



How do I know if my child has myopia?

Recently, I found my sixyear-old daughter always squinting while watching television programmes and unable to read some words on signboards. Is this a sign that she has myopia? Who are at risk?

A Unfortunately, the answer is yes. Squinting is usually due to refractive error, and the most likely cause in this instance is myopia.

Genetics play a large part in myopia, and children with one myopic parent have a 60-percent chance of becoming myopic. However, environmental factors are also extremely important. Children living in urbanised societies appear to be most at risk, likely due to the amount of near work as well as the lack of outdoor activities. Keen readers get myopia at a younger age, which also means that the final degree tends to be higher.

How can I prevent my kid from getting myopia?

The single most important measure is to let them go out and play. A study in Taiwan found that outdoor activities during recess resulted in a significantly lower rate of new onset myopia after one year. Two hours spent outdoors a day is recommended.

In addition, near activities must be controlled. Have good lighting, correct posture and take frequent breaks while doing homework or reading — at least once every 20 minutes. For devices, the further away the screen, the better it is for myopia control.

What are the treatment options?

Myopia can be corrected with



Some interventions for rapid myopia progression include atropine eyedrops, orthokeratology and myopia control glasses. PHOTO: ISTOCK

spectacles. However, if myopia progression is rapid despite conservative measures, one can consider various interventions. This is important as high myopia is associated with increased risks of potentially blinding conditions such as retinal detachment, myopic maculopathy, glaucoma and early cataract.

Atropine eyedrops

This is the most effective intervention. It is used on a daily basis when myopia progression is the highest, between six to 12 years old. Various concentrations slow progression down myopia from 60 to 80 per cent. Higher concentrations have effects such as glare, but can be controlled with special photochromatic transitional glasses. Lower concentrations have virtually no side effects.

Orthokeratology (overnight contact lenses)

The lenses appear to slow myopia progression to about 40 per cent. They also reshape the cornea overnight, hence allowing one to see clearly without glasses during the day. However, there is a risk of cornea infection.

Myopia control glasses

The glasses have varying reports of success but studies showed only minor slowing in myopia progression compared to atropine.

Remember to monitor the amount of near work and achieve a good balance by spending time outdoors — even if on a myopia intervention — to achieve a good control of myopia progression. If your child appears not to see well, it is wise to check it out early.

Dr Inez Wong



Senior consultant ophthalmologist, Eagle Eye Centre, Mount Alvernia Hospital

Source: The Straits Times © Singapore Press Holding Limited. Permission Required for reproduction