## EMBRYONIC CARCINOMA OF ETHMOID AND ROOF OF ANTRUM.

Dr. J. A. MacKenty, New York City.

U. M., aged 17 years, presented herself for examination on July 6, 1917.

Past History.—Acute coryza with cough and temperature in January, 1917; nasal discharge (yellow from both sides) accompanied by swelling of both eyelids, equal, not tender nor painful. This acute attack lasted nine days. From this time up to the present she has had post-nasal yellow and pinkish discharge. Four weeks prior to her visit to me she noticed a swelling of the right side of face over the antrum and eyelid, and numbness over the distribution of the second division of the fifth nerve for two weeks. Second upper right bicuspid tooth painful and tender.

Examination.—Right external nasal wall congested and the turbinated bodies swollen. Tenderness and swelling over the root of second right bicuspid tooth. Tenderness over external wall of antrum.

Transillumination gives a shadow over the right maxillary and ethmoidal sinuses.

Antrum washing gave inspissated pus.

Diagnosis.—Antrum infection from diseased tooth though the numbness in the distribution of the second division of the fifth nerve could scarcely be explained unless there was bone involvement of the antral roof.

First operation.—Diseased tooth removed and antrum opened inter-nasally. For ten days antrum was irrigated with a return of blood-stained fluid. Pain and tenderness not relieved.

Then I began to suspect a more serious condition, grounding my fears upon the sanguineous character of the antral washings and upon the blocking of function in the second division of the fifth nerve. The possibility of malignancy was explained to the parents and a radical operation advised. There was a suspicion of right eye exophthalmos.

Second operation.—Radical external sinus operation. Antrum was opened through the Killian incision after removing the ethmoid cells. A mass of soft, friable tissue was removed from the antrum

<sup>\*</sup>Read before the New York Academy of Medicine, Section on Laryngology and Phinology, Nov. 28, 1917.

—its attachment was to the roof. Exophthalmos of right eye now became apparent.

Microscopic examination.—(Made by Dr. James G. Dwyer). This tissue presents the picture of carcinoma made up of cells of a very young type. It may be embryonical in nature. The mass is made up in a very large part of cells, which appear here and there to be rapidly invading the surrounding tissue. I would judge that this growth would recur rapidly and that the recurrence would be of a very malignant type, as once cells of these growths are stimulated, growth is very rapid.

Third operation.—Ten days later the anterior wall of the antrum, external wall of the nasal cavity, and the floor and remaining inner wall of the orbit were removed. This was preceded by terminal ligation of the branches of the external carotid. In ten days between the second and third operations the growth had apparently entirely reproduced itself.

A maximum dose of radium was applied for two hours by Dr. Janeway through the open wound. Then the wound was closed.

Following this operation the improvement was marked. Pain, tenderness, swelling and exophthalmos disappeared. The cavity became clean and apparently was healing. Two months later, October 15, 1917, examination showed a rapid resumption of growth along the external wall of orbit and behind the orbit; internal strabismus and diminished vision. Radium was again applied with marked improvement up to Nov. 1.

The interesting points in this care are: (1) Its resemblence to an ordinary antrum disease from tooth infection.

- (2) The suspicious symptom of fifth nerve involvement.
- (3) The subsequent suspicious symptoms of sanguineous antral discharge and slight exophthalmos.
- (4) The rapidity of the return of the growth after the second operation (ten days).
  - (5) The retarding effect of radium upon the later recurrence.

A noteworthy point in the history is the acute sinusitis in January followed by a chronic condition during the winter and spring. This irritation undoubtedly lies in a causative relation to the malignancy, perhaps stimulating into activity some dormant embyronic remain.

May 8, 1918—Patient not expected to live more than few weeks. The return is exctensive and rapidly growing.

43 West 54th Street.