INTRAMURAL MALIGNANT TUMOR OF THE LATERAL WALL OF THE NASOPHARYNX.*

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Cases of primary malignant growth of the nasopharynx are of rare occurrence. In the textbooks there is little or nothing mentioned about such tumors. There are numerous reports of single cases, but the description is so indefinite in many of them that it is not possible to ascertain whether the tumor really originated in the nasopharynx or elsewhere. In other reports the diagnosis cannot be considered as definite, because the description of the character of the growth is not exact and permits of various explanations.

By primary carcinoma of the nasopharynx I refer only to those growths that clinically as well as histologically are malignant from the beginning and originated in the nasopharynx. I have, therefore, ruled out of this discussion all malignant tumors of the nose and of its accessory cavities, tumors of the pharynx, primary tumors of the cervical glands, and all tumors of the nasopharynx that are the result of metastases, or the encroachment of malignant growths from neighboring structures.

In reviewing the literature up to the spring of 1913, I found very few reports of primary malignant tumors of the nasopharynx, and especially of primary carcinoma. As late as 1901, Chevalier Jackson¹ reported a case of primary carcinoma of the nasopharynx, with the statement that in the German, English, French and Italian literature of the last twenty years, he could find only seven reports of primary carcinoma of this region, in addition to six cases reported by Bosworth.² To

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these Jackson added one, and of these fourteen cases no two were reported by any one observer, the earliest being that of Durand Fardel, in 1837. Laval,³ in 1905, reported seven cases of carcinoma observed by himself, and seventeen cases collected from the literature up to that date, the earliest being that of Michaud, in 1845, and nine of which were not cited by Jackson, whilst we find seven cases in Jackson's statistics that are not mentioned by Laval.

Since the publication of these two papers, primary malignant tumors of the nasopharynx have either increased in frequency or are being more accurately observed. In 1911, Citelli,⁴ of Catania, reported ten cases observed by himself, four of which were sarcoma and five carcinoma. In 1913, E. Oppikofer,⁵ of Basel, reported a series of twenty-one cases of malignant tumors of the nasopharynx, which he had personally observed since 1893. Strange to say, he observed only three of these during the time from 1895 to 1901, and the remaining eighteen cases since that date. Six of these cases were carcinoma. Oppikofer ascribes this to the progress in the technic of examination.

Trotter⁶ reports a series of twelve cases. Compaired,⁷ Aboulker, and others, report several cases of their own.

Furthermore, I might call attention to the statistics of Moritz Schmidt, of Prague, that of about thirty-eight thousand nose cases treated in the clinic, not a single case of primary malignant tumor of the nasopharynx was observed.

Since I made the above review of the literature there have been two papers on the subject in the American literature, one by Kelsey and Brown,⁸ appearing in 1913, and the very recent report by Dr. W. E. Gatewood,⁹ of Chicago, of two cases that were observed in the Presbyterian Hospital in the years 1909 and 1910.

Having called your attention to the infrequency of these primary tumors, and, because they present such definite symptoms, based upon an anatomic foundation, the report of even a single case seems justifiable.

The case I wish to report was first seen by me November 16, 1912. The patient was a young woman, twenty years of age. Her family history was negative, as was also her past history, as to illnesses. She consulted me because of a small

gland that had recently appeared at the angle of the left jaw. Her tonsils had been removed two months before seeing me. She did not complain of anything except the gland in the neck. General nutrition was excellent. My opinion was that the enlarged gland was due to absorption from a fragment of the left tonsil, enclosed in adhesions to the pillars. She returned to the physician who had removed her tonsils, and had this fragment excised. I did not at this time examine the nasopharynx.

I did not see her again for a year, during which time many of the deep cervical glands on the left side had become enlarged, and a few on the right side were palpable. She had lost about ten pounds in weight, and stated that she was not hearing well. A diagnosis of probable tuberculosis of the cervical glands had been made, and these were removed on both sides of the neck. The pathologic examination of the glands showed them to be carcinomatous. I had an opportunity to examine her soon after the operation. Anterior rhinoscopy did not show anything unusual. Posterior rhinoscopy showed that the postnasal space was much smaller than one would expect to find it. There was no tumor mass visible, but the left lateral wall looked infiltrated and was hard to the touch. This infiltration extended down the lateral pharyngeal wall. The soft palate was asymmetrical, but did not bulge. There was a moderate degree of middle ear deafness in both ears. She complained of some neuralgia in the side of the face.

Up to this time the patient had not felt very ill. She had not considered her condition serious, and had married shortly after I first saw her. During the year following the neck operation she grew rapidly worse. Nasal respiration became difficult. She lost weight rapidly, and there was marked bulging of the soft palate, with ulceration, and a profuse secretion from the throat, with very foul odor.

She was noticeably deaf—whisper voice was heard only about two inches from the ear. Rinne was strongly negative. The upper limit remained high. The membranæ tympani were congested, and there was absence of light reflex. There was marked ankylosis of the temporomaxillary joint, so that the teeth could only be separated about half an inch. The pain in

the forehead, face and neck was so severe as to require very large doses of morphin.

The patient died two years and three months after I first saw her. An autopsy had been promised, but at the last was refused.

Very little can be said as to the etiology of postnasal carcinoma. Most of the cases show that the patient has been of sound and healthy origin, and had not had any serious diseases. It is an interesting fact that carcinoma of the nasopharynx occurs in early childhood. The youngest case that I have been able to find in the literature is the one reported by Oppikofer, in a girl, thirteen years of age.

As to the original site of the tumor, it is usually in the lateral wall of the nasopharynx, although it may arise from the vault and spread to the side. Frequently the case is seen so late that it is impossible to determine the exact origin of the mass. Early in the course of the disease it may only be indicated by inflammation of the lateral wall. At such a time anterior rhinoscopy reveals nothing abnormal, and even posterior rhinoscopy may be apparently negative.

The trouble with hearing is one of the earliest symptoms, and this would point to the lateral wall of the nasopharynx as the most frequent starting point of the disease.

The symptoms of carcinoma of the nasopharynx are interesting, first, because in the early part of the disease there is very often entire absence of symptoms that ordinarily could be interpreted as due to disease of this locality, and, second, because such tumors frequently present a clinical picture of remarkable similarity, due to the fact that their origin in the lateral wall of the nasopharynx involves the inferior division of the fifth nerve, the orifice of the eustachian tube and the levator palati muscle.

Frequently the first symptom complained of is the pain in the area of distribution of the third division of the fifth nerve. Later the pain may spread to the second division. This pain may have existed many months, and the treatment may have been directed to that of trigeminal neuralgia. The pain varies in intensity, but is frequently excruciating and worse at night.

Cases have been reported where the growth has spread through the foramen ovale and involved the Gasserian gan-

gion, so that we must think of the possibility of a postnasal growth in considering a Gasserian ganglion operation in the treatment of intractable trifacial neuralgia.

The paper by Plummer and New,¹⁰ 1914, concerning a tumor of the middle cranial fossa involving the Gasserian ganglion, is a good illustration of this. It is also possible that the ganglion, which lies near the junction of the roof of the pharynx and the posterior wall, is irritated at the time when the growth is extracranial.

As the tumor originates in the lateral wall of the postnasal space, the eustachian tube is early involved, and middle ear deafness may be the first symptom complained of. Cases have been reported where a transudate formed in the tympanum, or where a suppurative otitis media, with rupture of the membrana tympani, occurred. Oppikofer reports one case in which a mastoid operation was performed on account of the discharge and the otalgia.

Enlargement of the glands of the neck often occurs early, and may be the symptom which brings the patient to the physician. The enlargement of the glands may be out of all proportion to the size and intensity of the primary growth. This adenitis usually appears below the upper insertion of the sternomastoid, and behind the angle of the jaw.

Citelli reports a case similar to the one which I have cited above, in which the enlarged cervical glands were removed before the primary tumor in the retronasal space was diagnosed.

Trotter lays stress upon the finding of some abnormality of the soft palate of the same side. He states that the defect is an inability to lower the soft palate on account of infiltration preventing relaxation of the muscles, and is not due to involvement of the nerve supply. The palate looks asymmetrical, but the patient cannot raise the palate well.

If the tumor proliferates not only into the nasal cavity, but also into the maxillary sinus, there may be severe pain in the area of the second branch of the fifth cranial nerve, and bulging of the anterior wall of the maxillary sinus and the hard palate.

Only a few autopsies of malignant retrotarsal tumors are reported in the literature. Whilst the cervical glands are

affected almost without exception in the earlier or later stage of the disease, metastases in other organs are very rare.

The prognosis is absolutely a bad one. Trotter states that he has not observed a single case that lived over fifteen months after the first examination, and this statement is borne out by reports from other clinicians.

In conclusion, I wish to again call attention, first, to the fact that so many of these cases do not complain of symptoms that would be attributed to the postnasal space. In my case nasal obstruction was one of the last things complained of. Second, of the importance in cases of trigeminal neuralgia of making a careful postnasal examination and testing the hearing. Third, enlarged cervical glands may be due to an unobserved carcinoma in the lateral wall of the postnasal space.

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