

Questions related to laser refractive surgery

One of the objectives of The Royal College of Ophthalmologists is the education of the general public in all matters relating to vision and the health of the human eye. Towards the end of 2004, the College agreed to collaborate with Dr Foster, one of the leading publishers of healthcare information in the UK, on a range of articles. These articles were to be published in The Times 'Body Beautiful' Supplement but in the event, lack of space meant that not all the copy was featured. We believe that the work deserves an audience and we are able to post in full the articles on cataract surgery, glaucoma, laser refractive surgery and corneal disease on the College website. We hope that the readers find the pieces interesting and informative although they are not a substitute for a detailed medical consultation.

A College statement on Standards for Laser Refractive Surgery was published on 2 April 2012.

What types of laser refractive surgery are available and what is best for me?

Conventional LASIK (Laser Assisted In Situ Keratomileusis) can correct short sight, long sight and astigmatism, accounting for around 95 per cent of refractive error. Wavefront LASIK tackles the remaining 5 per cent of defects and many consider that it offers better results. PRK and LASEK are alternatives - the recovery period is longer than for LASIK, but might be safer if your cornea is relatively thin.

Would a clear lens extraction be more suitable?

For the correction of higher refractive errors and for older patients, lens implantation techniques are often preferred. Cataract surgery - called clear lens extraction when the lens is not cloudy - can remove the natural lens and replace it with an artificial one. Ask your consultant which treatment is suitable for you.

How much will it cost?

Laser refractive surgery is generally considered non-essential and therefore not usually available on the NHS. Private treatment usually costs £1000-1500 per eye (2012 pricing) and is available at some NHS hospitals. Clear lens extraction is usually twice the price. Make sure you get full details of exactly of what and what isn't included in the quoted fees.

What qualifications do you have?

Guidelines from the Royal College of Ophthalmologists say that only registered surgeons with specialist training should carry out laser surgery. A broad knowledge of ophthalmology is essential to properly assess patients and manage complications. Ideally, surgeons should also belong to a relevant professional organisation that provides continuing professional development too. Dr Foster data shows that 109 of ophthalmology consultants specify laser refractive surgery as a special interest. This does not mean that other consultants don't have the necessary experience to carry out laser surgery, but for complex cases you should try to see someone that specialises in the surgery you are undergoing. Full details of consultant's special interests can be found by going to <http://www.drfooster.co.uk/Guides/ConsultantGuide/>

What experience have you had and how can you demonstrate results?

In general, the more operations a surgeon has carried out the higher the success rate. In some of cases, sight without glasses might not be as good as sight with glasses before the operation. The difference is usually minor, but find out what results your surgeon has had. Also check how many patients have had to come in for further treatment to improve on the initial results. Bear in mind that one in three people will still need glasses for some purposes, such as night driving. Laser surgery will not be able to cure age-related presbyopia and the need for reading glasses in your mid 40's.

What risks are there and what is your complication rate?

Complications occur in less than 5 per cent of cases, but make sure your consultant outlines all the risks. Flap complications with LASIK arise in 0-4 per cent of cases, but can usually be corrected with little or no loss of vision. Some people have a problem with dry eyes in the months after surgery and artificial tear supplements might be needed in the long term. Many patients have experienced glare or halo effects when night driving, particularly just after treatment. This is more likely the higher the correction that has been made, but is rarely severe. In rare cases, excessive thinning of the eye wall can cause the shape of the eye to be unstable after treatment. Severe loss of vision is very unusual, but some patients could require corneal surgery or hard contact lenses to restore vision. You should find out exactly how frequently your surgeon has experienced complications and why.

Can both eyes be done on the same day?

LASIK treatment on both eyes is possible on the same day, but your consultant should outline the risks. In order to reduce the risk of cross contamination should complications arise, each eye should be treated as separate procedure, so check that this is the case for you.