

Coloured Filters/Tinted Lenses for Reading Difficulties

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| Date: | November 2020 | Date of last review: | March 2018 |
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It is the responsibility of referring and treating clinicians to ensure compliance with this policy.

Policy: Provision of coloured filters/tinted lenses for reading difficulties is considered a low priority treatment and will only be commissioned by the NHS on an exceptional case basis. Clinicians need to apply to the exceptional cases panel for approval of funding (Funding request form available [here](#).)

Background:

In 1983 Irlen described Scotopic Sensitivity Syndrome (SSS) as visual perceptual difficulties when reading in a subgroup of people with dyslexia. The syndrome was diagnosed with the Irlen Differential Perceptual Schedule (IDPS) test. Treatment was later recommended with variable coloured lenses depending on the individual.

Coloured lenses/filters have since then been used in the management of reading difficulties and visual perception disorders.

Evidence and rationale:

Two recent systematic reviews in 2016¹ and 2019² reviewed the literature on the effect of coloured lenses or overlays on reading performance. 51 studies were identified in the first review and 45 in the most recent. Many of these were found to have a high or uncertain risk of bias. The studies with lower risk of bias were shown to provide less support for the use of coloured lenses. The reviews concluded that the use of coloured lenses/overlays cannot be endorsed and that any benefit identified is likely to be secondary to placebo or Hawthorne effects.

An update from the Royal College of Ophthalmologists issued in Autumn 2002 stated that “no scientific evidence to support the existence of such a syndrome has been found. The symptoms elicited by the IDPS are vague and medically would have very little diagnostic significance. Although SSS may not exist, interest in coloured filters or overlays as a treatment for dyslexia has persisted. Much of the literature is uncontrolled or poorly planned, but some good studies have supported it”.³

A policy statement issued by the Committee on Children with Disabilities, American Academy of Paediatrics, American Academy of Ophthalmology, and American Association for Paediatric Ophthalmology and Strabismus states that “visual problems are rarely responsible for learning difficulties. No scientific evidence exists for the efficacy of eye exercises, vision therapy, or the use of special tinted lenses in the remediation of these complex paediatric neurological conditions”.⁴

**Estimated number of people affected:
Priority:**

It is estimated that dyslexia affects 4-8% of children, depending on the threshold adopted.⁵

Low priority treatment.

GLOSSARY^{6,7}

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| Dyslexia: | a specific learning difficulty, which means it causes problems with certain abilities used for learning, such as reading and writing. |
| Hawthorne effect: | a change in behaviour of the research participants in experimental or observational studies |
| Neurological: | concerned especially with the structure, function, and diseases of the nervous system. |
| Ophthalmology: | the study of the structure and function of the eye and the diagnosis and treatment of the diseases that affect it. |
| Paediatrics: | the branch of medicine dealing with diseases of children. |
| Placebo: | a fake treatment or inactive substance that can sometimes improve a patient's condition. They are used in controlled studies to determine the efficacy of drugs. |
| Strabismus: | another word for squint. Inability of one eye to attain binocular vision with the other. |
| Syndrome: | a term applied to a group of symptoms occurring together regularly and thus constituting a disease to which some particular name is given. |

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