

RESULTS OF TREATMENT WITH THE CAM VISION STIMULATOR FROM SYDNEY EYE HOSPITAL

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The results are recorded of 36 patients who had completed treatment on the Cam Vision Stimulator in a 16 month period from May 1978 to August 1979. Table 1 shows the type and number of patients treated with the Cam Vision Stimulator.

TABLE 1
Type and number of patients treated with the
Cam Vision Stimulator

1. Strabismic Amblyopia	= 13
2. Anisometropic Amblyopia	= 7
3. Combined Strabismic/Anisometropic Amblyopia	= 13
4. Deprivation Amblyopia	= 3
TOTAL	= 36

All the patients who attended for treatment had:

1. Full ophthalmological examination, including a cycloplegic refraction.
2. Visual acuity with a linear chart and a near vision test.
3. Assessment of the fixation pattern.
4. Assessment of the binocular state.

Choice of treatment discs was determined by assessing the contrast threshold with the square wave gratings. One disc above, and all discs below the threshold were used in the treatment sessions. We have since noted that use of all discs is advised. It is possible that the results may have been different if all gratings had been used. Treatment time varied according to the concentration of the patient. No patient had treatment of under one minute per disc.

No occlusion was worn in between treatment sessions. Treatments were given weekly in most cases, and the visual acuity assessed at the end of each session. Treatment was discontinued when no further improvement was gained. The patients were reassessed after an interval of one month without treatment.

In assessing the results, "improvement" is defined as improvement in the distance visual acuity of ONE LINE or more as assessed on a linear vision chart, or one grade of near vision. 27 patients had had previous treatment but precise details of the response to conventional occlusion is not now available. Table 2 shows the results.

It can be seen that 17 patients **did not** improve at all. 19 patients showed some improvement. The greatest amount of improvement was in the patients' near vision, where there was an average of 2.3 near grades, as compared with the distance vision where there was an average of 1.6 lines of improvement recorded. 64% of the patients were between 6-9 years of age. Normally the prognosis in such a group would be poor for 100% improvement, so it is felt that these results are encouraging.

In conclusion, the orthoptists using the Cam Vision Stimulator found it simple to administer, and the treatment sessions were enjoyed by the patients. Many parents found attending for treatment sessions less traumatic than battling with a patch at home. This is perhaps significant when dealing with older children.

Results of treatment
TYPES

RESULTS OF TREATMENT TYPES	TABLE 2		
	No. Previously Occluded	No. with Improved V.A. Distance / Near	No. Showing Improvement
1. Strabismic Amblyopia 13	10	5 / 4	6
2. Anisometropic Amblyopia 7	5	6 / 6	6
3. Combined Strabismic/Anisometropic Amblyopia 13	9	6 / 6	6
4. Deprivation Amblyopia 3	3	1 / 1	1
Total 36			TOTAL = 19 (52%)