



ChromaGen™ Assessment Guide



ChromaGen™ is a Cantor and Nissel product

Welcome to ChromaGen™ a management system that has been proven to be safe and effective in helping colour deficient patients have enhanced colour perception and realistic help with patients who suffer from reading disorders.

In this guide we will give you practical advice on how to assess your patients easily and effectively to give your patients the best ChromaGen™ can offer.

What you will find in your ChromaGen™ diagnostic system.

- 16 coloured ChromaGen™ Haploscopic filters
- 25 ChromaGen™ contact lenses made up from the 8 ChromaGen™ colours in different densities and colour pupil diameters
- Assessment and scoring test sheets for colour vision and ASD™
- A CD-Rom presentation on how to use your ChromaGen™ system.

Before assessing any patient for either Colour deficiency or Reading disorders, it is important for the patient to understand the limitations of ChromaGen™.

It is important that patients have realistic expectations and they understand:

- a) What it is that they expect the lens to do,
- b) What it is unlikely to do.

The ChromaGen™ lens might realistically be expected to do some or all of the following:

- Improve general colour perception
- Make colours brighter and clearer
- Allow shades of colour, previously unseen, to be observed and discriminated
- Improve colour naming
- Improve safety by allowing fluorescent signs and bright signal lights to be seen much more clearly especially by protons
- Improve performance on colour vision tests
- Improve reading skills
- Improve writing and spelling skills
- General improvement in academic learning
- As an aid to other learning methods

The following expectations are not realistic

- Cure colour vision deficiencies
- Immediate ability to name colours
- Ability to pass all colour vision tests
- Dramatic improvement in reading ability (however a marked improvement should be noticed within 1-3 months using ChromaGen™)

ChromaGen™ will not cure colour blindness or Reading Disorders

Assessment

In this guide you will notice the term ASD™ or Academic Skills Disorders this is a term that covers reading, writing and spelling difficulties, that is commonly known as dyslexia.

Methods for assessment

Firstly with all assessments using the ChromaGen™ system it is very important to find out the patients non-dominant eye, as the initial trials will always be carried out on the non-dominant eye.

Colour Vision Deficiency and Colour Perception Problems

- Sighting dominance – ascertain non-dominant eye.
- Show the patient the Ishihara plates and score in the usual way

Using the 8 coloured ChromaGen™ filters, ask the patient to assess the missed Ishihara plates by asking, “ Does filter number one make any difference?”

- Eliminate the coloured ChromaGen™ filters as per the patient’s decision
- Once the patient has decided which filter is making the plate clearer and easier to see, fit that colour contact lens (suggested 6mm coloured diameter and in the darkest shade if there is an option).
- It may be necessary to fit a lens to the dominant eye to help balance the effect (usually yellow, orange or green in the lightest density).

It is very important not to send the patient away without a commitment, suggested closing discussion with the patient after a successful

Assessment could be “Now you have seen that the ChromaGen™ filters have given you enhanced colour perception, you have a choice of either contact lenses or spectacles which would you prefer?”

Assessing for ASD™

The assessment tests included in the ChromaGen™ diagnostic system have been developed to help you successfully test patients from an early age to adult.

They have been developed by Mr Chaaban Zeidan ChromaGen™ Consultant Director of Clinical Services in his own clinic based on studies of over 600 patients.

The tests are simple yet very effective in measuring the patients abilities in ASD™ and help to show a measured improvement when using the ChromaGen™ filters.

Form No 1 Evaluation stage

We would recommend before the patient is assessed, have them or the parents complete form No 1 the evaluation sheet.

This will help not only in understanding what area of ASD™ the patient maybe having problems with, but also enhances the service given by the practice.

Progress of the patient can be measured against these results.

Scoring the Evaluation form

Once all answers have been given, they are totalled up and any allowance deducted. There are allowances for age (see bottom of the form), Example for a 5 yr old subtract 5 points. After 9 yrs old you will always subtract 1.

Example. If answered yes to 28 questions out of the total 40 questions, and the patient is 7 years old, You would then subtract 3 points $28 - 3 = 25$. Which is the total number of points.

To work out the percentage ratio $25/40 = 62\%$ so the specific learning difficulties score is 62%

The aim is to bring this down, so the score is as close to zero as possible, this is a very good method for showing an improvement using ChromaGen™ filters.

Form No 2 The Flow Chart

The flow chart has been designed to offer a logical progression with the patient starting with the investigation and assessment ending up with the summary and dispensing.

With the final recommendations to be made by the practitioner.

Form 2a Academic skills Disorder™ appraisal test

This sheet is used to record the patient's details and performance using specific tests.

These record the performance with and without the ChromaGen™ filters in place.

The tests performed that produced a poor result should be repeated with the filters in place, as these will produce the best results.

Form 3 Single word reading

Different types of suffers of ASD™ have areas where they particularly fail when reading, it maybe that they are competent and in some cases fluent readers, but single words can cause problems, or it maybe the patient is a very poor speller.

The single word test has been devised so you can use the same test on various age groups (however, patients of the specific age groups may still have difficulty reading the words correctly if their ability to read is poor).

It is useful to time these exercise over one minute, but not vitally important.

Any mistakes should be highlighted along with any missed words.

Once the test has been performed, it will give an indication and will make it easier to determine at what age the individual is actually reading.

The test should then be performed again with the chosen filters in place, and the results can be compared. Measure any improvement.

Form 4 Single word reading

The same method of assessment as on form 3

Form 5 Sentence Reading test

If reading single words is not a problem then sentence reading can be used.

The text read is again determined by the patient's age and ability, and timed over one minute. Any mistakes should be noted; the test should then be repeated with the chosen filters in place. Again the test should be timed over one minute and the results compared with the first test to see if there has been an improvement.

The improvement will be measured in fewer mistakes made and possibly the more words read in the same one-minute unit.

Form 6 Crowding phenomenon

Most suffers of ASD™ find the crowding phenomenon the most difficult test to cope with.

The patient reads the words until it becomes, difficult or impossible to read, again any mistakes are recorded.

This is a good test to use to decide on the appropriate filter or filters to prescribe.

Form 7 Hand writing test

Handwriting skills are also an area that effects ASD™ suffers, it is a very useful test to record both before and after tests using the ChromaGen™ filters to see what improvement they make.

This test is also very useful when the patient returns after 3 months again to measure their improvement.

Other Information

The ChromaGen system is offered in a choice of either contact lenses or spectacle lenses.

The ChromaGen™ contact lenses are available in GM Advance which is a Bio-Mimetic material which means that it is compatible with the cornea offering greater comfort and water retention, standard parameters are 14.50mm diameter, 8.60mm radius, a large variety of base curves and diameters are available, please contact our offices with the required sizes. Powers +/- 20.00 spherical (higher powers may also be available), also toric lenses available.

Spectacle ChromaGen™ lenses available in CR39 for all modalities required.

ChromaGen™ spectacle lenses are also available in bifocal and progressive lenses.

The most Frequently asked Questions and Answers.

Q. What does the term Haploscopic mean?

A. The term Haploscopic means that each eye is individually assessed without occluding either eye.

Q. Why do the contact lenses come in different densities of colour?

A. The reason we produce the contact lenses in different densities of the colours is that we can control the amount of white light passing through the contact lens. By altering the density of colour on the contact lens you can achieve a better result than with spectacle lenses.

Q. Would you prescribe the same coloured filter for both eyes?

A. Not normally. In some cases patients may choose the same coloured ChromaGen™ filters. However, in studies we have found that using ChromaGen™ for colour vision problems 50% of patients need only one filter in the non-dominant eye. Where as patients with ASD™ problems will always need two ChromaGen™ filters, but not necessarily the same colours.

Q. Why is it recommended that a patient should attend a clinic initially after the first month then either after 3 months?

A. If the patient has chosen contact lenses then we would always recommend an initial check up after the first month to check on the fit and the cleaning regime. With ASD™ patients we would recommend a check up after 3 months. This is a good period of time to measure the amount of improvement in the patient's specific disorder.

Q. How long should the contact lenses last?

A. The contact lenses are custom manufactured in GM Advance, a bio-mimetic product that is designed to last up to 12 months if well cared for. There is the option of replacing the lenses every 3 months, please discuss this option with your ChromaGen™ distributor.

INDICATIONS FOR USE:

The ChromaGen™ contact lenses and spectacle lenses are indicated by the FDA in the USA for the following.

The ChromaGen™ v2.0 Haploscopic system & colour Discrimination Enhancement Soft Contact Lenses and Spectacle lenses are indicated for daily wear to enhance colour discrimination in patients with protan or deutan (red-green) colour vision deficiencies. The lenses may also be prescribed for the correction of refractive ametropia (myopia, hyperopia and astigmatism) in aphakic and not aphakic persons with non-diseased eyes. The lenses are disinfected using a hydrogen peroxide lens care system only and are available in a frequent replacement program.

The ChromaGen™ v3.0 Reading Aid Soft Contact lens and spectacle lens are indicated for daily wear for the correction and refractive ametropia (myopia, hyperopia and astigmatism) in aphakic and non-aphakic persons with non-diseased eyes.

These lenses may also be prescribed as a coloured filter to aid individuals who experience reading discomfort not related to binocular vision problems or uncorrected refractive error. The lenses are disinfected using a hydrogen peroxide lens care system only and are available in a frequent replacement program.

PRECAUTIONS & WARNINGS FOR ChromaGen™ CONTACT LENSES

Special precautions for ChromaGen™ practitioners regarding possible alterations in spatial perception.

Patients using the darker shades of tint in their ChromaGen™ lenses may experience some or all of the following:

- Reduced low contrast acuity,
- Reduced illumination at night,
- Distortions in distance perception of moving objects or while driving,
- Distortions of apparent velocity

Thus, wearing these darker lenses may make driving difficult, especially at night, or under foggy, misty or other adverse conditions.

Contact Lenses are dispatched to you sterile in a glass vial with a tamper evident flip top. If the tamper evident seal is broken when receiving the lens, DO NOT USE.

Contact lenses should NEVER be cleaned using non-sterile water sources (tap water, etc) they should NEVER be used during activities such as swimming, bathing or water sports. Failure to adhere to this can lead to serious eye infection and loss of sight.

Lenses should be re-sanitised for the full contact time of the appropriate soft contact lens solution. Please read the detailed instructions for use, which contains all the appropriate warnings regarding contact lens safety, wear and cleanliness.

If you have further questions of a technical nature please do not hesitate to contact Cantor & Nissel Ltd, England. Telephone 00-44-1280-702002 fax 00-44-1280-703003 or email orders@cantor-nissel.co.uk or your local ChromaGen™ Distributor.

You can also visit the ChromaGen™ website at www.dyslexia-help.co.uk for more information.

ChromaGen™ is a Cantor & Nissel product manufactured in the United Kingdom by Cantor & Nissel Ltd.

ChromaGen™ is patented in Europe, USA and Canada .

ChromaGen™ is FDA approved in the USA and approved by the Korean FDA.

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