

NEW SYNTONIC PROCEDURES WITH CHROMOGRAPHY SIGNIFICANCES

By

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INTRODUCTION

The empiric procedure of the "shot gun prescription" has long been the bone of contention in scientific medicine. From this shot gun procedure in clinical medicine, there has been developed over a period of a great many years many of the most exacting therapeutic agents given in specific conditions of disease.

In Syntonic Optometry the shot gun procedure is frowned upon, but by this empiric method of application there is stabilization of ocular function in many cases of difficulty, then by inductive analysis general syntonic procedures are definitely established.

Thus in my own practice of Syntonic Optometry what might appear as "shot gun procedures" are being established as definite methods of application in many conditions requiring stabilization of ocular function, I refer to the altering of frequencies or the applying of two or more syntonic prescriptions during one application.

This paper covering clinical investigation of cases in which wave frequencies have been altered during the Syntonic application with certain phases of chromography used with syntonics, is presented to the members and Fellows of the College of Syntonic Optometry with my sincere wish that the material may be of some immediate or future value to the college and that the syntonic procedures may be further investigated

Early in March of 1935, Mr. C.E. White was referred by a painting contractor for emergency attention and further reference if necessary. Mr. White had received severe lime burns from lime falling in the eyes during his interior decorating work. The eyes pained very severely and the entire sclera and conjunctiva were firey red with inflammation.

Knowing the selected activity of the wave frequencies of ν in lessening sensory transmission and through sympathetic inhibition tending to throw the parasympathetic arc of the autonomic nervous system into dominance, ν was given as an anodyne and to lessen the lachrymal secretion of the burn.

Almost immediate relief was received. At the end of about eight minutes, for reasons quite evident the filters were switched to $\mu\nu$. After a few minutes application of $\mu\nu$, discomfort was noticed and the filters were switched back to straight ν . This procedure of altering the frequencies was continued for thirty-two minutes with the result of cessation of all discomfort

was noticed and the filters were switched back to straight v. This procedure of altering the frequencies was continued for thirty-two minutes with the result of cessation of all discomfort.

Thus the first case of altering of frequencies at or during one syntonization was brought to a successful finish, and there was no recurrence of difficulty.

During the following months similar cases were started with the standard or classic prescriptions but relief was more rapid and permanent when ever several prescriptions were given during one syntonization.

On March 1st, 1935, Mr. Cowles, age 47 was referred to me for complete Optometric diagnosis by a surgical nurse. This case report appeared in the June 1935 issue of the American Journal of Optometry in a paper by the writer on Chromography. The case will here be reviewed:

Mr. Cowles had received ocular attention from a number of practitioners located in various parts of the state. Several forms of medical therapeutics had been administered over a period of three years, and glasses in single vision and bifocal forms had been prescribed, all with no benefit to the patient.

Mr. Cowles was bothered by lachrymation and burning of the eyes when near work was attempted and, in addition, suffered from photophobia when out of doors. In his work, that of a surgical supply salesman, he drives a large part of the time and with these ocular difficulties has very little comfort during his waking hours.

Optometric diagnosis other than chromography gave evidence that a near point correction in lenses and orthoptics was all that was required, although he had always been given minus lenses for distance vision.

Chromography revealed foci of infection, and the patient was referred to the oral surgeon for examination attention.

The report of Dr. Householder follows:

Dr. D. J. Mayer,
Riverside, Calif.

Re: Mr. Cowles.

X-Ray shows lower left first molar with gold crown and extensive rarified area involving both roots. Lower left

first molar was extracted, area thoroughly curetted and socket closed with sutures.

F. L. Householder, D.D.S.

Two weeks after the completion of oral work, the Chromographs showed the eyes to be toxic free and the graphs normal. Reading glasses have been prescribed, Syntonizations and orthoptics are being given and the patient is responding very well. Only occasionally do the original symptoms give any disturbance, and the visual graphs are greatly improved. A glare prescription will be given at the finish of the orthoptic training.

As well as resistance being completely broken by foci of infection, Mr. Cowles had had a forty percent solution of argyrol instilled in the eye to stop lachrymation supposedly from infection of the lids. This instillation of argyrols was followed by a still strong solution of the same drug and the resultant effect was chemical burn.

All the standard classic syntonics prescriptions were tried with nothing but very temporary relief from the lachrymation, redness, and discomfort. Then ν and $\nu\omega D$ were applied and altered several times with five minute intervals for each prescription. This was done to give the resultant see-saw effectivity of depression of the sympathetic arc of the autonomic in greater and lesser degrees thereby giving a greater kick to the stimulation of the parasympathetic arc, much the same in effect as the old hand choke in automobile motors. This is the Syntonic prescription used to clear up the case after foci of infection had been alleviated. The Rx is $N/L-5'$, $\nu 5'$, $\nu\omega-5'$, $\nu 5'$, $\nu\omega-5'$, at times each frequency prescription was used twice in a syntonization and at other times each prescription was used three times in the application.

That this syntonics prescription is sound physiologically and definite in its beneficial reaction in application is proved in the practice of my friend and colleague, Dr. Maurice Dalton, as well as in my own practice. This syntonics prescription used as indicated in cases of ocular disturbance with lachrymation (cases of optometric nature) gives complacency of the ocular nervous system more quickly than any of our classic prescriptions to date.

My next experience in altering syntonics prescriptions during the allotted time of one application, came in a series of four pterygium cases, all of which were entirely corrected and normalized.

In April of 1935 Mr. Jack Sheets was examined and the left eye found to be effected by a very severely inflamed pterygium. That the eyes were acutely inflamed and were causing a good deal of distress by burning and smarting and had hastened the optometrist diagnosis seemed evident, but Mr. Sheets rather asthenic by nature appeared necessarily nervous

Mr. Sheets was nascentized N/L – and $\delta\omega$ given to reduce the intensity of the ocular nervous irritation and to prepare the patient for $\mu\nu$ which was indicated and the properties of which are well known.

After 10' of $\delta\omega$ the prescription was changed to $\mu\nu$. This prescription gave the patient considerable relief and the one application made a noticeable improvement in clearing the inflamed eyes. This procedure was followed and the pterygium disappeared at the end of fifteen syntonizations.

It was most interesting to notice in the above case as well as with one of the several similar cases following that of Mr. Sheets that $\mu\nu$ definitely seemed to produce greater nervous irritation and the patient complained a good deal of not being comfortable while being treated unless $\delta\omega$ was given for 10' preceding the $\mu\nu$. I have spoken to several syntonists about this but I have found no explanation of the cause of irritation.

This syntonic Rx is N/L-5', $\delta\omega$ 5' to 10', $\mu\nu$ -15'. It has a definite place in the clinical application of syntonics in cases of pterygia.

During the latter part of 1933, after several years of clinical investigation in the field of chromography, I was approached by several orthoptists who said the value of chromography was lessened because they could re-establish normalcy of the color fields by orthoptics.

There followed a series of investigations in my office in which endogenous and exogenous toxemias as diagnosed by chromography were covered up and the fields normalized by orthoptics. The cases always observed with such periodicity that they were control cases and always some weeks after the completion of the orthoptic procedure, the fields collapsed or were altered to the type and kind of chromograph used in diagnosing the toxemia or foci as indicated in the original optometric diagnosis.

Thus the value of chromography as an aid in optometric diagnosis was increased and the necessity of elimination or alleviation of the existing toxemia or foci on or before the time orthoptics were instituted was conclusively proven.

Then came Syntonics filling a recognized need in optometric diagnosis and attention. The more I studied and worked under Dr. Spittler the more I recognized the gigantic proportions of his contribution of Syntonic Optometry to our profession, and the greater became the significance of the keystone connection of Syntonics and chromography.

Feeling that the accepted explanations of the why of chromography were so bewilderingly vague and the physiologically inadequate the following line of thought was started. Whereas, it is generally excepted that the sympathetic nervous system is in dominance

in infection, even eventually in secondary infection, and also in infection there is a continual rise in the acidity level of the blood, resulting in academia, furthermore, in chromography, if foci of infection is found, with collapse of all the fields, particularly the green field, it follows almost invariably that there is photophobia. Then this photophobia must have been acquired by the eye becoming scotopic by a slowing up of the parasympathetic nervous system.

Thereas, the parasympathetic nervous system is in dominance in sleep and immediately following a good night's rest before the defense mechanism of the body is activated, the chromographs which have shown infection are much larger with the exception of the green field. It would seem that parasympathetic nervous stimulation would eventually always enlarge the constricted fields, and that is exactly what we did in altering these fields by orthoptics. Because I have clinically demonstrated that in abdominal toxemia particularly of an eliminative nature, the blue field is first effected and contracts, and the contraction is at first always noticed in the vertical meridian, and also, because allergic, causes of exogenous toxemia always enlarge the fields. Then these changes presumably must be brought about by: in the first instance inhibition of the sympathetics and in the second instance by stimulation of the parasympathetics.

Mr. Georg Wald's work in the finding of Vitamin A in the retina and the increases of Vitamin A in overcoming photophobic and various other conditions by parasympathetic stimulation, with all of the above would lead us to think that: AS INFECTION TAKES PLACE AND THAT SYMPATHIC NERVOUS SSTEM BECOMES DOMINANT IT DOES SO BY INHIBIING THE PARASYMPATHETICS: CAUSING A COLLAPSE OF THE COLOR FIELDS.

Therefore, in the final analysis the retina and more particularly the layer of rods and cones, and especially the cones, for they are the principles of color vision, must be normally under parasympathetic control.

Now our problem evolved itself into proving his parasympathetic arc of the autonomic nervous system is the principal nerve supply to the retina in conditions of, or state of health.

With my very limited knowledge of the autonomic nervous system no positive statement of proof could be found, but physiologists and authorities on the autonomic nervous system seemed to infer this parasympathetic supply to the retina. Then at intervals I sent letters to men of authority asking their help in pointing out parasympathetic nervous supply, but they helped but little until Dr. Spitler gave me aid. May I quote a part of his letter, "The superior corpora quadrigemina send fibers to the nucleus of the third nerve, thence to the ciliary ganglion controlling pupillary contraction and accommodation. We also find Ball says the following: 'About the meaning of another class of fibers starting in the Superior Corpora Quadrigemina and after decussation going to the retina – centrifugal – fibers nothing certain is known.'

“Hansom credits Grey in 1916 that, ‘The optic nerve also contains efferent fibers which terminate in the retina’.

“It would seem from the foregoing that the superior corpora quadrigemina at least exercises some control over known parasympathetic functions, pupillary contraction and accommodation. Furthermore, superior corpora quadrigemina send fibers to the retina directly, hence we might infer that these fibers may be parasympathetic. The inference, however, must be tentative.

“Starling cites the fact that consensual withdrawal of the rods from the choroid is attributed to efferent fibers in the optic nerve and calls them the ‘retino-motor fibers’. Presumably he is talking about the same set of fibers mentioned above although he does not so specifically state.”

I find that Kuntz mentions the parasympathetic fibers of the short ciliary nerves and their choroidal supply with inference to the retina, but he states that their exact distribution and mode of termination is unknown.

Many optometric educators hold fast to the idea that chromographic changes must take place because of the blood supply alone. Even if we find that to be the case the parasympathetic arterial control explains these changes almost as I have stated them.

Let me again quote from the above mentioned letter of Dr. Spitler: “Undoubtedly the nutrition of the retina and restoration of the rhodopsin must basically be dependent upon circulation. Furthermore, the sensitivity of the retina is determined by the quantity of rhodopsin. Furthermore, high frequency light has greater bleaching effect than low frequency light on rhodopsin, meaning by that it is more fully absorbed.

“From the foregoing it would seem then that sensitivity and regeneration of rhodopsin being a function of circulation, and since the parasympathetic fibers follow blood vessels and result in dilation, in constriction, it would seem that sympathetic over-activity might control and thus alter the rate of generation of rhodopsin with a consequent loss of sensitivity of the peripheral fields. This would probably affect the blue field first due to its greater ionizing effect on rhodopsin.”

Now to demonstrate a “tie in” of chromography with syntonics, Goldzieher states, “A glaucomatous attack is brought on by emotional stress, fatigue cold, thyroid hyperfunction, and most often in decreasing gonadal function. While the symptoms of acute glaucoma might be summed up as those of cervical sympathetic irritation, the incidental precipitating factors mentioned above are all known as powerful sympathetic stimuli.”

During the past year I have had four cases of increased intra ocular pressure under observation and investigation. All four of these cases shoed foci of infection by chromography, by collapse of all the fields so that the fields of chromo were all within the 20 degree circle, Chromography revealed sympathetic control in these cases. The hypertension of the eye also revealed sympathetic control to a high degree.