Some valuable case reports adding support to the author's own theories concerning ocular migraine

Ocular Migraine— A Case Report

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To better understand the technique used in the optometric care of migraine headache, the reader is referred to the article "Ocular Migraine and Prolonged Occlusion," THE OPTOMETRIC WEEKLY, *Sept. 3, 1953.*

The prevailing thought expressed in current literature relative to headaches of ocular origin is that visual anomalies do not account for the headaches of migraine intensity. It is the purpose of this and other writings to show that visual therapy when properly executed, can bring untold relief to countless thousands who are classified as migraine.

As migraine headache is known to be caused by a vasodilatation of the cranial arteries, the treatment of necessity is aimed at reducing this distention. Through the marvelous work of Harold G. Wolff, M.D., and his associates, one of the greatest contributions to an understanding of headache pain can be found in his book "Headache and Other Head Pains" (Oxford University Press, 1948). The following is a paragraph taken from page 593:

"Therefore, the headache of migraine is produced primarily by distention of cranial arteries, chiefly, but not exclusively, the branches of the external carotid; and procedures that constrict the cranial arteries and thus reduce their amplitude of pulsation will diminish or terminate the headache."

With regard to pharmacotherapy for migraine cephalagia, it has long been accepted that injections of ergotamine tartrate (sold under the name of gynergen), are a tangible help in relieving the pain associated with the attack. For at least fifty years the use of fluid extract of ergot has been known to terminate migraine headache attacks. Ergotamine is a vasoconstrictor, and its purpose is to counteract the vasodilatation which produces the migraine. Its effect is so constant, that it holds the most important place in the control of migraine today; but, because any prolonged and constant use of a vasoconstrictive agent is considered harmful to the human organism, its use is very restricted and limited.

To illustrate the harmful effects of the prolonged use of this drug, the following case is reported in the "1951 Year Book of Drug Therapy" (published by the Year Book Publishers, Chicago).

"Case 1. Woman, 36, with headaches, received an injection of 1cc ergotamine daily for three weeks, then she took 3 to 8 tablets daily for several months. Severe cramping pains and paresthesias developed in the left thigh, leg and foot. The leg suddenly became cold and pale, and there was severe pain and inability to move the toes. On hospitalization the left foot was hot and turgid, but all arteries were pulsating. Ischemic Neuritis was diagnosed. Ergot preparations were withdrawn. She was treated with Vitamin B-1 and placed on a Sanders bed. Motor and sensory function gradually became normal over a year."

Nonetheless, in spite of the harmful possibilities of the continued use of ergotamine,

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a doctor's report

it is used to give relief during Status Migrainus, and the obtained relief is an indication of a true migraine cephalagia.

This patient, Mrs. W., is the wife of an optometrist, who at present is not practicing optometry, and her referral was through an optometric colleague in a neighboring city. She came in with the feeling that any attempt at visual therapy would be a hopeless gesture; but because all avenues of medical therapy had been tried, there was still that faint glimmer of hope which is carried by all chronic cephalagic patients.

Mrs. W. well realized the harmful possibilities of the constant use of gynergen; nevertheless for a period of ten years she used it daily by intramuscular injection. During this

period, she tried repeatedly to stop the use of this drug, yet in every attempt was immediately thrown into Status Migrainus. Her attitude, as expressed during the case history, was that, even if it shortened her life by ten years, she would continue to take it, rather than suffer daily migraine attacks.

Her history of migraine dates back to about five years of age, her present age being fifty. Prior to 1940, these migraine attacks were periodic, but slowly through the years they have become more frequent, so that there has been constant headache these last ten years. At first the onset of the pain would be in cycles. For a long period she would awaken anywhere from 2:00 a.m. to 5:00 a.m. with the migraine. Then it would change, and come on sometime during the day. Gradually, however, this came back to the early morning type of cephalalgia.

When she first began using gynergen it made her very ill, and she tried faithfully not to use it because of its ill effect, but because the head pain was so intense, she was forced to use it regularly. Between the effect of gynergen and her Status Migrainus, she originally spent about three days out of every seven in bed. By decreasing the dosage, she was able to build up more of a tolerance to it, and soon found that by taking the injection at night she could ward off the early-morning migraine and not suffer the ill effects of the vasoconstriction.

She had the typical nausea and vomiting accompanying these migraines, and also the extreme photophobia which is so characteristic of ocular migraine. Along with the head pain was a most severe post-cervical tension extending downward into the trapezius area. This tension was constant when she was extra nervous, and she had numerous chiropractic treatments, but with no lasting results. She frequently had her husband massage the cervical area, as that gave some temporary relief.

She had consulted numerous physicians in Seattle and Portland, and as a result had extensive pharmacotherapy. In 1942 she submitted to a complete hysterectomy, in the belief that these were the migraine of the menopause. She suffered through allergy tests and elimination diets. She had sinus therapy. She took thyroid medication. All of this was of no avail. In 1952 she began to have pains in the arms and legs, and became extremely worried about this continued use of gynergen. She obtained a prescription for phenobarbital and tried this valiantly for six weeks as a substitute. Although during those six weeks the pain in her limbs was definitely better, she at last had to go back to gynergen. This experience again made her desperate to find some relief other than gynergen, and resulted in her finding her way to this office for a headache case study for ocular migraine.

On February 25, 1953, an extensive history was taken, a portion of which appears in the foregoing paragraphs.

The first visual analysis showed, subjective: O. D. −.50 cyl. axis 160. O. S. −.50 cyl. axis 20. Distant phoria was 3$^{\Delta}$ exo and vertical phoria was 1¾$^{\Delta}$ left hyperphoria with vertical ductions of O. D. 2:1/1½:1. O. S. 1:1½/2:1½.

Prolonged monocular occlusion was instituted, and the right eye was occluded first on February 28. At the end of the three days (March 3rd), the distant phoria increased to 8$^{\Delta}$ exo and the vertical phoria showed 1$^{\Delta}$ left hyperphoria with ductions of O. D. 1:0/2:1. O. S. 2½:2/1:0. (Note the right hyperphoric indications of the ductions following the occlusion of the O. D.) Then the O. S. was occluded three days making a total of six days of monocular occlusion. This time our distant phoria increased to 10$^{\Delta}$ exo and our vertical phoria now showed 4$^{\Delta}$ left hyperphoria. Vertical ductions were O. D. 4:3½/−1½:−2. O. S. −1½:−2/4:3½.

With the discovery of these phorias, Mrs. W. was sent home with a temporary clip-over Rx of 1¾$^{\Delta}$ down O. S. and 4½$^{\Delta}$ in, and was asked to omit the gynergen shot that evening.

The next day (March 7), she called very excitedly to report that she did not awaken with a migraine that morning, even though she had omitted the gynergen the evening before. This was the first time in ten years that this had happened.

Between March 7 and 11 she had used gynergen three out of the four days. Her temporary Rx was changed to 2$^{\Delta}$ D.O.S. and 3½$^{\Delta}$ in.

The next day she had no headache, and no gynergen. This continued until March 15, when she experienced one of the worst migraine attacks in her history. The next two days she experienced no headache, but took some phenobarbital to relax her from the effects of the March 15 attack.

On March 18 another analysis now showed #8 holding at 8$^{\Delta}$ exo and #12 holding at 2$^{\Delta}$ left hyperphoria, with vertical ductions of O. D. 3:2/0:−1. O. S. 0:−½/3:2½. Alternate cover test gave quickest fusion with 1½$^{\Delta}$ D.O.S. and 5$^{\Delta}$ in. Her temporary clip-overs were changed to this amount.

On March 25 another analysis was made, and she reported the following since the last change in prism: The cervical and trapezius tension increased for a day, then subsided. She dropped gynergen to every other day, and only when a headache started. However, it was noted that through these long years of expecting a headache, she was using the gynergen at the slightest indication of such a pain. By this means she hoped to stave off a severe attack.

This analysis again showed the 1½$^{\Delta}$ D.O.S. and the 5$^{\Delta}$ in to be the best combination of prism, so it was not changed, but the patient

was asked not to use gynergen any more, but to substitute the phenobarbital in the event of a headache. It was felt that she would never have relief as long as she did not break her dependence upon a drug for vasoconstriction.

By April 1, she reported she had not again resorted to gynergen. She would still develop headaches, but not like the previous migraine syndrome. She reported great improvement. Many nights she would even eliminate the phenobarbital, and still be quite comfortable.

On April 7, she reported two days of headaches. They were very uncomfortable, but she stayed with our agreement to omit gynergen, and used only our agreed substitute, phenobarbital.

At this time we ordered the following permanent prescription: O. D. −.50 cyl. axis 160 with ¾△ up and 2½△ in. O. S. −.50 cyl. axis 20 with ¾△ down and 2½△ in. Added to the above, was a +1.50 O. U. in panoptic dual-vision lenses.

Periodically, she has reported to us for very minute frame adjustments, as even the slightest deviation will cause the cephalalgia to return, but on every visit she has reported definite progressive improvement, even to frequent omission of phenobarbital.

She was seen quite recently, with a glowing report that she had been off all medication for six weeks, and had not suffered a headache of any degree. If she removes her glasses and fails to close one eye, she can feel the headache begin within five minutes. Return of the lens correction eliminates this immediately. She also reported that she felt much better physically. She had regained strength and energy, and was able to keep up with the many activities which she enjoyed.

Conclusion

It is evident from the foregoing case, that treatment of severe headache by vision therapy is many times an extended procedure. As in the treatment of any disorder of the nervous system, it takes time and patience on the part of patient and practitioner alike. Lenses must be looked upon as medicine for a visual condition, much like thyroid medication for hypothyroidism. It is a procedure of trial-dosages for a period, then consultation, and it is repeated until success ensues.

It is mandatory that the optometrist look upon a lens prescription as a therapy, and not as a mathematical equation. We are not dealing in a true science; we are practicing one of the healing arts by dealing with that variable component—man.

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New Jersey Holds 50th Business Meeting

Executive and committee reports highlighted the 50th annual business meeting of the New Jersey Optometric Association which was held at the Hotel Stacy-Trent, Trenton, New Jersey, Sunday, December 13. The association celebrated its 50th anniversary at a convention held in Atlantic City last May.

Registration began at 9:30 a.m., and the convention began with a roll call of officers and committee chairmen. Following the reading of the minutes, reports were made by the president, secretary, treasurer and executive secretary. Committee reports were heard and reports were made by the resolutions committee.

Preceding the luncheon session, the group heard an address by the Hon. Thomas S. Dignan, deputy director, division of civil defense, who discussed "The New Jersey Civil Defense Plan—Utilization of Optometrists."

New business, including the nomination of officers for the coming year, was acted upon at the afternoon session of the meeting. Delegates for the 55th annual congress of the American Optometric Association were also selected, and nominations were made for state board appointments.

The meeting was adjourned following an open forum session held by the welfare committee.

Texas Convention To Hear Shepard

A nationally known and always popular lecturer and teacher, Dr. Carl F. Shepard of Chicago will headline the speakers for the 1954 convention of the Texas Optometric Association, to be held in San Antonio, April 25, 26 and 27.

The three-day program will be under the lecture charm of the popular "Shep" who is constantly in demand as a convention speaker. Additionally, the Texas educational program will feature an innovation for its members in the form of the workshop sessions on various optometric subjects.

Dr. E. T. Jennison, Jr., San Antonio, general chairman of the convention, stated that further plans call for a bright social program featuring hospitality sessions, banquet entertainment, dancing and a Mexican-style dinner.

Columbia U. Alums Re-Elect Radde

At a recent meeting of the Columbia University Alumni Club of Buffalo, New York, Dr. Otto C. Radde was re-elected to the post of secretary for the coming year.

A graduate of Columbia University in 1913, Dr. Radde is a past director of the New York State Optometric Association, and past president of the Buffalo Society of Optometrists. He maintains his optometric practice at 2247 Seneca Street, Buffalo.