

CLINICAL RESEARCH

Age-related Norms for Peripheral Visual Field

T.D. Williams*

Peripheral Field Norms

I would like to present some further norms based on my study reported in Can J Optom (ref 1).

In that paper, I presented normal average field sizes for the Goldmann I-2 stimulus for age groups 15, 25, 35, 45, 55, and 65 years.

Figs. 1 and 2 show the equivalent data for the Goldmann I-3 and I-4 stimulus.

If these figures are reproduced as transparencies, they may be used as templates for comparison with a given patient's chart. If this is to be done, then the scale of the transparency should be adjusted photographically so that the separation of the fixation point and the 60 degree marker is equal to 7.2 cm (the same as their separation on the Goldmann charts)

Table I shows the percent reduction of the visual field size as a function of age.

It appears that the rate of reduction of peripheral field is slower than that for the central field data reported previously (ref. 1).

References

 Williams, T.D. (1983), Computer-based analysis of visual fields: age-related norms for the central visual field, Can J Optom 45(4):166-170

Acknowledgements

This research was supported in part by a grant from the Canadian Optometric Education Trust Fund, and by grant No . AO162 from the Natural Sciences and Engineering Research Council of Canada. Jim Wilkinson (UW Optometry Class of 1986) prepared the computer-plotted figures.

Table I Area of Normal Peripheral Field

Age group	I-3 isopter area (sq mm)	Percent Reduction*	I-4 isopter area (sq mm)	Percent Reduction*
15	12288	0.0	16038	0.0
25	12059	1.8	15702	2.1
35	11160	9.2	15192	5.3
45	10298	16.2	14328	10.7
55	8112	34.0	12677	21.0
65	6376	48.1	10498	34.5

^{*}relative to 15 year age group

Variability in isopter sizes. The isopters shown represent mean I-2 data for the 15-year-old age group (outer isopter) and the 65-year-old age group (inner isopter). The bars shown on either side of the isopters represent 1 standard deviation; that is, the total length of each bar is 2 standard deviations.

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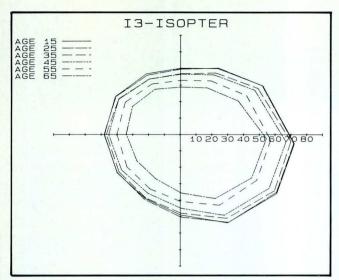


Fig. 1

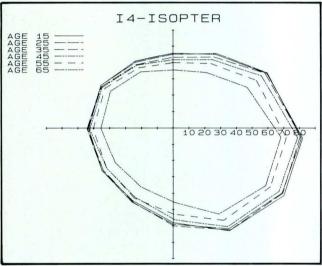


Fig. 2

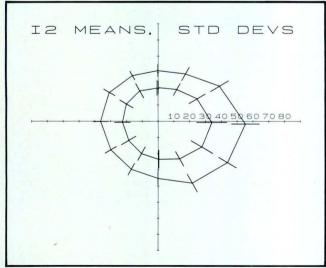


Fig. 3: Variability in isopter sizes. The isopters shown represent mean 1 - 2 data for the 15 year-old age group (outer isopter) and the 65 year-old age group (inner isopter). The bars shown on either side of the isopters represent 1 standard deviation; that is, the total length of each bar is 2 standard deviations.





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