THREE UNUSUAL NASAL (SPHENOPALATINE) GANGLION CASES¹

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In 1908² I described the symptom-complex that seemed referable to the nasal ganglion. Since that time, I have added some features under the headings of motor, sensory, gustatory and sympathetic.³

The pain picture is by far the most frequent and predominant and next to that, I believe, come manifestations that seem referable to the sympathetic nervous elements of the ganglion.

It will be recalled that the nasal ganglion, that is, the sphenopalatine or Meckel's ganglion, is supplied from the maxillary, with the sensory fibers and by the Vidian nerve, with fibers from the geniculate ganglion of the seventh and the carotid plexus of the sympathetic.

This has been a very interesting phase of practice to me and to-day I report three cases each having, it seems to me, unusual features. They do not belong as representatives of types of cases.

The usual neuralgic picture is pain in and about the eyes and the upper jaw, the teeth, extending backward about the temple under the zygoma into the ear, making earache; and then backward into the mastoid; and severest usually at a point two inches back of the mastoid, to extend into the occiput, the neck, the shoulder; into the shoulder blade and sometimes the axilla and breast and frequently down into the arm, forearm, hand and even to the finger tips.

Added to this symptom-complex frequently is found a sneezing and watery secretion, more marked probably in the morning, frequently extending through the day; a red external nose, with tearing eyes, photophobia and a sense of discomfort in the eyes, difficult for the patient to describe.

Occasionally, however, are added unusual features to this clin-

¹ Chicago Neurological Society, March, 1918.

² Greenfield Sluder, The Rôle of the Sphenopalatine or Meckel's Ganglion in Nasal Headaches. New York Medical Journal, May 23, 1908.

³ Idem. The Sympathetic Syndrome of Sphenopalatine (Nasal) Ganglion Neurosis, Together With a Consideration of the Neuralgic Syndrome and Their Treatment. Trans. American Laryngological Association, 1915.

ical complex. These cases record phenomena that at present are unique and cannot be explained. They may be recorded as facts.

Mrs. C. F., thirty-five years old, consulted me January 1, 1918, at the suggestion of Dr. Fayette Ewing. She had suffered violently from headache a large part of her life. Dr. Ewing had found some disease of the ethmoid on the left side and had curetted the capsule of the ethmoid for that reason. She continued to have great headache and as he was about to depart for service in the National Army, he put her in my charge. In the effort to localize some starting point for the pain, I cocaineized the ganglion of the right side at the time when the headache was on the right side. The headache stopped; but as an effect of cocaineization the right eyelid drooped very perceptibly to obscure probably half of the blepharal fissure and the pupil contracted to one half of the size of the fellow of the opposite side.

The case presents this interesting phenomenon: That through the nasal ganglion in this case must pass a large part of the sympathetic supply which goes for the elevation of the eyelid and to the pupil. Further experiment, when the pain was on the left side, showed that cocaineization of the left ganglion failed to control it, but that it (pain) did stop from cocaineization of the right ganglion.

Mrs. H. C., thirty-five years old, Joplin, Mo., consulted me December 15, 1917, complaining of great lower-half headaches, right and left, accompanied by dizziness—"the objects went around her"—of such severity that she was able to walk only with difficulty. She had suffered eight years from these conditions. Examination revealed a well-marked post-ethmoidal-sphenoiditis, with considerable acute element mixed with it. In the effort to localize the point from which the pain proceeded, cocaineization of the ganglion was followed by cessation of the headache, with almost instantaneous relief of the dizziness. After six hours the headache returned to some extent, but the dizziness was almost absent. Owing to this patient living at a distance, further observation has so far been impossible.

This patient had been carefully investigated in every department of a general examination. This case is of interest, showing dizziness of rotatory type stopped by cocaineization of the nasal ganglion.

Mr. F. B., aged thirty-eight, consulted me November 1, 1917, sent by Dr. F. L. Henderson, who had exhausted all means known to him for the relief of a right-sided blepharospasm of great severity. Examination showed a post-ethmoidal-sphenoidal suppuration, with polyps on the right side. Experiment showed that cocaineization of the right nasal ganglion opened his right eye and relieved the blepharospasm for a period of three hours.

It was therefore decided to inject² the nasal ganglion of the right side. This was done three times and was followed by relief of the spasm for three to six hours at each injection.

The right post-ethmoidal sphenoidal operation was performed December 21, 1917, and also relieved the spasm for a few hours. Treatment of the sphenoid cavity was followed by the cessation of the supuration and disappearance of the polyps; but the blepharospasm remained. Right intrasphenoidal cocainization relieved the spasm for three to six hours.

The case was unsatisfactory, at least for the blepharospasm, and I determined to open the sphenoidal cavity of the left side, which, in the nose, appeared to be normal. I decided on this because I remembered that nobody could tell the subdivision of the sphenoidal body prior to opening it, and not always then, without X-ray plates with probes in situ. I felt that the irritation might come from the left sphenoidal sinus.

Prior to this the experiment with the left nasal ganglion was performed and was found to give longer relief from the spasm than had the right nasal ganglion or the right sphenoidal sinus operation. I then elected to inject the left nasal ganglion. This has been done twice with transitory relief. On April 20, 1918, I opened the left post-ethmoidal cells. The blepharospasm is unchanged.

This case is exceedingly interesting, bringing up the question of the path of the impulse which may set off the blepharospasm.

I had assumed that it was sent through the great superficial petrosal from somewhere—the seventh nerve possibly or the geniculate ganglion—but that it would be of the same side. The fact that the injection of the left ganglion opened the right eye is, to my mind, not to be explained at present.

²Idem. A Phenol (Carbolic Acid) Injection Treatment for Sphenopalatine Ganglion Neuralgia. *Jour. A. M. A.*, Dec. 30, 1911, p. 2137.