SARCOMA OF THE NASO-PHARYNX, WITH REPORT OF A CASE.*

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The naso-pharynx is not often affected by malignant disease; sarcoma seems to be met with more frequently than carcinoma, and of these medical literature contains the report of but a limited number of cases.

In the first volume of Dr. Bosworth's work on diseases of the nose and throat he gives a report of nineteen cases of sarcoma, located in the naso-pharynx, all that he had been able to collect up to that time—1889.

Sarcoma is a disease of earlier life than carcinoma. Of Bosworth's nineteen cases, ten occurred between the ages of one and thirty years, and of the ten, five were between ten and twenty years of age. His cases were also more common among males than females in the proportion of almost one to three.

Symptoms.—The only symptom in the earlier stages which might make the symptoms differ from other tumors of the same region is the character of the secretion, which is of a sero-mucous character, and quite ichorous and offensive. This is quite an early symptom, and with the presence of a growth would of itself be almost diagnostic. Epistaxis, though slight, is liable to occur in many of the cases.

There is no special sarcomatous cachexia, but the general health suffers early in the history of the case; this is usually observed before there is any mechanical interference with respiration or deglutition. This impairment of the general health so early in the disease may be due to the offensive character of the discharge, which no doubt impairs digestion and poisons the inspired air. We all know that benign tumors of the naso-pharynx, on account of interference with oxygenation of the blood, will greatly interfere with the general health, especially in young persons, among whom we find the majority of these growths. After the sarcomatous tumor has increased in size there will also be difficult deglutition and attacks of dyspnœa.

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Impaired hearing, by incroachment upon the Eustachian tube, is also a prominent symptom, and there may be suppurative otitis media.

All the special senses except that of sight are usually impaired or abolished.

The origin of a sarcomatous growth is usually from the basilar process of the occipital bone, beginning in the deeper layers of the mucous membrane lining the naso-pharynx, and growing in the form of lobulated rounded growth, and as it spreads downward closing the posterior nares, and forming attachments by infiltration in all directions. The tumor will assume an irregular rounded or lobulated shape, having a pinkish or somewhat muddy color, according to vascularity, between the somewhat translucent appearance of a myxoma and the pinkish-white opaque look of a fibroma.

The only positive way of making a diagnosis is the removal of a small section and making a microscopic examination of the same.

Carcinoma may be diagnosticated from sarcoma by the hard feeling of the former, which is quite different from the softer consistency of the latter. The question whether the tumor arises in the nasal cavity or the naso-pharynx is not always an easy matter to decide; a naso-pharyngeal growth, whether fibroma or sarcoma, is said to produce a unilateral, while a nasal growth gives rise to a bilateral stenosis, a point of some importance. Bosworth believes that the converse is true. In the case to be reported the former theory proved to be correct.

A nasal tumor is rarely attended with secondary infiltration of the cervical glands, or, if it is, not until late in the course of the disease. In naso-pharyngeal cases, if it does occur at all, it will likely be earlier in its course. Enlargement of the cervical glands is said to occur in about one-third of the cases; in my case there was no involvement.

Sarcoma of the nasal cavities does not show a disposition to advance into the pharynx. It is said that a sarcomatous tumor, more or less filling the pharynx, is pretty clear evidence that it originated in the naso-pharynx.

Prognosis.—The earlier in life the more rapid the course of a sarcoma; the character of the tumor also has something to do with the prognosis; a tumor composed of small round cells runs a much more rapid course than a spindle-celled growth; a fibro sarcoma, on account of the fibrous tissue, would not grow as rapidly as the others. In Bosworth's nineteen cases the patients, with one exception, all died either as a result of the operation or within a few months from

a rapid recurrence of the disease. In the other case the patient was alive seven years after the removal of the tumor with no symptoms of any recurrence. On general principles we may, therefore, regard the prognosis as exceedingly unfavorable.

Treatment.—The points in the treatment are the use of the cold wire snare, galvano-cautery snare; slitting of the palate, or the external operation. Outside of the question of hemorrhage, which is not usually severe, my preference would be the cold wire snare, when there is no infiltration of the tumor with the sides of the pharynx, and when it can be encircled within the snare and used through the snares. In slitting the plate the growth may sometimes be encircled with a heavy snare or *ecraseur*, and after its removal the cut surface thoroughly cauterized, although there is some danger of exciting inflammatory reaction of a severe character in the surrounding healthy structure.

The external operation should only be performed when all other means are out of the question, and it gives any promise of prolonging the life of the patient, the patient being in a fair condition at the time of operation.

The following case, Jas. R., aged fourteen years, was admitted into my service at the Mercy Hospital on October 5, 1897, with the following history:

For the last two months he had difficulty in breathing through the right nostril, and somewhat less marked on left side; difficult and painful swallowing, headache, dullness of hearing, more marked on right than left side, an ichorous irritating discharge from the nostrils, slight epistaxis at times. There was no marked cachexia, but considerable emaciation, and no enlargement of the cervical glands. His father stated that he seemed to be in a sleepy state most of the time, and he complained of slight pain in the throat. On examination of the throat there was found to be a bulging forward of the right side of soft palate, presenting almost the appearance of an acute phlegmonous tonsillitis. The left side was not so markedly protruding, although not normal; on introduction of the finger into the naso-pharynx, a semi-solid mass could be felt, almost completely filling the post-nasal space; the posterior nares could not be felt, and the mass was completely attached to the walls of the pharynx and soft palate; only slight bleeding was caused by the examination.

There was not much doubt in my mind as to the nature of this growth. The question of its removal was next to be taken into consideration; to remove with the wire snare through the nose was impossible on account of the infiltration with the surrounding tissues.

To encircle the tumor with an ecraseur introduced through the mouth into the naso-pharynx was also out of the question on account of adhesions all around.

On consultation with Dr. J. J. Buchanan, surgeon to the hospital, it was decided that the external operation was the only method offering any chances whatever, accordingly on October 10, five days after admission, the operation was performed by Dr. Buchanan, in the following manner:

An incision was made transversely from the zygomatic process of the malar bone, skirting the lower border of the orbit to its inner and lower angle. It was then continued downward in the re-entering angle between the nose and cheek and along the upper lip to the middle line, where it was turned downward, dividing the lip at its middle. The soft parts including the periosteum were separated from the superior maxillary and malar bones at their junction.

A blunt hook was then passed around both bones at this point, and used to draw a wire saw beneath them. This saw was left in place. Another saw was passed under the nasal process of the superior maxilla and also left in place. A median incision to the bone was made in the roof of the mouth from the incisor teeth backward and the soft palate and uvula split in the middle line.

A drill hole was made well back in the middle line of the hard palate and a wire saw drawn through into the nostril alongside the septum.

The bones were sawn through in a few seconds with the three saws and the superior maxilla was lifted from its bed with a Ferguson's forceps and turned to the outer side where it hung out of the way attached to the face only by a pedicle of soft tissues. The infiltrating growth was cut away with scissors and required extensive dissection, it being impossible to remove it in its entirety.

The jaw was returned to place and held there by buried wire sutures. The soft parts, including the soft palate and uvula were sutured and but few signs of the operation remained.

The patient made a good recovery so far as the operation was concerned; the extensive wound healing promptly and showing very little scar, but in short time the naso-pharynx again filled up, and the patient died November 4, twenty-five days after the operation.

Examination was made by Dr. Singley, pathologist to the hospital and found to be a small round-celled sarcoma.

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