Scotopic Sensitivity Syndrome (Mears-Irlen Syndrome) and Coloured Filters/Tinted Lenses

<table>
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<tr>
<th>Date:</th>
<th>December 2003</th>
<th>Date of Last Review:</th>
<th>New Policy</th>
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<td><strong>Policy:</strong></td>
<td>It is the responsibility of referring and treating clinicians to ensure compliance with this policy.</td>
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<td><strong>Provision of coloured filters/ tinted lenses for specific reading difficulty (SRD)</strong></td>
<td>is considered a low priority treatment and will only be commissioned by the NHS on an exceptional case basis and clinicians need to apply to the exceptional cases panel for approval of funding. (Funding request form available on <a href="http://www.cambsphn.nhs.uk/CCPF/ExcptnalandIFR.aspx">http://www.cambsphn.nhs.uk/CCPF/ExcptnalandIFR.aspx</a>).</td>
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**Definition:**

The most common specific learning difficulty is specific reading difficulty (SRD). Developmental dyslexia or specific learning difficulty for reading has been defined as attainment of reading skills below normal for age, in the presence of normal intelligence, and adequate learning opportunities.

In 1983 Irlen described Scotopic Sensitivity Syndrome which was said to cause visual discomfort in a subgroup of people with dyslexia. It consisted of six major categories of symptoms:

- Photophobia: sensitivity to light.
- Background distortion.
- Visual resolution: the inability to see print clearly and free from distortions.
- Scope of focus: the inability to perceive groups of letters, notes, numerals, or words at the same time.
- Sustained focus: the inability to maintain focus except with the employment of inordinate energy and effort.
- Depth perception/gross motor activities: the inability to judge distance accurately.

Sufferers from SSS were diagnosed by a set of questions constituting the Irlen Differential Perceptual Schedule (IDPS) test and treated with coloured lenses specific to each individual.

Specific reading difficulty affects 5-10% of school populations, depending on the threshold adopted, and is probably twice as common in males than females.

**Estimated number of people affected:**

Privately available individually prescribed coloured filters and lenses are available from local opticians, including the assessment with the Wilkins intuitive colorimeter and Wilkins rate of reading test. Quoted costs = less than £100.

Irlen centres in UK also undertake assessment and provide overlays and tinted lenses on a private basis. Quoted costs = approximately £300.
Health benefits: 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”.

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”.

Searches of Medline and Cochrane showed two double-masked placebo controlled studies and a randomised controlled trial on individually prescribed coloured filters/ tinted lenses to help with reading, which indicate some possible benefits. Two review papers and a randomised prospective controlled trial on the effect of tinted lenses on reading ability did not show significant improvement in reading.

Risks: There are no proven documented risks to health for the use of individually prescribed coloured overlays or tinted lenses.

Priority: Pending further high quality research, provision of coloured filters/tinted lenses for specific reading difficulty (SRD) is considered low priority.

GLOSSARY (Ref 5)

Syndrome: a term applied to a group of symptoms occurring together regularly and thus constituting a disease to which some particular name is given.

Paediatrics: the branch of medicine dealing with diseases of children.

Ophthalmology: the study of the structure and function of the eye and the diagnosis and treatment of the diseases that affect it.

Strabismus: another word for squint. A condition in which each eye is not pointing at the same object at the same time.

Neurological: affecting the nervous system.

Medline and Cochrane: sources of medical information.

REFERENCES:


