

NASAL FIBROMATA, WITH REPORT OF CASES.*

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Fibroid tumors in several locations of the body are, of course, extremely common, as, in the uterus; again, a large number of fibromata of the pharynx are reported.

In looking over the literature I find pure fibrous tumors of the nose quite rare: I also find that they have not received the attention which I think their importance demands, the difficulties and dangers of diagnosis and operation not dwelt on sufficiently, the young specialist not warned to be careful in attacking these cases. In several works, which should be exhaustive, from one-quarter to one-half page only is devoted to the entire subject, while mucous polypi, having no element of danger, are treated of at length.

I find some fifty odd cases reported, dating back to 1832; since then case after case has been added to the list. I am somewhat inclined to doubt the accuracy of some of these earlier diagnoses, as nasal surgery was then, as it were, in its infancy, and the methods of examination and diagnosis were rather crude. Be this as it may, we have cases reported all along the line by Senn, König, Lincoln, Langenbeck, Mott, Gerdy, Syme, Verhaeghe, Gomez, Pepinster, Fisher, Van Domelin, Gay, Mougins, Dickson, Maisonneuve, Hodgen, Steiner, Hitchcock, Chattellier, Seiler, Villar, Ingals, Jarvis, McKenzie and others.

The exciting causes are admitted to be trauma and irritation; the indirect cause, the excessive functional activity of the nose and the connective tissue changes which the nasal mucous membrane undergoes. We find these tumors during the younger period of life, oftener in the male than in the female; both of my cases occurring in young men aged respectively eighteen and nineteen years.

Unilateral stenosis is usually the first symptom which the patient complains of; this, of course, comes on quite gradually, as the growth of the fibroid is slow. The discharge in both my cases was peculiar, and I am forced to think characteristic, although I find no description of such a discharge in the literature of the subject. In both of my cases it was a whitish, opaque, glistening and markedly granular substance, collecting around the tumor. I have never seen such a dis-

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charge except in these two cases of nasal fibromata. Later the discharge has mixed with it blood and possibly some broken-down tissue, due either to erosions on the tumor itself, or of the surrounding mucous membrane. Epistaxis is considered by some observers absolutely inseparable from these fibroid growths. This is not, however, my experience; one of my cases gave chronic nose-bleed as one of his main symptoms, while the other gave no history of epistaxis whatever.

Headache or neuralgia is almost invariable after the fibroid has reached any size. These will vary according to the location of the growth. One of my patients complained of occipital and frontal headache—the tumor was located toward the posterior nares; the other of violent supra and infra-orbital neuralgia—the fibroid was located in the middle two-thirds of the nasal chamber.

Observers give other symptoms, due to pressure effects, as exophthalmus, spreading of the bones of the nose (frog face), etc. None of these were present in my cases, on account of the comparatively small size of the tumors.

Dolbeau claims that unilateral stenosis characterizes naso-pharyngeal tumors, and seems to lay considerable stress on this point. I agree with Bosworth, in taking an entirely opposite view. With the perfect illumination we can give the nasal chambers and the upper pharynx, and the invaluable aid which cocaine renders us, the diagnosis of these tumors is made, provisionally, without great difficulty and with considerable accuracy. I say provisionally, advisedly, because I always have some doubts of a diagnosis which is not backed up by the microscopic examination of the tumor. The growth is described as "irregularly rounded or lobulated, smooth and glistening in appearance, and presents a decidedly reddish-pink color. In some cases the blood vessels can be recognized coursing near the surface by the whitish background of which the tumor is composed." This description answers excellently for one of my cases, but would not for the second. Both of my tumors had very broad pedicles, and were not easily movable; hard and resisting to the impact of the probe, one bleeding readily when manipulated. All observers state that the growth adapts itself, to a certain extent, to the shape of the cavity in which it is confined, extending most where there is the least resistance, but growing in all directions without regard to the surrounding structures. I noticed this in my cases, although only to a limited extent.

It is conceded, I believe, that fibroids spring more often from the ethmoid; cases are reported coming from the floor of the nose, also

from the septum; one of mine came from the septum, the other seemingly from the ethmoid.

Tumors to be excluded in differential diagnosis are, osteoma, chondroma, sarcoma, carcinoma, nasal polypi (soft, which by irritation or rough unsurgical handling have assumed a somewhat fibrous consistency), adeno-fibroma, osteo-fibroma, chondro-fibroma, and, possibly, gumma.

The prognosis in these cases depends, of course, to a certain extent at least, on the size of the tumor with which we have to deal. If left uninterfered with death would eventually result, the tumor extending and destroying surrounding vital parts by pressure. The growth of the tumor is, as is the case, I believe, in fibroids *generally*, slow. The earlier the operation the more satisfactory the prognosis. If the removal be accomplished before the growth makes it necessary to resort to one of the more heroic measures (removal through the palate or resection of the superior maxilla), I consider the prognosis would be good. The main and only danger is the profuse and sometimes uncontrollable hemorrhage.

Chemical caustics, evulsion or avulsion, electrolysis, galvano-cautery, splitting the tumor with the galvano-cautery knife and snaring each half separately, have been tried with varying results. All things considered, I prefer the cold or hot wire snare when the growth is not too large. When the tumor *is* too large for intra-nasal operation, then we would be forced to resort to one of the more heroic measures, as Rouge's, Cassaignac's, Ollier's, Langenbeck's, the case being referred to a general surgeon.

Case I. Referred by Dr. K. C. Divine. C. E. M., male, æt. eighteen years, dry goods clerk. Consulted me in June, 1894. Family history excellent. Father and mother both living and in good health. Never heard either complain of any nasal trouble, more than ordinary colds; no record of any tumors occurring in his family. Consulted me on account of one side of the nose being completely blocked up; also complained of chronic, and at times profuse, nose-bleeding; gave history of intense occipital and frontal headaches. About ten or twelve months before consultation first noticed slight blocking of left side of nose; the obstruction continued to increase and a discharge began; his description of the discharge was unusually accurate for a layman. Nose-bleeding did not begin for several months after noticing the first obstruction; these hemorrhages increased in severity until some ten days before consulting me; he bled sufficiently to cause fainting. The bleeding was sometimes through the ant. nares, sometimes the posterior. Headaches had been

present about two months. Examination anteriorly showed the left nasal chamber open as far back as the junction of the middle and post. third; at this point I found obstruction. Throwing in a ten per cent solution of cocaine, and waiting ten minutes, I examined again. I could now see distinctly blocking the chamber a tumor of reddish-pink color, somewhat irregularly rounded, several blood vessels showing on its surface. The tumor was dense, resisting and slightly movable; manipulation caused some bleeding. Post. examination showed growth about three-quarters of an inch from post. border of vomer, filling the nasal chamber completely. I diagnosed the tumor nasal fibroma and advised removal.

I selected the galvano-cautery snare, thinking it safer than the cold wire, although more difficult to manipulate. I did the removal slowly, drawing the wire tight and making the connection about every five minutes. After half an hour I could feel by the snare handle that the tumor was almost severed from its attachment, and was congratulating myself on a bloodless operation, when, at the next turn of the thumb-screw, hemorrhage began; it being impossible to remove the snare, only one course was open to me—to complete the section as rapidly as possible; this I did. By the time the section was finished the hemorrhage was startling, both nostrils pouring forth almost a continuous, solid stream, the patient gulping blood from the mouth as fast as he could spit. Only one measure I felt sure would arrest the harm, so I plugged the post. nares with iron cotton, forcing the plug in as tightly as I could draw it, then packed the ant. nares from the location of the tumor out; then hemorrhage stopped. Roughly estimated, the patient lost something more than a quart of blood. The tumor was about the size and shape of a pigeon egg, the pedicle being between one-third and one-half the size of the tumor, constituting almost a sessile growth.

Dr. J. A. Childs, at that time demonstrator of pathology in the Southern Medical College, kindly made a microscopical examination of the tumor and pronounced it a pure fibroma.

Case II. J. G. S., male, æt. nineteen years, young illiterate German. Consulted me in 1896 for "guitar in the head." Family history excellent. Patient seemed vigorous and healthy. First noticed slight obstruction in left nostril about one year before consulting me; this increased until the nostril was entirely blocked. He gave a history of intense supra and infra-orbital neuralgias; these had become more frequent, as well as more severe, for several months before consultation. Examination showed a large, oblong tumor, extending from about three-quarters of an inch

to an inch of the ant. nares backward to about the same distance of the post. nares, filling the nostril entirely; the growth was distinctly lobulated, of a dead white color; a tracery of blood vessels appeared on its surface; surrounding it was the peculiar whitish, opaque, glistening and markedly granular discharge which I have already spoken of.

Examination with the probe showed the tumor to be dense, resisting and only slightly movable; tumor did not bleed on manipulation, and the patient gave no history of epistaxis.

As well as I could judge the pedicle was about one-third as wide as the length of the tumor, springing, apparently, from the ethmoid. I removed two sections of the growth with the cold wire snare and submitted them to Dr. Leroy Harris, at that time professor of chemistry in the Southern Medical College, now pathologist at Jefferson, for microscopic examination. He pronounced the tumor a true fibroma. My diagnosis was made in accordance with this report. The patient refused operation.

I examined case No. 1 eighteen months after the operation and found no indications of a return of the growth; the patient was in perfect health; reported that the nose did not give him the slightest trouble.

BIBLIOGRAPHY.

1. Senn on Tumors.
 2. Burnett.—Throat and Nose.
 3. Bosworth.—Diseases Nose and Throat; edition of 1890 and 1896.
 4. Sajous.—Nose and Throat.
 5. Lennox Brown.—Throat and Nose.
 6. Ashhurst.—Encyclopædia of Surgery. Vol. V.
 7. Sajous.—Annual of the Universal Medical Sciences, 1896.
 8. Bishop.—Diseases of the Nose, Throat and Ear.
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