

[Reprinted from THE MEDICAL NEWS, June 30, 1894.]

**SARCOMA OF THE NOSE—EPITHELIOMA OF THE
LARYNX IN A WOMAN.¹**

BY HORACE CLARK, M.D.,
OF BUFFALO, N. Y.

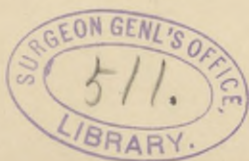
THE cases that I have to report are :

1. A case of sarcoma of the nose, defined as a mixed sarcoma, containing melanotic pigment, and
2. A case of epithelioma of the larynx in a woman.

The sarcoma occurred in a woman, seventy-nine years old, whose family history is entirely negative. She has never had any serious illness, and is the mother of a large family. I saw the patient for the first time on October 23, 1893, and made the following memoranda :

About a year and a half ago a peculiar sensation was noticed in the nose. Six months later, during the course of an acute coryza, inability to breathe easily was referred especially to the left nostril. The finger came at once upon a lump, of the size of a small cherry, which was hard, scarcely sensitive, and bled when touched. From this time on, the lump rapidly increased in size and filled out like a little bladder, causing deformity of the ala. Three weeks previous to the date of this note there had been profuse nose-bleed in consequence of a fall. During a period corresponding with the patient's observation of the tumor the eye on this side had readily inflamed, and the lid had been puffy at times. There

¹ Cases reported to the Section on Laryngology and Rhinology, New York Academy of Medicine, December 27, 1893.



was an entire absence of pain, but a fulness in the head had been noticed all along.

Upon examination, the left nostril was found to be occluded just within the entrance by a round, bluish-gray mass, showing a superficial loss of tissue equal to about one quarter of the size of the presenting surface. With a probe, this mass was found to be hard, slightly movable, and apparently attached to the inferior turbinated body. It was immersed in a sero-sanguinolent fluid and bled readily.

Posterior rhinoscopy, not being readily practised, was not persisted in, because the patient had already been subjected to somewhat harsh examination at other hands.

A probable diagnosis of sarcoma was made.

That portion of the growth which presented was removed with the platinum wire. A dull-red heat was turned on until the wire had thoroughly caught. The cautery-loop was then used alternately as a hot and cold snare. The premaxillary fossa was curetted and such parts of the inferior turbinated body as were involved were removed with the cold snare and curet. Except for the larger portions, the curet worked best, for the tumor was very friable. There was very little bleeding at the time of the operation; nor had any occurred five hours later when a dressing was applied.

I had the opportunity of watching the case for six weeks. There is little question but recurrence will take place pretty rapidly.¹ It is worth noting that there was a suspicious-looking area upon the cartilaginous septum in the other nostril, which passed for a simple erosion.

Dr. Elmer Starr, of Buffalo, kindly had this case referred to me.

Epithelioma of the larynx was the diagnosis made in

¹ On March 7th, a report from the case states that plugging is necessary to prevent hemorrhage. The tumor has extended into the face, which, with the nose, is enlarged a good deal.

the case of a woman, thirty-eight years old, whom I saw in October, 1893. The notes upon the case in general were supplied by the family physician, Dr. Wilcox, for whom the operation was performed. They are essentially as follows:

The patient's father died of carcinoma. She herself did not present the marked cachexia of this disease. There had never been nausea or vomiting. Curetting had been done for hyperplastic endometritis, but no microscopic examination was made of the scrapings.

My own information relates to difficult swallowing, first noticed in February, 1893, but not until July did this become distressing. Food had often been refused after the latter date, never because of pain, but from inability to complete the act of swallowing. Also, since July, small quantities of yellowish matter had been evacuated by the mouth.

I shall not enter upon the details of the examination further than to say that the growth was found to be attached to the ary-epiglottic ligament on the left side, upon its extra-laryngeal surface, and did not rise above the level of that ligament. With inspiration the larynx presented the appearance of a recurrent paralysis. The bands came together in the median line in phonation, and the growth was carried in that direction. Aside from a general pallor the interior of the larynx presented nothing remarkable. Upon the neck there was a swelling which looked and felt very much like a bronchocele.

It was hoped that the evulsion of as much of the new growth as could be seen would make deglutition easier by giving freer movement to the larynx. The only result from operation was the substitution of a normal for a distorted position. The swelling in the neck had entirely disappeared on the following day. A constriction had probably been removed from the principal outlet for an extensive purulent infiltration of the bronchial glands and surrounding parts. The temperature was normal.

There is nothing of interest in the subsequent care of the case, which was assumed by the family physician.

The autopsy, made ten days after the operation, revealed stenosis of the esophagus, due to an epithelioma extending some four inches downward from the level already mentioned at which the tumor appeared above. There were also two or three carcinomatous nodules upon the wall of the pharynx, showing that metastatic formation must have been very rapid.

The diagnosis in both cases was verified by Dr. Krauss, of Buffalo, whom I also have to thank for some beautifully stained sections from the growths.

Report of the microscopic examination by Dr. William C. Krauss, Professor of Pathology in the Medical Department of Niagara University, Buffalo, N. Y. :

Sarcoma. The tumor, composed of three separate pieces, was delivered to me by Dr. Clark, immersed in a 50 per cent. alcoholic solution, on October 24, 1893. The largest of these masses was as large as a chestnut, the other pieces the size of a bean. The largest piece was covered with a dense fibrous coat, except at its cut surface, and here it appeared mottled, pigmented, somewhat resembling the color of a bronchial gland. Its consistency was soft, friable, and highly vascularized.

Preliminary examination. Several small particles were taken from the large mass, carefully teased, and mounted temporarily in glycerin. Under a one-fifth-inch objective the mass appeared cellular, the bulk of the cells being of the small-spindle variety. Alongside of these spindle-cells were other cells, some resembling small, round cells, others round pigment-cells of a blackish-brown color. As these three varieties of cells composed the bulk of the tumor, I made the diagnosis of mixed sarcoma, probably melanotic.

The particles of tumor-tissue were further hardened in alcohol, imbedded in celloidin, and sections cut with a Schanze microtome. These were stained with micro-

carmin and ammonio-carmin, cleared in clove-oil, and mounted in balsam. Examined with a one-fifth-inch objective the cellular structure appeared no less prominent than at the first examination. The spindle-cells, however, did not present the same general outline, because of their grouping and the necessary transverse sectioning through them. The pigment-cells appeared as in the fresh examination, in some sections exceedingly numerous, in others less so. Considerable connective tissue was present, forming a stroma for the support of the cells. The diagnosis made at the preliminary examination was thus further corroborated by the final examination.

Epithelioma. The tumor, composed of seven or eight irregularly shaped masses, was delivered to me, immersed in a 50 per cent. alcoholic solution, on October 21, 1893. In size these separate particles ranged from a chestnut to a small pea. The color was pinkish-red; the consistency soft, compressible. The macroscopic appearance resembled a highly cellular, vascularized tissue.

Preliminary examination. As an immediate examination and diagnosis were demanded, several minute particles were cut from different masses, carefully teased, and then, unstained, mounted temporarily in a normal salt-solution. The tissue was composed entirely of cellular elements, the connective-tissue stroma being sparsely present. The cells were of the flattened, squamous variety, nucleated and closely packed together. The epithelial pearls were not well marked, and were small. After examining several slides, and finding the same general characteristics, I made the diagnosis of carcinoma, of the flat-celled variety, or, as these are commonly designated, epithelioma.

With a view of making permanent mounts, the tumor-particles were hardened by the alcohol method, imbedded in celloidin, and sections cut with a Schanze microtome. These were stained with ammonio-carmin and picro-

carmin, and mounted in balsam. Examined with a Zeiss C objective, the same general characteristics were found that were present at the first examination. The nucleated squamous cells comprised the bulk of the tumor. Occasionally small aggregations of cells arranged concentrically (epithelial pearls) were found, but were not sharply defined. The first diagnosis was unchanged by this examination, the same features being present in both.

My opinion, then, is that the tumor in question must be an epithelioma, the diagnosis being subsequently fortified by the death of the patient.