



Usefulness of yellow tinted lenses in inherited retinal disease.

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Background and aims

Patients with inherited retinal disease such as retinitis pigmentosa can suffer from debilitating visual symptoms such as glare and eye fatigue. Tinted lenses which filter blue light have been shown to give subjective¹ and objective² improvement in vision in inherited retinal disease. These lenses may have further benefits in protecting the retina from blue light³. However, few UK ophthalmology centres for inherited retinal disease currently offer tinted lenses. We investigate this patient group's views on usefulness of tinted lenses as well as problems associated with their use.

A questionnaire regarding use of tinted lenses was filled in via telephone call with 18 patients with inherited retinal disease (56% male, 44% female, age range 25 – 87) who had been prescribed tinted lenses in a tertiary ophthalmology centre. These tinted lenses were made to the patients' prescription with a blue blocking filter incorporated or used as a clip on to existing non-tinted spectacles.

Results

Patients used their tinted lenses on average of 4 days a week, for 2- 4 hours each day. 72% of patients found the lenses improved their overall vision, though 44% reported worsened colour perception and vision in dim light (Table 1). The symptoms which tinted lenses were most likely to relieve were headaches, glare and eye fatigue (Table 2). 65% of patients felt that by wearing tinted lenses they were protecting their eyes, though only 35% cited this as the main reason they wore tinted lenses. 72% of patients said they would buy a new pair if their tinted glasses were to break.

Aspect of vision	Number of responses			
	Improved	Worsened	No effect	Unsure
Overall vision	13	1	3	1
Recognizing detail	6	2	7	3
Contrast sensitivity	8	2	7	1
Vision in dim light	1	8	7	2
Colour perception	1	8	6	3

Table 1. Patient reported effect of tinted lenses on aspects of vision

Visual symptom	Number of responses				
	Improved	Worsened	No effect	Unsure	Not applicable
Glare outdoors	9	2	4	0	3
Glare indoors	9	3	1	1	4
Glare from computer screens	11	0	0	0	7
Headaches	8	3	1	0	6
Gritty eyes	4	1	9	0	4
Burning eyes	5	1	6	0	6
Eye fatigue	9	1	4	2	2
Problems adjusting when moving from a bright to a dim environment	3	4	5	3	3
Problems adjusting when moving from a dim to a bright environment	7	3	2	4	2

Table 2. Patient reported effect of tinted lenses on visual symptoms

Discussion

Our findings suggest tinted lenses should be offered to patients with inherited retinal disease, particularly those with the symptoms identified here as relieved by tinted lenses. They act as a useful adjunct in a patient population where treatment options are currently limited.

References

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3. Downes, S. Ultraviolet or blue-filtering intraocular lenses: what is the evidence?. *Eye* 2016; 30, 215–221