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Evaluation of low vision patient



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Near Vision Testing

1. In low vision near vision is recorded as the size of print that can be read fluently and easily.
2. Allow the patient to read at his/her preferred distance
3. Secondly measure functional reading ability for each eye at 40 cms .
4. For both near testing situation use reading cards specifically designed for low vision.



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D. REFRACTION

- Importance of a good refraction in a low vision examination cannot be over-stated.
- Many times, people with low vision will have improvement with just careful refraction.
- Refraction of low vision persons are not too different from the normal refraction procedure.



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Tests conducted

- Visual Field Testing and Amsler Grid Testing.
- Contrast Sensitivity Function (CSF).
- Colour Vision Testing.
- Glare Testing.
- Binocular Testing.



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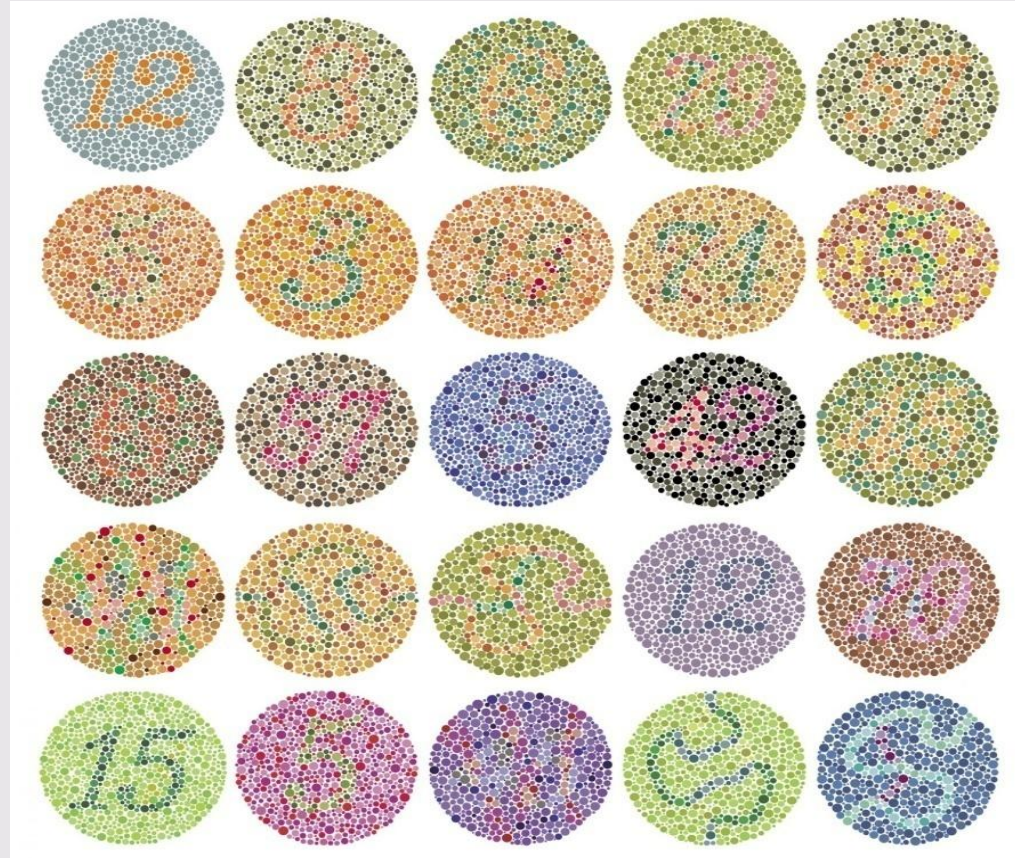


Fig no : 5 , color vision chart



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E. ASSESSMENT OF VISUAL FIELDS

- Helps to evaluate central scotoma's ,Mid, long and peripheral constrictions
- Importance for orientation mobility and help in searching.



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Fig no 6 :
Confrontation test



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F. AMSLER GRID TESTING

- Helps to know, extent of central retina available for magnification.
- Visual Fields of 5 Degrees or less may limit the amount of magnification.
- Visual fields are reduced below 40 Degrees.
- It is a parameter of “*LEGAL BLINDNESS*”



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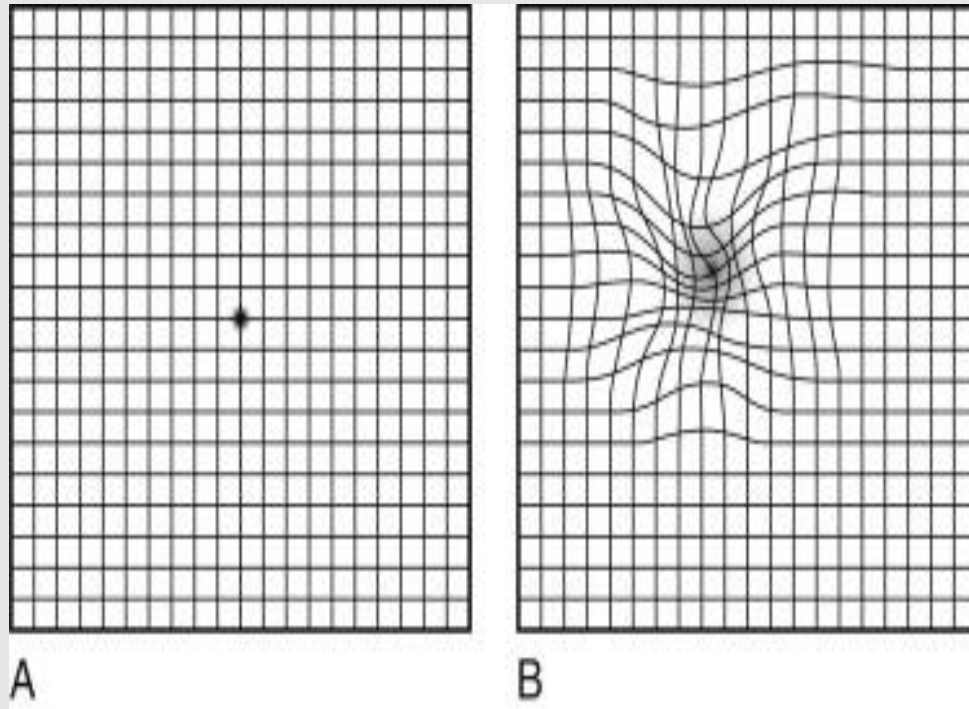


Fig no 6 : Amsler grid



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G. CONTRAST SENSITIVITY ASSESSMENT

- Need for Magnification.
- Ability to use Optical Devices.
- Lighting (Functional Adaptive Device).
- Overall Function-contrast enhancing techniques.



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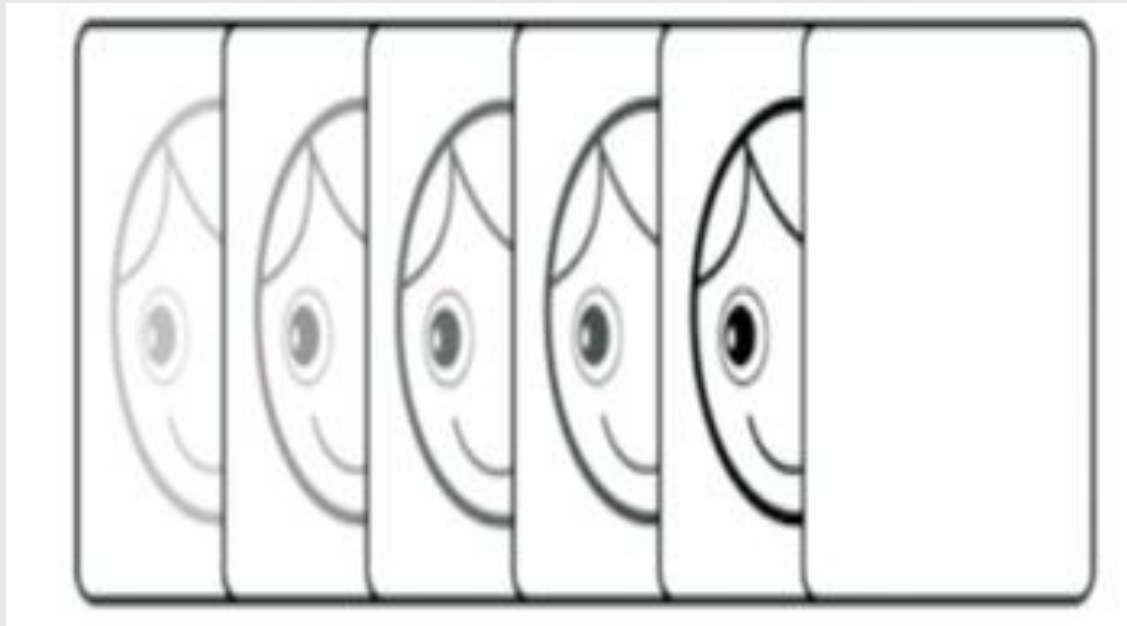


Fig no 8 : Contrast sensitivity testing



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II. COLOUR VISION TESTING

- Significantly affect educational, vocational, daily living, and mobility needs.
- Diagnostic of specific diseases.
- Some colour vision tests e.g., Holmgren wool, D15 panel test, Ishihara's test.



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Fig no 9 : Colour vision testing beads



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I. GLARE SENSITIVITY

- *Glare* is the reduction of visual function caused by the scattering of incoming light.
- Clear ocular media is required for clear image on the retina
- Glare may be caused by the opacification of the ocular media.



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Importance of Glare Testing

- To choose proper levels of illumination.
- Preferred non optical devices like tinted lenses/polaroid's or peaked caps.
- Tinted Lenses/ polaroid's.
- Peaked Cap.



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Fig no 10 Cap



Fig no: 11 Tinted glasses



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J. BINOCULAR TESTING

- Gross assessment of ocular alignment.
- Sensorimotor testing (e.g., Worth four dot, stereo fly, red lens test).
- Amsler grid testing.
- Contrast sensitivity.



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REFERENCE

Guidelines for comprehensive management of low vision in India , 2013 ,chapter no:7 , pg. no 17 to 29 .