

How to read an Australian medical report about vision

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Reports from ophthalmologists can be tricky to decipher. They should include a diagnosis and where relevant, a prognosis. It is likely the patient has been tested for distance and near acuity, visual fields, stereopsis (depth perception), refractive error, nystagmus and perhaps colour perception.

When reading the acuity numbers, note whether this was tested with or without correction (wearing glasses). If the acuity is quoted as 6/..., the child was *probably* tested at 6 metres. If 3/..., they were tested at half distance. To find the equivalent 6/.. acuity, treat as a fraction when converting. If there is a +1 or +2. This means that the patient could read 1 or 2 letters on the smaller line. If there is a -1 or -2, this just means that for the acuity quoted, the patient missed one or two letters on that line.

Near visual acuity will usually be quoted as a print size – e.g. N24, N36.

A spectacle correction might be included in a report. It will look something like this: -9.00/ +4.00 X 60°.

The doctor might use abbreviations. Here are some we have come across:

DV – distance vision

NV – near vision

OD – oculus dexter – right eye

OS – oculus sinister – left eye

OU – oculus uterque – both eyes

PD – pupillary distance

IPD – interpupillary distance

BVD – back vertex distance

VA – visual acuity

BEO – both eyes open

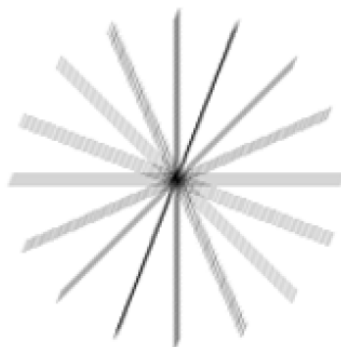
ERG – electro-retinogram

ODC – ocular diagnostic clinic

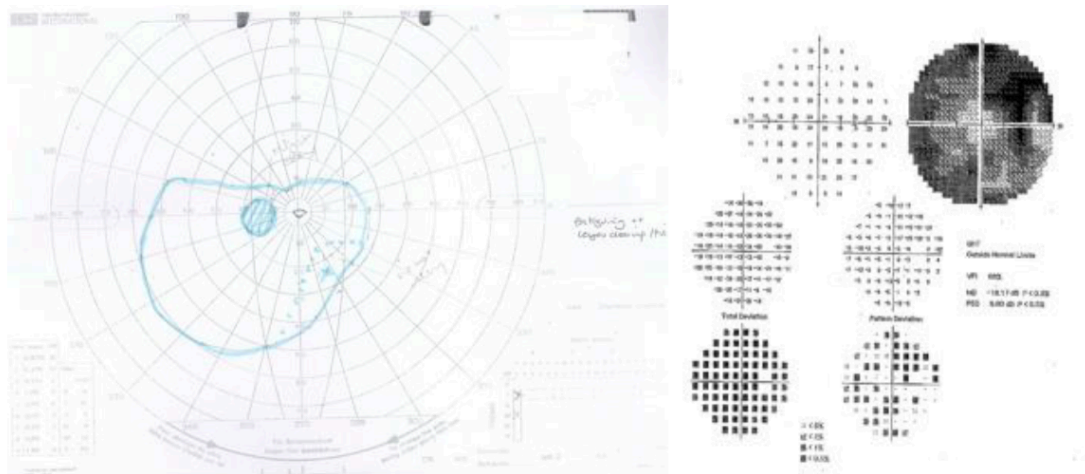
CUCV – City University Colour Vision test

Glasses are weaker than magnifiers because they don't work by magnifying, they work by correcting the focus of the eye. Myopia (short sightedness) is corrected using negative diopters. Hyperopia (long sightedness) is corrected with positive diopters. If there are degrees in the glasses prescription, then the patient has an astigmatism. "Plano" means that one lens has no correction, because one eye needs no correction.

Astigmatism can be tested by seeing which line in a grid such as the one below, is more blurred than another. Picture shows a series of lines rotating around a central point, like a compass. Some lines are more blurry than others.



Field tests are difficult to perform with children, especially if they have nystagmus. Some ophthalmologists say these tests are unreliable on anyone under eight years of age. The Goldman field test results look like the picture below left, with the blue line indicating the extent of the field in one eye:



The Humphreys field test looks like the picture above right, with the black areas indicating where the patient cannot see.

If the patient has nystagmus, the ophthalmologist might provide information about the shape of the movement (jerk, rotary, horizontal, etc), the rapidity, and whether there is a null position and head posture. If it is described as a "latent" nystagmus, this means it is present only when one eye is occluded.

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