

DISCUSSION ON "CROSS-FIRE" TECHNIQUE

By Dr. Hammond S. Horton

The formal presentation of Dr. Spitler's paper on "Cross-Fire" technique is a fortunate one for the syntonists. There was so much material to be covered at the 1933 meeting that those attending did not receive the full potent of this method when given in discussion by Dr. Spitler. The method employed as given in his paper will at least give the Syntonist a start on the problem.

Doubtless this will have a great metamorphosis during the next few years. It is to be expected if the science, or any science is to survive.

Senile cataract of the cortical type which Dr. Spitler discusses is one of the conditions which I believe can be corrected, allayed or even prevented by the proper measures. Conservation of vision as now being practiced is going to go a long way toward lowering the incidence of this senile disorder. If body changes can be governed and the light entering the patient's eye can be controlled by our methods, and if the public can be educated to consult the optometrist at the first sign of dimming vision, I believe that we can go far to make life worthwhile through efficient vision in the later years of life.

Dr. Spitler quotes Duke-Elder. I also feel that opinion from this source should be respected. As the paper has shown the entire train of events is believed to have been instigated by the passing of radiant energy through the lens. He says, however, that it may be "any wave length". It is entirely possible that it can be demonstrated in the future that it is some particular band of radiation in the range of spectrum. Some believe now that the ultra-violet (beyond the visible range) has a deleterious effect of this nature; others are of the opinion that the infra-red is responsible for the anomaly. I know of no scientific material prepared after research which would give any clue to this situation.

The listener will recall that Duke-Elder believed the train of effects produced by passing light radiation to result in an upset of the lens metabolism. The writer believes, and practice seems to bear out the thought, that these cases are generally found with low metabolism, poor circulation, and a low blood pressure. Blood reaction may bear on the subject as well. At the next meeting there will be something of a definite nature on this subject. The amount of material compiled at present is not sufficient to base any definite ideas on, however, the fact still stands that the above named conditions do exist in the majority of cases,

Dr. Spitler has made the remark in his fine paper that the subject of photosensitization should be the subject of a complete paper, and the object of some worthwhile research work over this next year. I heartily agree with this idea. The work of Woodbury points to the advisability of such a study.

Certainly no one will fail to concur in the thought that local as well as general metabolism, which includes anabolisms, or the building up of the body and its nutrition, and catabolism, or the tearing down and production of wastes, has a great bearing on the subject. One of the cases cared for by myself is a shining example of the effect of Syntonics on a low blood pressure, low circulations, and low metabolism case displaying senile cataract at the age of 58. Treatment has normalized the blood pressure from a

systolic of 95 to 130 millimeters. Ocular results have not quite kept pace with the improvement of the system, but the calcification could easily be responsible for that fact.

Dr. Spitler goes on to note that the permeability of the lens capsule is an important factor in the maintenance of its transparency. No more need to be said on this subject, now. Dr. Spitler has covered osmosis and the permeability of membranes with all present.

Whether or not the incident light is the primary cause of the ocular disturbance, or whether a purely systemic disorder is at fault is only conjecture. Possibly it is one, possibly the other, and perhaps it may be a combination of both. We know that a technique which is effective in one case will fail on another. It must be that a different etiology exists. While our diagnostic material has increased by leaps and bounds the past five years, at the same time there is much to be learned concerning the qualification and more accurate typing of the individual case. It is only natural to presume that the form of treatment benefiting the one would be of little avail on the other. Incident light is undoubtedly a contributing factor at least, and actually the primary cause of these lenticular involvements in a large percentage instances. This may give some explanation for those not responding to our methods. We are dealing primarily with an inability to properly diagnose.

The cross-fire method of attack is undoubtedly a great improvement over the old method. There are several different possible methods of application.

The rotation of the eyes during this method as the patient fixates on one after the other characters on the "cuff" brings into play a method which has been in use for many years. The chief advantage is that it enables ocular rotation while the patient at the same time obtains the benefit of the selected frequency. Two operations are thus combined into one. The rotary action of the entire oculo-muscle apparatus is certain to flush out old fatigue, waste and toxic products from those tissues. It produces a pumping action which is one of the chief methods employed by voluntary muscle to change blood and stimulate circulation. The action throughout, the entire body musculature aids the heart in an onward passage of blood in its flow back to the right auricle. This part of the treatment method, then, is entirely scientific.

My chief complaint with the method is that with the selected frequency employed the intensity of the illumination was so greatly reduced that it has been very difficult for the patient to perceive the fixation targets in the hood of the instrument. For this reason I dispensed with the idea as such, but continued having the patient rotate the eyes.

The idea occurred to me that the intensity must not be any greater in treatments of other anomalies when using the alpha or the delta. However, there would be no retinal fatigue or after-images if the intensity of the radiant energy source could be "stepped up" for use with the light frequencies. Another thought was to increase the size of the target by some means so that its retinal image would cover a greater area of the retina. For example, if a plus lens were placed into the hood of the instrument at its focal distance from the average nodal point of the patient's eyes, then the apparent size of the target would be increased many fold. The patient could then follow the corners of the target to get the same effect. Still another method is to arrange two sets of double prisms large enough to fit into the hood, each set placed so the adjoining bases are at right angles to each other. The patient would see four targets at opposite corners of a square. Each one could be fixated in turn to obtain ocular rotation.

In conclusion, the writer desires to state that the method advanced by Dr. Spitler is an entirely plausible and has scientific merit. The method of application which is best suited will have to be evolved after

research. Basically, the hypothesis is well founded. I see no reason why the technic should not be employed by all, and an individual report submitted on the question at the next meeting.

Dr. Hammond S. Horton
210 Schofield Building
Cleveland, Ohio