Vol. 7 N0. 9
October 1940 issue
College of Syntonic Optometry
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CHOMOGRAPHY AND PYORRHEA

N.B. The following Second Part of Dr. Mayer's paper is include by mention in his First Part. It is being reproduced here by consent of the publishers of the Year Book of the New York State Optometric Association.

By
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For a period of years I have been interested in the effect of pyorrhea in chromography. In 1930 a patient showing foci of infection by chromography and whose oral X-rays showed such ravages of pyorrhea that she was immediately advised to have a full mouth extraction, temporarily completely lost the vision of one eye because of faulty prophylaxis, and prophylactic measures of the dentist doing the extraction.

The patient had been advised to have the dental oral surgery done by the oral surgeon that I had referred her to for the X-ray and oral diagnosis. Arrangements had been made for post surgical care, a competent dentist was to complete her work and make her plates. At the last minute she went to a billboard dentist and the result has been mentioned in the above paragraph. That the billboard dentist is to dentistry exactly what the commercial optometrist or "spec fitter" is to Optometry, can be learned from any good ethical dentist.

This patient had to go to the oral surgeon for treatment and care for several weeks and instead of saving money, her poor judgment cost her sixty dollars more than the work as originally planned in my office, and undoubtedly aided in shortening her life. A heart already weak and affected by foci of infection developed complications and the patient died in 1934.

Here it is of interest to note that in the regaining of vision as the patient underwent recovery from the oral surgery, the color blue was first recognized and the blue field established, then red and the red field and lastly green was recognized and the green field established.

Since 1907 special attention is given to the scaling of teeth and doing thorough prophylaxis in all operative cases by Dr. M. M. House, outstanding authority on oral foci of infection. Dr. House states, "It is estimated that people having general infection f the gums and pockets around the teeth have something like twenty-five square inches of absorptive tissue area open to infection". In spite of the teaching of Dr. House and other dental authorities careful and thorough dental prophylaxis is sadly and woefully neglected by many men in general dentistry. This has been most evident in the investigation of chromography.

Dr. T. D. Beckwith in discussing the presence of destructive bacterial organisms in the gingival tissue in cases of stomatitis and gingivitis, states, "In nearly all instances, bacteria are present within the tissues about the teeth when either one of the above conditions is evident". Dr. Beckwith bases this statement on a histologic study of the gums in pyorrhea. Most of the specimens examined wee obtained from inmates at San Quentin Penitentiary and others from the department of bacteriology of the University of California.

Now to mention a case in point, on November 12th, 1936, Miss Marie Carr was referred by a medical physiotherapeutist.

HISTORY – Miss Marie Carr, age 18, over-weight, has always been over weight, and phlegmatic. Has headache, frontal and low over eyes, dull and numb feeling head. Headache all of the time during past three months. Tendency to be very nervous and emotional. Can no longer see well with glasses prescribed in late part of 1934.

Distance vision bad and when attempts near work such as reading or sewing, her headaches become very much more severe. Right handed and right eye dominant. In the analysis of eye habits it was found that she uses her eyes in critical seeing in reading, sewing and hand work for four or five hours daily. The rest of the time her work is about the home, being outside but very little and receiving no outside exercise. She averages nine to ten hours of sleep daily.

The external ocular examinations showed the Palpebral conjunctive badly inflamed, and the sclera a dull gray. Pupils average size, sluggish in contraction, but holds contraction quite well. In using the diagnostic lamps and the ophthalmoscope, eyes lachrymated badly and she showed a tendency to hold the left eye partially closed. The fundus appeared normal but requires a minus 8 D lens to view it.

Triangulation showed blur at four inches and a break at three inches. Eyes converged evenly and noticed immediate break. Vision with old Rx:

O.U. 20/20 +3	Naked vision O.U. 72 percent
O.D. 20/20 +	O.D. 48 per cent
O.S. 20/20 -3	O.S. 72 percent – Ives –

The extra ocular tests show a systolic blood pressure of 142 and high pulse pressure. Sinuses all clear under transillumination. Tonsils inflamed and pitted. All tissue of the mouth show gingivitis, gums gray, spongy as liver, and bleed upon touching them.

The visual, or innervational graph showed the case to be a medium high myope and typed a C-1 case. We know, therefore, that the somatic nervous system showed a higher degree of fatigue than the antonymic. Further, this case being one of a medium high degree of myopia it should be a B. type case. Those familiar with diagnostic and corrective Optometry as taught by the "Graduate Clinic Foundation", will also recognize that this patient in times past would type a B-2, hen B-3 and lastly the C-1 of this examination.

The chromographic examination made November 16, 1936 at 2:10 p.m., reveals Foci of Infection by the collapse of the green fields. The blue fields appear quite normal but somewhat constricted, thus we know the case shows no abdominal toxemia and appears as straight dental infection. This was further evidenced by the extra ocular examination of the patient's mouth.

The patient was referred to te dental oral surgeon for X-ray and oral diagnosis. Dr. Housholder's report follows:

Dr. Donald J. Mayer, November 27, 1936.
Riverside, California

Dear Doctor:

Regarding patient Marie Carr.

Full mouth X-Ray show no dental irregularities or pathosis.

F. L. Householder, D.D.S
Dental Oral Surgeon.

Next the patient was referred to a competent dentist in general practice.

Dr. Donald J. Mayer,
Riverside, California

Riverside, California
December 1, 1936.

Dear Doctor Mayer,

Concerning Marie Carr:

Examination revealed neither dental caries nor non-vital teeth, but priodontoclasia was present in its incipicncy.

Etiologic factors in this case, I should say were presence of deposits, lack of oral cleanliness, food impaction, and possibly some nutritional deficiency.

Treatment consisted of the removal of all deposits and septic material from the necks and roots of the teeth, following with astringent mouth washes and massage of the gums.

In conclusion patient was instructed in the art of tooth brushing so that teeth may be kept clean and gingivae stimulated. It is hoped we were able to make this patient realize the importance of daily oral care.

Yours truly,

D. A. Bernhardt, D.D.S

At the completion of this dental attention some two weeks later chromographs were made on December 4th, 1936. These chromographs show resistance high and normal fields of chroma. The dull and longer constant, but occurred when doing or following all near work. The sclera was changing to a normal white color and the conjunctiva was more clear.

At this time a lenticular prescription was given according to the visual graph made then, and which had not changed from the original diagnosis. Syntonic applications and orthoptics were instituted and at the end of two months of this corrective procedure the right eye shows exactly 2 D, reduction in the myopia, while the left eye shows 1.50 D reduction of myopia.

The syntonic and orthoptic procedure used in this corrective optometric work constitutes another story.

CONCLUSIONS

1. If time and space permitted, I would gladly cover case reports much the same as this one, showing the effect of periodontoclasia in its various stages upon the eyes by chromography. The chromographs always show FOCI OF INFECTION. In most of the cases investigated by Dr. Beckwith mentioned early in this paper, streptococci were found microscopically.

2. In the case reviewed in this paper the prophylaxis was pyrostatic and raised resistance to a point of tolerance, nevertheless, due to the phlegmatic and overweight condition of the patient the state of nervous balance of the individual acts to incubate all infectious agents. It is doubtful that the patient will remain for long in this state of tolerance unless she submits to a tonsillectomy and diligently cares for her health.

3. While this case has not been finished all symptoms of ocular discomfort have been alleviated. If the patient continues to resist the incursion of infection the myopia will be further reduced.

4. Orthoptic procedures must not be instituted in any case until the chromographs show resistance or tolerance, for orthoptics by its stimulating effect may cover up for a time the evidence showing the true condition of the patient. That type of orthoptics becomes only "patch up" Optometry.

CONTINUED IN NOVEMBER SYNTONOGRAM