOL, patients would almost certainly require reading glasses for close work. With modern laser eye measuring techniques, the overwhelming majority of patients (at least 85%, see below for details) achieve their 'refractive' goal (i.e. the desired spectacle prescription, if any, after surgery).

There are three main kinds of premium intraocular lenses (IOLs), which may be suitable for you, which will increase the chance of you not needing glasses after surgery:

- 'Toric' IOLs, which allow the correction of pre-existing astigmatism.
- 'Multifocal' IOLs are similar in concept to bifocal glasses or especially multifocal contact lenses, except that the lens is within the eye; the goal of these lenses is to allow the ability to see both distance (e.g. driving) and near (e.g. reading) without glasses.
- 'Toric multifocal' IOLs combine the advantages of both these types of lenses.

A *toric IOL* is a more bespoke lens placed inside an eye to correct a patient's

astigmatism, at the same time reducing the patient's short- or long-sightedness. After surgery, the chance of needing glasses for distance is greatly reduced, although without the simultaneous placement of a multifocal component of the lens ('toric multifocal'), patients should still expect to need reading glasses. Cataract or RLE surgery in patients with marked astigmatism using standard, nontoric IOLs does typically lead to improvements in unaided vision, but patients should not expect that their final distance or near vision will be clear without glasses. It is not always possible to use a toric lens, even if an individual has significant astigmatism; reasons include inconsistent scan data, poor corneal surfaces (e.g. very dry), irregular astigmatism and small pupils, which preclude accurate placement of the lenses.

Multifocal lenses are specially designed to create (at least) two images at the same time, one of which is in focus for near and one for distance. The individual's brain decides which image will be 'used', depending on what is being looked at. With such lenses, about 85% of people achieve day-to-day spectacle independence, meaning that typically they can both drive and read, e.g. a restaurant menu, without glasses. For more prolonged reading, however, many patients still choose to wear reading glasses.

As multifocal lenses split the light entering the eye into at least two images, there is by definition a compromise in the quality of vision achieved. Although around 85-90% of patients are spectacle-independent after surgery, the distance & near vision achieved is unlikely to be as impressive as if a standard, monofocal lens (with reading glasses) had been used instead, the upside of course being the lack of a need for near spectacles.

Multifocal lenses are probably unsuitable for patients with optically demanding hobbies & occupations, such as astronomers or photographers, although the golfer Gary Player has notably done very well after such surgery! In the dark - and occasionally even the light some patients do complain of haloes / glare around lights; multifocal lenses are thus unsuitable for occupational night drivers. In addition, people with relatively low degrees of short-sightedness are not great candidates for these lenses, as they are used to an excellent quality of unaided near vision. Although it can be difficult to determine in advance who may be dissatisfied with the quality of vision achieved with multifocal lenses, dissatisfaction may be commoner in people with 'type A' personalities, as well as those with good unaided distance vision already.

Toric multifocal lenses combine the benefits of both toric and multifocal lenses, i.e. simultaneously improving astigmatism and aiming to achieve spectacle-independence for distance and near.

The premium lenses discussed above are not necessarily better than the monofocal lenses used in 'standard' lens RLE or cataract surgery. Your surgeon will discuss with you in detail which lens choice we believe will be the best choice for you. All premium lenses require accurate placement within the capsular bag of the eye and - unlike standard lenses - there is the possibility of: (i) migration of the lens in the postoperative period, which may potentially require a repositioning procedure (approximately 1:100 patients, included in your surgical package); (ii) late migration of the lens may occur, with potential reduction in vision; (iii) not being able to use a premium lens as planned during a procedure, in the unlikely event of a surgical complication making the placement of such a lens unsafe. In this latter situation, patients must be aware that there is a chance of not being able to have their vision corrected to the extent that they had hoped, for example, no reading vision

without glasses and / or a residual requirement for spectacles for distance (e.g. if astigmatism cannot be corrected).

What other lens techniques are used in RLE?

An alternative approach for people, who wish for reduced reliance on spectacles, is a technique known as 'blended monovision'. In this technique, multifocal lenses are not used, but one eye (usually the dominant eye) undergoes lens replacement surgery aiming to achieve good distance vision, while the other eve is set for closer distances. While some patients (typically long term contact lenswearers) can tolerate a sufficient difference between the two eyes to allow a true reading eye and a distance eye (known as 'true monovision'), most cannot. However, aiming for a more subtle difference in prescription between the two eyes (ideally around 1.25 Dioptres) allows greater functionality around the house, and is often sufficient to allow supermarket shopping without glasses, seeing the dashboard clearly and also some reading, all without the disadvantages of multifocal lenses.

For blended monovision to work well, it is imperative to have a good result from first eye – typically the dominant, or distant eye – surgery. If the 'refractive' outcome from surgery is not as good as planned (see below, risks), then your surgeon may recommend aiming for a distance result in the second eye too. This naturally may increase the chance of you needing reading, or intermediate vision, spectacles.

It is not uncommon for patients to find that they need several weeks to adapt to the results of this technique, which can occasionally cause minor headaches for a short period of time. It would be unusual for unpleasant symptoms to persist in the longer term and most patients adapt very quickly indeed, often being able to read larger print happily within 36 hours of surgery.

Costs

The costs of *toric* and *multifocal* lenses are significantly greater than for standard intraocular lenses. In cataract surgery, most of the larger insurance companies do not fund the extra cost of these lenses, the cost being passed directly to the patient as an 'excess'. It is worth considering, however, the potential likely savings made in comparison with, for example, the costs of varifocal glasses in the future. There is no extra charge for the blended monovision technique, as standard lenses are used, unless you have significant amounts of astigmatism, in which case toric lenses will be suggested, which may be used to obtain best results in the blended vision technique.

The cost quoted to you at your consultation includes the cost of the procedure, the surgeon's fee, hospital costs, your new lens and all immediate aftercare and consultations required pertaining to the procedure itself (including lens rotation or repositioning procedures, placement of a piggyback lens within the eye, but specifically excluding YAG laser treatment – see below – which, if required, is typically required months or years later).

Obviously, if another condition is detected during your consultations, for example an eyelid malposition or glaucoma, ongoing management of these conditions would be excluded from your package and this would be specifically explained to you at the time.

Your initial assessment consultation and biometry (eye measurements) are charged separately from - and in addition to - any procedure fees. The surgeon's fees for carrying out the RLE procedure are the same regardless of the type of lens employed. Bear in mind that if one eye, for example, requires a toric multifocal lens, and the other eye a standard multifocal, there will be a considerable difference in cost between eyes.

Risks

Although your eyes will be measured using a modern, laser-scanning technique, there is no absolute guarantee that the refractive outcome (spectacle prescription, if any, following surgery) will be perfect due to: the empirical nature of the formulae used to estimate the lens power; and the variation between individual patients' eyes in their response to surgery (e.g. lens position within the eye, and the astigmatic effect of incisions).

This means that, for distance, approximately 90% achieve a refractive outcome within 1 Dioptre of their goal, and approximately 70-75% within 0.5 Dioptre. In other words, despite using modern laser-scanning techniques for measuring eyes, there is a small, but significant chance of being spectacle-dependent following surgery, for both distance and near. The chance of patients having a significant postoperative refractive error (need for a small spectacle correction, or a "refractive surprise") is typically greater for patients whose eyes are either very long- or short-sighted to start with. Subsequent corrective refractive surgery may be possible for some patients at a later date. This may include the placement of another 'piggyback' lens in the eye, in front of the new lens, or subsequent laser eye surgery on the front of the cornea of the eye.

In the extremely unlikely event of a surgical complication, it is possible that a premium lens would not be an appropriate choice of lens to implant, the decision being taken during surgery. It is important to understand that, in this eventuality, it may be necessary to use a standard intraocular lens (i.e. not a toric or multifocal lens). For some such patients, subsequent surgery to achieve spectacleindependence may be possible. In the rare event of a non-premium lens being used, the cost of the surgery will naturally be adjusted downwards to reflect the lower cost of the lens implanted.

The 'surgical' risks encountered in standard cataract or lens surgery still apply for patients undergoing implantation of a premium lens; these include (non-exhaustive):

Some possible complications during the operation

- Tearing of the back part of the lens capsule with disturbance of the gel inside the eye, which may sometimes result in reduced vision, and / or delayed recovery from the procedure. This occurs in less than 1:300 procedures and is less common in RLE procedures than typical cataract surgery.
- Loss of all or part of the lens into the back of the eye requiring a further operation, which may require a general anaesthetic. This is uncommon (around 1:1,000 cases).
- Bleeding inside the eye (very rare with modern techniques, but conceivably could lead to loss of vision or even the eye itself).
- In the highly unusual event of a significant complication, it may not be safe to place a lens implant – temporarily or very rarely permanently. In this case a subsequent procedure may be necessary to implant an IOL at a later stage (contact lens wear would be an alternative).

Some possible complications after the operation.

- Allergy to, or intolerance of, the eye-drops used. A change in eye drops helps.
- Some eye surface discomfort is common in the early months after most forms of eye surgery. This is typically mild after RLE surgery and may be asymmetrical.

Lubricant eye drops can help with these symptoms and are usually safe to take in addition to the normal eye drops given after surgery, but please check with your surgeon.

- Some variability of vision is normal in the early weeks after RLE and patience can sometimes be required.
- Bruising of the eye or eyelids. This is uncommon, but can manifest as red blotches on the white of the eye (particularly under the upper eyelid). These are nothing to worry about and will settle spontaneously; their presence does not reflect the underlying health of the eye.
- Floaters. The development of floaters in middle age is exceptionally common, a change occurring as a result of maturity of the jelly of the eye. Lens surgery can hasten the development of such changes, however, in many cases the extra light that a new lens allows into the eye simply makes you more aware of pre-existing floaters.
- High pressure inside the eye. This is more common in patients predisposed to glaucoma.
- Clouding of the cornea, which could conceivably lead to a requirement for a corneal graft and imperfect vision. This is very rare in RLE patients.
- Incomplete removal of the lens. In RLE, the native human lens is broken up into tiny pieces, which are then removed by suction. On rare occasions, tiny fragments of lens can become sequestered either behind the pupil during surgery, or in the angle between the cornea and the iris. In such an event, a further very quick procedure, washing out the front of the eye may be necessary. Recovery should then otherwise be uneventful.

- Incorrect strength or dislocation of the implant. This is exceptionally rare in RLE patients. In patients with multifocal lenses, centration of the lens is crucial; in the unlikely event of the lens being decentred at your postoperative visit, and your vision is suboptimal, then a small corrective procedure may be advised, although rarely it may prove impossible to achieve long term perfect centration / orientation.
- Swelling of the retina (macular oedema), approximately 1:100 eyes. Drops are given following surgery to reduce the risk of this happening.
- Detached retina, which can lead to loss of sight. It is important to state that RLE does not change the underlying 'medical' state of the eye; initially short-sighted patients continue to have a higher underlying risk of retinal detachment than non-short-sighted patients. In addition, however, the risk of retinal detachment is approximately five times higher in the first four years after RLE surgery.
- Infection in the eye (endophthalmitis), which can lead to loss of sight or even the eye, despite prompt treatment. We go to great lengths to reduce the risk of postoperative infection to as low a level as we believe is possible, including the use of antibiotics, special eye cleansing techniques, mask wearing during the procedure and no-touch techniques. In the exceptionally unusual event of infection (less than 1: 1,000), the scientific literature suggests that the organism in question is nearly always borne by the patient, rather than being 'cross-infected' from the hospital / staff.
- Glare and associated symptoms. All types of intraocular lens can be associated with glare and associated symptoms, although the incidence of these is higher in patients

having multifocal / toric multifocal lenses implanted. Even with standard monofocal lenses, some patients are aware of a shadow in their peripheral vision, although generally such side effects diminish with time as the new lens settles in. Optical side effects may initially interfere with driving, work and leisure activities, but it is uncommon for such side effects to persist in the medium and longer term. For patients with troublesome optical side effects from multifocal lens, less than 1% choose to undergo a lens exchange procedure, swapping a multifocal for a monofocal lens, although such surgery is potentially difficult.

 Most intraocular lenses are not visible, but people may occasionally notice a glint in your eye caused by a reflection from the front of the lens.

Complications are rare and in most cases can be treated effectively. In a small proportion of cases, further surgery may be needed; the risk of this happening is approximately 1 in 300. Very rarely, some complications can result in loss of sight. Overall the risk of severe loss of vision (blindness) in the affected eye is less than 1 in 1,000.

The most common complication is called 'posterior capsule opacification', affecting around 1:10 to 1:15 patients. It may come on gradually after months or years. When this happens, the back part of the lens capsule, which was left in place inside the eye to support the implant, becomes cloudy. This prevents light from reaching the retina. To treat this, a laser beam is used to make a small opening in the cloudy membrane in order to restore the eyesight. This is a painless outpatient procedure, which normally takes only a few minutes and does not need to be repeated, normally restoring your vision to its previous postoperative state. This treatment is available on the NHS if desired and is not included as part of your RLE package.

Anaesthetic options for lens replacement surgery

Modern lens replacement surgery is typically performed with the use of eye drop anaesthetic alone. Immediately prior to the procedure, eye drops are administered which completely numb the front of the eye, but do not paralyse eye movements or affect the vision of the eye. This leads to quicker recovery from the procedure and also avoids the risks of the anaesthetic injections of yesteryear.

The use of eye drop anaesthetic makes it highly unlikely that you will feel any sharpness or pain during the procedure, although you will probably feel "pressure"-type sensations at various key stages during the procedure. Your surgeon will warn you in advance of such sensations occurring, which is usually more than sufficient to allow you to remain relaxed. In the unusual event of the sensations become uncomfortable, it is always possible to administer an additional, safe and needle-free local anaesthetic during the procedure.

Option (1)

Although I do not think you will feel pain, I would recommend the use of a mild sedative tablet (typically *temazepam*) in your case, which helps relax you prior to, during and after the procedure. While many are happy to admit their anxieties, others can exhibit slightly unusual behaviour during the procedure, which can interfere with surgery. Examples include breath holding, deep breathing and unpredictable movements, most of which can be controlled by a sedative. The use of a sedative pill is also recommended for second eye surgery, as it is not unusual for you otherwise to be more aware of your surroundings. You should naturally expect to feel a little drowsy afterwards.

Option (2)

In your case, I would recommend a deeper form of sedation to allow the procedure to be carried out safely. Typically, this involves an anaesthetist placing a small plastic tube into the back of your hand to administer a low dose of an intravenous anaesthetic, which means that you are unlikely to remember any of the procedure. It is important that you do not eat for 6 hours prior to the procedure, but you will not be required to change out of your normal clothes. Extra fees apply.

Option (3)

In your case, I would recommend carrying out the procedure with the assistance of a general anaesthetic (going to sleep for the operation). You may need to have a formal assessment of your fitness by the hospital / anaesthetist and should expect to spend 3-4 hours after the procedure in the hospital. It is important that you do not eat for 6 hours prior to the procedure, and you will be required to change out of your normal clothes into a hospital gown. Extra fees apply.

If you would prefer to change your anaesthetic option, it is important to contact your surgeon well in advance, as it will not be possible to organise on the day.

Please find below information that is given to patients after their RLE:

You have just had a procedure to remove a lens from your eye, replacing it with a new lens. At this stage, it is likely that your vision in the eye is still blurry, although many comment how bright the world seems. It is likely that your vision will stay blurry until at least tomorrow evening, due to the fact that your eye has just had surgery and also because your pupil will still be dilated. Some mild discomfort is normal, which should respond well to paracetamol alone.

A shield is normally placed over the eye to protect it, as well as to give you confidence during the first night after surgery that you will not inadvertently damage your eye in your sleep. Many surgeons do not use a shield and if it upsets you, please take it off. In any case, you should peel the shield off to put your eye drops this evening, before reapplying it for sleeping.

- Please make sure you use the drops supplied, 4x/day for a total of 4 weeks, unless otherwise advised <u>by your</u> <u>surgeon</u>. It is often easier for someone else to put the drops in; please ensure that hands are washed before use and try not to touch the end of the bottle on the eye or surrounding skin.
- Other eye drops. If you use e.g. glaucoma drops, then it is usually safe to continue, although it is important to use a new bottle for the freshly operated eye. If you are taking a prostaglandin drop, e.g. latanoprost (Xalatan), bimatoprost (Lumigan) or travoprost (Travatan), then we generally ask you to stop for 4 weeks after surgery.
- Showering / washing. To reduce the risk of infection, it is best not to get any water into the eye; keep the eye closed in the shower and avoid splashing water in for at

least a week. If you wished to, you could attend the hairdressers' towards the end of the first week, but ensure you keep your eyes closed if your hair is being washed.

- We do not advise swimming for at least 4 weeks after surgery.
- Exercise. You have just had an operation, so please keep exercise light for a week or so. Gentle gardening is fine, provided that at no point you bring a dirty hand near to your face / eye, as is walking the dog etc. No swimming as above.
- Do not be concerned if the eye is red in the first few days – this will settle down – however, if redness increases please contact me.
- Lens surgery changes your spectacle prescription: to allow reading in the short term, a pair of off-the-shelf '+2.5' reading glasses may be worth a small investment, unless you have had a multifocal lens implanted.
- Either your surgeon or one of the HerefordVision team will ring you tomorrow to check on you after your surgery. Please feel free to ask any questions at the stage.
- Your vision should continue to improve from tomorrow. Should it deteriorate, it is important that you seek help without delay. Likewise, if the eye becomes painful during the first week, it is also important that you contact your surgeon.

Please find below a sample additional consent form, which you will be asked to sign on the day of surgery. Please do not hesitate to contact your surgeon in advance if you have any questions regarding the proposed surgery.

Sample consent form

I,, give my consent for a LEFT / RIGHT phacoemulsification procedure with placement of an intraocular lens.

I have read the leaflets issued to me by my surgeon, including "Refractive Lens Exchange" and understand the contents.

After reading this information, I understand that any procedure has a risk involved and that the overall risk of serious loss of sight as a result of the proposed surgery is approximately 1: 1,000. I understand that, while uncommon, other complications can occur, which may delay recovery or potentially lead to a level of vision with which I am disappointed.

I also understand that, although I have had my eyes measured for surgery by a modern laser technique, there is no absolute guarantee that the refractive outcome (desired spectacle prescription, if any) will be perfect due to the empirical nature of the formulae used to estimate the required intraocular lens power. Approximately 90% of patients achieve a refractive outcome within 1 Dioptre of their goal and approximately 70% within 0.5 Dioptres. I therefore understand that there is a small but significant chance of remaining spectacle-dependent, for both distance and near, despite surgery. This applies even if a premium multifocal or toric lens has been used. Subsequent corrective refractive surgery may be possible at a later date for some patients.

Delete if not applicable:

For patients who have chosen multifocal and/or toric lenses, in the unlikely event of a complication, which makes placement of such a lens impossible or unsafe, I understand that a standard intraocular lens may need to be used instead.

Additional comments specific to me:

Signed: Date:

In your case, we would recommend:

- standard intraocular lenses
- toric intraocular lenses
- multifocal intraocular lenses
- blended monovision technique
- true monovision
- toric multifocal intraocular lenses

with the following anaesthetic technique:

- topical eyedrop anaesthetic with tablet sedation / relaxation
- intravenous sedation with topical eyedrop anaesthetic
- general anaesthetic

It is important that you contact the HerefordVision team in advance of surgery if you wish to be considered for an alternative type of lens or anaesthetic.

HEREFORD VISION

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