

EYE HEALTHCARE

MANAGING DYSLEXIA

The somewhat 'grey' term of Dyslexia or Academic Skills Disorder (ASD) affects approximately 1 in 8 of the population, with four times as many males as females experiencing it.

What is dyslexia?

According to the British Dyslexia Association, dyslexia is an umbrella term covering a range of learning related problems.

So what are the symptoms?

The main symptoms in the perpetual distortion of the text that makes reading more difficult include

- (1) Blurring (non-refractive).
- (2) Movement of the letters and words.
- (3) 'Shimmering' on the page.
- (4) The words sinking into the white background of the page.
- (5) Pattern being formed by the spaces between the words and lines, which interfere with reading.

Some individuals even find writing 'falling' off the page, where others see 'rivers' running through the text. One individual said "I used to re-read every passage repeatedly to make sense of it – but I thought everyone did this."

How can dyslexia be managed?

Everyone has a natural transfer for visual information travelling from the eye to the brain (magnocellular pathway). But in the case of dyslexics, the transfer speed is too quick and

needs to be slowed down by using coloured lenses (haploscopic filters) of differing wavelengths - to slow the information transfer by differing amounts, depending on that individual's needs. The haploscopic filters also work to resynchronise the visual information into a format the brain will easily recognise.

It was Professor John Stein of Oxford University Dyslexia Unit that first found that about half of dyslexic individuals would benefit from using coloured lenses – giving clearer text, ease of reading and better word and number recognition.

What management solutions are available?

Whilst there is no single solution to managing dyslexia, ChromaGen™ is the only patented, FDA approved product for the management of reading disorders through the fitting of coloured glasses or contact lenses. It can also help patients who suffer from either Academic Skills Disorder 'ASD' (which includes dyslexia and dyspraxia (clumsiness)), colour deficiency and even migraine.

The entire assessment is completely painless - a pair of trial frames are simply placed on the patient's face. The test for dyslexia is first carried out with no filters in place and ascertaining the 'words per minute' score using the Wilkins 'Rate of Reading' test. Then the filters are used one by one on the non dominant eye (whilst looking at a reading chart) asking "Is the print clearer and easier to read, with or without the lens?" – until the one is selected which gives the most 'comfortable' and 'relaxed' view. The procedure is then repeated for the dominant eye and the 'Rate of Reading'

test repeated – to see what increase, if any, there is in the ‘words per minute’. The test is then repeated in its entirety without and then with the coloured spectacles to finalise the ‘Rate of Reading’ result. Often the ‘Rate of Reading’ test may not show a marked improvement in the ‘words per minute’ but the individual will notice a significant ‘distortion of the print’ improvement – where “it looks easier to read.”

Will the improvements last?

This small or type of ‘improvement’ on the day is the one that grows over the next 4-6 weeks of wearing the glasses in all ‘concentrating’ circumstances. It’s often helpful at this point to test the coloured filters on some normal reading of text the patient brings with them, showing the difference with and without, as the improvements will generally be evident, with less hesitation and stumbling on big words. This generally gives the characteristic “louder and more fluent, but this time much less words were jumbled or missed out.” To monitor progress, a follow up set of check-ups should take place at 6 weeks and 3 months.

Once an individual starts to use the filters, they get a permanent improvement as long as they continue to use them in the initial years. They eventually improve their reading skills and can start to do without the ChromaGen™ filters as their ability to read improves with education.

Colour Vision Deficiency

Where colour vision deficiency exists, the ChromaGen™ system for improving this is done in a similar way by selecting the best filter for the non- dominant eye ONLY whilst viewing an Ishihara colour

vision test and then separately something more practical like a London tube map or an alpine ski-run map. The final result is then made up as a single centrally coloured contact lens and replaced every 6 months.

The future is Bright

It is important to realise the ChromaGen™ system is not a cure for colour deficiency or ASD and only should be prescribed as a ‘management system’, in conjunction with an official dyslexia diagnosis from a qualified educational psychologist.

Many famous people were dyslexic, including Leonardo Da Vinci, Thomas Edison, Napoleon, Churchill and Einstein. A lot of adults today did not realise they were dyslexic until the last few years when it was recognised and talked about – but thankfully help is at hand and “Whilst there are a lot of sceptics, there are an enormous group of patients whose lives have been changed by the system.”

For Further information on the ChromaGen™ system visit:
www.dyslexic-help.co.uk

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