## THE VIOLET RAY AND OZONE OF USE IN NOSE, THROAT AND EAR CONDITIONS.\*

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So much is claimed for the violet ray and so much is said against it that I hesitate to bring its use before the members of the Academy. My excuse for so doing is that I am convinced that all who are not utilizing it for both treatment and diagnosis are neglecting a valuable aid. For diagnosis alone it is worth investigating by the specialist, the internist and the surgeon. It may help the internist and the surgeon to eliminate many supposed points of pain and to narrow to a small part of the anatomy the true focus of many widely disseminated symptoms. What is true for the surgeon and the internist is equally valuable for the nose, throat and ear specialist. It localizes pain almost to the exact point most involved. That which the patient describes as general frontal headache is localized in one or both frontal sinuses; or the sinus may be demonstrated free, and the pain traced to the exit or the supra-orbital nerves. Again, one nerve may be eliminated and the other found extremely sensitive to the rays. Usually some restricted area that is more acutely sensitive than any other is isolated.

The pain or soreness disappears with treatment from the periphery of the involved area first, and later from the actual pathological tissue involved. Having thus localized the area, the etiology—local, general, or both local and general—is more easily determined, and must be carefully searched for and, if possible, removed. Dislike of the violet ray is not frequent, but is very decided when it exists.

I do not wish to weary you with details of cases; so I will merely mention three that will indicate their general character and the scope of the treatment:

Case 1: The patient was Miss C., a teacher, who had for many years been subject to extremely severe right-temporal and frontal headaches, which were more frequent and more severe when the general system was overtaxed, and resulted in great exhaustion. The various headache remedies relieved the attacks but did not diminish their frequency or severity. Although the first use of

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the violet ray quickly cured one of her most severe seizures, so great was her dislike for it that she decided that she preferred to continue to rely upon the less prompt relief obtained from drugs. During the next six or eight months I saw her occasionally but gave no violet rays. Finally Miss C. reported that not for years had she experienced so few or such mild attacks of headache as since the use of the violet ray. "As every condition," she said, "has been the same since that time as before, the improvement must be due to that!" Her dislike for the violet-ray treatment was not less, but she wished to make further trial in order to see whether possibly her headaches might become wholly a past experience. The result was that, in spite of her aversion, each application of the ray was followed by a recognized feeling of comfort. Commencing over the cervical nerves, I gradually diminished the current, reaching the especially involved area with a very mild application and then gradually increased, until the point of easy tolerance was reached. After only four treatments, Miss C. left for her summer vacation. On September 1 she left this report: "The best ever! Do not at all mind that it is time for school."

Case 2: This patient was a boy of 10 years with chronic suppurative otitis media, probably from the time of erupting his first teeth. There was a large perforation of the lower anterior segment of the drum membrane, with much and frequent foul discharge. The adenoids had been removed without improving the aural condition. No further operation on nose or throat was indicated. After carefully cleansing and disinfecting, I used ozone, as generated by the violet-ray apparatus, directly in the ear. It passed freely through the Eustachian tube into the throat. I also gave it through the mouth and nose. In a surprisingly short time the discharge stopped and the perforation closed. An attack of measles interrupted the treatment; but, much to my surprise, there was no relighting of the aural infection.

Case 3: Dr. N., a dentist, came in one evening with a very uncomfortable sore throat; temperature and much general distress. The tonsils and lateral folds were well covered with a grayish-yellow exudate, suggestive of serious infection. After cleaning the area involved, the throat electrode was thoroughly used over all the exudate, and the surface electrode down the spine, especially the cervical region. Cutting off all appointments for the next day was advised, and an early morning report requested. The morning telephone message was a surprise, in that it reported entire relief from discomfort and absence of exudate in the throat. Insisting

upon personal judgment, I found no trace of exudate and no fever Nothing further developed.

The harsh, nervous cough, with or without an enlarged lingual tonsil, is usually greatly relieved. Enlargement of the thyroid gland diminishes and distressing symptoms are removed. Even brokendown tuberculous cervical glands respond in a satisfactory manner.

I am very anxious that a free discussion follow and that favorable or unfavorable reports be given.

This paper does not include the use of the therapeutic lamp with violet screen.

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Pole Ligation for Hyperthyroidism. Pearson. Dublin Jour. of Med. Sci., July, 1913.

A case of severe acute hyperthyroidism is reported in which pole ligation was performed with a very successful result. In reference to the technic stress is laid on the importance of including in the ligature veins, lymphatics, and nerve filaments as well as arteries. The operation is especially suited for (1) mild and early cases which fail to respond to medical treatment, yet which do not require the more serious operation of partial thyroidectomy; (2) acute severe cases especially in the presence of emaciation of cardiac dilation. In many of these it should be employed as a preliminary to excision which may be carried out subsequently, when the patient is in better condition, with much less risk. Excision on the other hand should be performed in cases with even mild thyrotoxic symptoms if the gland is much enlarged, and it is required after a time in many cases which have been treated by ligation because in the words of Hayo, "Most of the ligated cases will relapse within from one to three years, although their condition will not be so bad as before the ligation." GUTHRIE.