SOME ASPECTS OF SWISS ORTHOPTICS

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From 1966 to 1968 I trained as an orthoptist in St. Gallen, Switzerland, at the Orthoptic and Pleoptic School of Professor Bangerter. I worked from 1968 to 1973 in the Orthoptic Department of the University Eye Hospital in Bern.

During my training, the treatment of amblyopia was very important. So was the treatment of ARC, which I have never carried out again since then.

When I started work in Bern, we used Professor Cüpper's euthyscope treatment of amblyopia, which was much less time consuming than the Bangerter method. Two to four children could be treated together in one session. The treatment took about 2 months, following a preliminary two months of inverse occlusion. The child had two sessions, each of half an hour, daily. When fixation improved, he also had two sessions of 20 minutes each with the Haidinger brushes; then we changed to direct occlusion and gave the child some monocular exercises. Most of the children were hospitalised, or came for the whole of each day. After this intensive treatment the child was sent home with direct occlusion, and came back to our department for a weekly check up.

Children up to 4 years were given direct occlusion regardless of the state of fixation, with weekly visits. When necessary a child was hospitalised and had two sessions a day of monocular exercises like crossing out letters, for instance all "o's" in a magazine or telephone book. Between the ages of 4 and 5 years we tried direct occlusion. Although the prognosis was not so good we sometimes got positive results. If not, we gave inverse occlusion and euthyscope treatment. Another method of treating amblyopic eyes in older children (5 to 10 years) on whom we could not try direct occlusion, or where euthyscope treatment was impossible because of time or distance, was to give 2 months of inverse occlusion followed by direct occlusion for a quarter of an hour daily, gradually increasing to one hour. This treatment could take up to one year (maximum).

Over the years, euthyscope treatment became less and less necessary, and occlusion gained more importance, as the children came to us much younger.

Another form of treatment which gained importance was penalisation. Penalisation is based on exact correction of both eyes and an added correction of +3.OD. for the amblyopic eye, together with daily atropine 1% in the good eye. In general it was better accepted than occlusion. This penalisation for near, as it is called, was effective for younger children as they are concerned only with things close to them. For school children the method was better, as they used the amblyopic eye for near and the good eye for distance.

Another treatment was given to nystagmus patients, children and adults, using an after-image based on the principle of the euthyscope. The after-image was given by a photo-flash with an area sparing the macula and with a central fixation mark. The patient sat very close to the flash, and covered one eye for a moment. Just when he felt he was fixing the central fixation mark he set off the flash himself. Then he sat (like a euthyscope patient) in a room with a light going on and off. He now had a steady entoptic fixation stimulus which blocked the nystagmus and led to better vision. When the after image was gone, the nystagmus increased in intensity and the patient gave himself a new after-image.

After 4 sessions (or fewer) a day for about 4 weeks, vision improved subjectively, because in time the feeling of blocking or reducing the intensity of the nystagmus persisted even when the after image was gone. Objectively, improvement was less apparent. Some patients came back for further treatment when they felt their vision had deteriorated.

In treating heterophoria we did, on the whole, the same exercises as are used here in Australia. One additional thing was to practice room fusion for near and distance. For half of each half-hour session, twice weekly, patients practiced convergence and divergence with the prism bar, using Worth lights and Worth glasses for distance, or a fixation light at 30cm and Bagolini lenses.

On the whole, there are not so many differences in the field of orthoptic work. Something to think about are distances and population. Australia is 224 times larger than Switzerland and has 3 times as many inhabitants. There are about 138 registered orthoptists in the Swiss Orthoptic Association, 14 of them living abroad. Australia has 300 registered orthoptists, approximately 140 of them now working.