HEADACHE: ITS OTO-RHINOLOGICAL ASPECTS.*

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This subject is a very broad one. It would be impossible to cover the entire field in several symposiums. I will only attempt to mention and discuss some of the most common causes of the symptom "headache." I say symptom, because headache is no more a disease than rheumatism, and we should be severely criticised if we treat this condition without finding the cause. The causes of "headache" may be divided into the following heads: Toxic (intestinal, appendiceal, gall-bladder, prostatic, tonsillar, nasal cavities, dental, renal, aural); reflex from eyes, pressure in nose, from uterus, from irritated tooth.

I shall limit myself to the causes found in ear, nose and throat.

The most common and most often overlooked cause, from personal observation, is pressure in the nose, without any marked pathological condition being apparent.

Case 1. Mrs. H., referred to me from Baton Rouge, suffering with very severe pain over entire right side of head, more severe in supraorbital region. Patient had been under physician's care for past two weeks and only relief was obtained from morphin.

Examination of nose. Membranes look healthy, no abnormal secretion. Middle turbinate on right tightly wedged between septum, which is slightly deviated in upper part to right and outer wall of nose. It was impossible, even after tissues had been shrunk, to pass the smallest cotton-wound applicator between the septum and turbinate; or turbinate and outer wall. Color of turbinate pale from pressure. Middle turbinectomy performed; patient relieved at once. She explained that she had the sensation of a spring being removed and pressure relieved. Patient has had no trouble since, now eight months.

I could cite any number of such cases where either the middle turbinate or septum have been removed and the patient cured.

Case 2. Mr. G. D., age 44. Past history negative. About 12 years before I first saw the patient, he began having a pain and a throbbing over the left side of the head, at first periodical, increasing in frequency. He has been treated by a number of physicians

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without much result. Eyes, negative. Pains are now constant and very severe; has had to give up work.

Examination. Septum deviated to left, middle turbinate scarcely visible and seems tightly wedged, slight amount of mucus but no pus. Submucous resection performed. Patient's condition improved rapidly; it is now two years since operation and he has had no headaches. This is another case of pressure pain and possibly a secondary occlusion of the sinuses. Just a few words in regard to the sinuses. It is often hard to say just what sinuses are at fault. Often all are involved.

Case 3. Patient has suffered with headaches for 16 years and has been to various clinics; was sent to the nose and throat clinic about two weeks ago. Slight amount of pus found under the middle turbinate and posteriorly. Antrum washed out and great amount of pus was found. Patient relieved for 24 hours. Three days later the antrum was again washed. This washing was repeated every other day for ten days, but the pus and the pain continued. January 30, the inner wall of the antrum was removed. Patient is now free from headache and the amount of pus is very slight. In this patient the symptoms were due to pus absorption and possibly to some reflex irritation of the branches of the fifth nerve.

Suppuration of the frontal sinus will often give no pain, as long as drainage is good. However, the most violent pain is caused when we have a closed suppurating frontal sinusitis. Often simply removing the obstruction and washing out or aerating the sinus will relieve the condition. Ethmoid sinusitis causes a number of obscure headaches; the pain is very variable, from a sense of fullness over the bridge of the nose, to severe pain over the entire head. Another reason why headaches from the ethmoid sinuses is hard to diagnose is that there often is no visible trouble. We may, by probing, find a polypoid condition and after excluding other sinuses, place the blame on the ethmoids. In polypoid sinusitis, there is often no pus and very little abnormal secretion.

Last but not least is the sphenoid sinus. No doubt this sinus is the cause of a great many obscure pains in the head. Let us just a moment consider the anatomy of this sinus. The sphenoids are two irregular shaped cavities in the back part of the nose, just posterior to the ethmoids; their openings are at the top and very seldom visible. Posteriorly they are separated by very thin bone from the pituitary body, cavernous sinus and the third, fourth, fifth, sixth and Vidian nerves. These nerves are often found running under the

mucous membrane of the sinus, or only separated from it by a thin wall of bone. By injecting cocain into this sinus, we can often get anesthesia of one or more of these nerves. Now, if absorption of cocain can take place into the nerves, does it not stand to reason that a sinus full of pus or degeneration, would affect these same nerves?

Dr. Greenfield Sluder stated in a paper read before the American Medical Association, May 5, 1915, as follows: "I believe many (but not all) of the recurrent headaches that bear the name migrain are sphenoidal empyemata, that have lost most if not all local signs; or were started as such empyemata; and that the nerve trunks have become involved either by extension of the inflammation (or its toxin) through the thin wall separating the sphenoid sinus from the adjacent nerve trunks."

The treatment of these cases is removal of the anterior wall of the sphenoid, and if badly diseased, curetting gently and washing out with aqueous solution of sodium salicylate (2 to 5 per cent) or 1 per cent carbolic acid in oil.

Often the headaches spoken of as occipital are sphenoidal in origin.

Case 4. Mrs. H., age 45, has suffered nearly continually with pain in the occipital region, often very severe; duration two years; has been treated by gynecologist, oculist, general practitioners, osteopaths and even Christian Scientists, with very little relief.

Examination of nose. Nothing abnormal noticed. Post nasally one could see a small amount of thick pus over the posterior end of the middle turbinate; removed middle turbinate and curetted the posterior ethmoids. Patient slightly relieved. -Two weeks later opening of sphenoid found and the sinus washed; much improved. Anterior wall removed later. Patient is now entirely relieved; only occasionally comes to have sinus irrigated.

We should always be on the lookout for trouble with the teeth, causing reflex pains in head. In touching on this part of the subject very lightly, I would caution all about relying too much upon the appearances of a tooth. The x-ray is the only reliable way to rule out the teeth as causative factors. In the throat the most common cause of headache is absorption from diseased tonsils. Often we get reflex pains from the ears in chronic catarrhal otitis. The pains from acute otitis, mastoiditis, sinus thrombosis, brain abscess and a number of other conditions about the head and neck can only be mentioned.

Case 5. Mrs. C. F., age 44, has had discharge from the left ear as long as she can remember. For the past ten years she has suffered a great deal of pain over the left side of the head, often very severe. Two months ago she was suddenly attacked with violent vertigo and could not stand up. Nausea and severe vomiting. Was sent to the Charity Hospital and admitted to the medical service. I was called to examine the ears. At this time patient had free discharge of pus from the left ear; drum membrane bulging. Mastoid only slightly tender; strong nystagmus to the right; could not sit up in bed as she would always have tendency to fall to the left. No labyrinthine tests were made; advised patient's transfer to otological service. I did not see the patient for a week, then was called by one of the otologists in consultation. The patient was now very ill, temperature 103°. Mastoidectomy was performed the next day; found very sclerotic bone, small antrum, middle ear full of cholesteatomatous material. Fistula in horizontal semi-circular canals. The patient has made an uneventful recovery; all dizziness and nystagmus have disappeared. The patient now has no headaches and feels in every way much improved. This case is not reported in detail as to the interesting labyrinth condition, but to illustrate headaches from chronic otitis.

Case 6. Miss S. M., age 29. April 23, 1914. Headache all the time over eyes and back of head. Tightly wedged middle turbinate removed from the right side of the nose. Septum deviated considerably in upper part to the right; no visible pus.

May 11. Has had very little pain in the head for the past two weeks and feels much better.

May 14. Pain over right side of the head, pus coming from right frontal and ethmoid regions. Wassermann, negative.

May 20. Pain still severe, impossible to enter frontal on account of deviated septum.

May 24. Suffering a great deal. Sent to Presbyterian Hospital. X-ray shows ethmoids on right very cloudy.

May 27. Submucous resection of septum and ethmoids scraped, sphenoid opened. Patient, as would be expected had considerable pain.

June 29. Patient is now free from pain and feels fine; discharged.

September 1. Patient returned complaining of severe pain in the supraorbital region. Nerve injected with alcohol; relieved two days.

September 17. Supraorbital nerve injected again.

October 26. Patient has remained free from pain until last few days; now severe pain over first and second divisions of the fifth nerve.

November 2. Supraorbital and second division of fifth injected; only temporary relief.

October 16. Supraorbital nerve removed under local anesthesia and forament plugged with wax.

December 8. Patient returned suffering with pain in second and third divisions of the fifth nerve. Injection attempted a number of times by myself and later by Dr. Allen with only slight result.

January 16. Gasserian ganglion removed by Dr. Allen and myself.

January 23. Discharge from right ear, slight facial paralysis.

January 23. Discharge from right ear; drum incised. Facial paralysis marked. Pain over mastoid.

March 2, 1915. Patient has very little pain, still some tenderness over mastoid.

July 9. Mastoid very tender. Leucocyte count, 20,000; temperature, 102°. Mastoidectomy performed under local anesthesia; small amount pus, considerable necrosis of mastoid.

Since this operation the patient has had periodical attacks of pain and tenderness over the mastoid, sometimes over the course of the facial nerve. Her eye has caused a great deal of pain and she has had to use dionin and olive oil freely. Just how to account for this pain over the fifth nerve I am at a loss and hope to have some one explain it. Is it a hysterical condition? Certainly after complete removal of the ganglion there could not be regeneration of the nerve.

In closing, I should like to apologize for presenting a subject in such an haphazard way, my only excuse being that the subject is too large and time too short to do otherwise. My intention was simply to call attention to some of the most common causes of headache and to point out that it is not always an easy matter to say whether the nose and throat are or are not the cause of the trouble.

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