A TOOTH IN THE LEFT NASAL CAVITY CAUSING PURULENT RHINITIS.

BY HOMER DUPUY, A.M., M.D.

Assistant Surgeon Eye, Ear, Nose and Throat Hospital, New Orleans.

Medical literature has reached enormous proportions, and it is rare indeed when reporting a case that one cannot find the homologue to his own.

A careful review of the "Index Medicus," and of standard works and journals in rhinological literature, resulted in my finding the report of only one case of a tooth in the nasal cavity.

It is this knowledge of its rare occurrence and uniqueness, as well as its embryologic and pathologic features, which induced me to report the following case:

Mrs. H., aged twenty-five, presented herself at the clinic of the Eye, Ear, Nose and Throat Hospital for the relief of "Nasal Catarrh."

Patient stated that three months prior to her admission at the clinic she was thrown from her bicycle, falling on a hard, gravel-covered embankment.

Recovering from the shock she had a profuse hemorrhage from the left nasal cavity which lasted for over an hour.

About fifteen days after this accident she noticed a discharge from the left nostril, which gradually increased in quantity, and soon became very offensive.

From that time to the date of patient's admission in the hospital, a period of three months, the discharge continued uninterruptedly.

She insisted that on the occasion of her fall from the wheel a pebble had lodged in the nose, and was the cause of her present ailment.

While her nasal condition was a source of great discomfort, her general health seemed perfect. Rhinoscopic examination revealed pus along the floor of the left nasal cavity, which being removed, a body, having the gross appearances of a rhinolith, was seen on the floor of the nose, about half an inch from the anterior nasal orifice. A probe, used with considerable force, made no impression on the mass, which appeared to be deeply imbedded in the floor of the nose.

With nasal forceps the body was tightly grasped, and by dint of forcible and repeated movements, the mass was extracted.

To my surprise it proved to be a tooth, which on inspection showed the crown to be undergoing caries, the root, however, being perfectly normal.

A probe bent at a right angle, and passed along the floor of the nose, entered a socket having a depth of one-third of an inch. This was evidently the former seat of the tooth. The probe could neither be seen nor felt in the roof of the mouth, which presented no deviation from the normal.

The root of the tooth presented the typical outlines of an incisor.

The superior dental arch showed no break in its continuity; but on enumeration of the teeth, one was missing in the left half of the upper arch, and it proved to be the *left lateral incisor*. I emphasize the fact that this anomaly was not appreciable, except by enumeration of the teeth, which were so perfectly adjusted as to form an unbroken arch. The patient made a speedy recovery from the purulent rhinitis.

She reported at intervals for a period of six months, after which time examination of the nose showed the socket on the floor to have totally disappeared.

We are certainly not justified in presuming that this is the only instance of a *misplaced* tooth having erupted in the nasal cavity.

Nature repeats anomalies, time and again, yet, judging from the literature accessible to me, this particular anomaly has not often been recorded.

The scarcity of reports on so interesting a subject justifies my insertion of the one case I found reported.

In the June issue, 1899, of the *Southern California Practitioner*, Dr. Hoell Tyler, of Redlands, Cal., reports a case of "A tooth in the nasal cavity." I republish his article in full:

"The patient was thirty years old, and married. She sought treatment for catarrh and throat trouble and stated that she had been treated by several homeopathic specialists at intervals for several years. But having her nose sprayed, and taking medicine out of two glasses, had given but little relief.

"She had chronic rhinitis with a stinking discharge from the right nostril, chronic pharyngitis, and was anemic and in rather poor general health. On cleansing the nasal cavity I discovered what I mistook for a foreign body, about one inch from the anterior nasal orifice. I was surprised to find that I could make little or no impression upon it with forceps or strong steel hooks, although consid-

erable force was employed. Both ends being imbedded I determined to cut it in two by means of the dental drill and extract the fragments. The jarring of the drill loosened it somewhat and then with the steel hooks it was extracted.

"It grew from the nasal septum, in which it was imbedded to the depth of three-sixteenths of an inch, with the root turned downward. The root did not penetrate the roof of the mouth; it was not connected with the alveolar border nor with any cyst. The tooth extended horizontally directly across the nasal cavity, resting upon the floor of the latter and with its crown or point imbedded in the inferior turbinated bone. It resembles a canine tooth, is nine-sixteenths of an inch in length, a little over one-eighth of an inch in diameter in the largest part, had a pulp cavity and central canal and was supplied with blood vessels and a nerve. The patient had had the usual number of teeth in her jaws and there was nothing peculiar about her mouth.

"The wound in the nose healed readily and she recovered from the rhinitis and pharyngitis with ordinary treatment.

"Most of the works on surgery, and special treatises, speak of supernumerary and misplaced teeth sometimes forming cysts in the superior maxillary bone and occasionally penetrating the nasal cavities, but in the literature accessible to me I have been unable to find any account of a tooth growing from the nasal septum and I do not recollect having read a report of such an instance in the medical journals, although I have no doubt there are several such instances recorded."

REMARKS.

Dr. Tyler's case is evidently one of a *supernumerary* tooth; the one I report being a *misplaced* tooth.

The etiology of both anomalies is a most interesting problem, for which two explanations may be offered:

First—During the development of the embryo, the enamel-germ in both conditions being displaced from its normal position by some *intrinsic*, developmental force, inversion of the enamel-organ occurred, causing the tooth to grow upward.

Second—The same condition may have been produced by some *extrinsic* force, such as trauma or abnormal pressure, causing inversion of the enamel-organ in utero.