

MYOPIA - SHORT-SIGHTEDNESS - THE NEED FOR GLASSES

What is myopia?

This is the medical term for short-sightedness. This is a very common problem with the eyes which is easily corrected with glasses, contact lenses or laser surgery.

What are the symptoms?

This is where the vision for reading or close work is much better than the vision in the distance which is blurred.

What is the cause?

This is usually due to the eyeball being slightly too large causing the image to focus in front of the retina and thus will appear blurred to the person. Myopia can also develop when much older due to the lens of the eye becoming harder which increases the power of the lens causing the person to develop myopia. This is often a forerunner of the development of a cataract.

At what age?

Typically myopia develops in the teenage years and will continue to slowly increase throughout the teenage and even into the late twenties. However, the major change happens between 10 and 16 years old. However, it is possible for myopia to develop at an earlier age.

What can be done?

It is not possible to prevent the growth of the eye which is responsible for the eye being too large and it would appear that the size of the eye is determined by your genes.

What is the treatment?

For people with small degrees of myopia, up to -1 dioptre, often they do not need to wear glasses all the time but only when requiring distance vision as for reading the blackboard or for driving. Those with prescriptions for greater than -1 dioptre will usually have to wear glasses all the time and these can be prescribed by your Optometrist or Ophthalmic Medical Practitioner.

Contact lenses. A very popular alternative to spectacles is the wearing of either gas permeable contact lenses or soft contact lenses. Soft lenses are more popular than gas permeable because they are often more comfortable to wear but are not suitable for everyone. Those with significant astigmatism or very high values of myopia are better with gas permeable lenses. In addition, children are much better with gas permeable lenses as they are easier to handle. While there is no limit to the age which children can begin to wear contact lenses, it is usually accepted that children begin to wear contact lenses between 15 and 16 years old. Below this age it requires both motivation from the child and also a guarantee from the parent to supervise and

manage the wear of the contact lenses.

Refractive Surgery. There has been a great deal of development in recent years on the correction of myopia with refractive surgery. This is either undertaken with a technique called radial keratotomy where a number of small cuts are made to the eye to correct the myopia or astigmatism. In the UK this has largely been preceded by the Excimer Laser which imprints a corrective lens on the surface of the

eye. The latter technique has now been used in the UK for the past 5 years and now has FDA approval in the USA. For those with myopia less than 6 dioptries is proving to be very reliable. For very high degrees of surgery, intraocular (Lenses placed in the eye, in front of the normal lens but behind the pupil) are being inserted in a few centres, but not under the National Health Service (NHS).

How often should I have an eye test?

For children this is recommended every 6 months as they will be undergoing a fairly rapid period of change. For adults, once a year is recommended.

High Myopia.

This is defined by refractions above -10 dioptries of short-sightedness. The glasses in this case will be much thicker though this can be minimised by high refractive index plastics and utilising a smaller frame. Contact lenses in these circumstances will give both better vision and better cosmetic appearance. Furthermore a person is also entitled to an NHS sight test and voucher where appropriate.

Should you have any further questions please contact your Optometrist, Ophthalmic Medical Practitioner or Doctor.

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