

## ABSTRACTS

### NOSE AND ACCESSORY SINUSES.

*New Intranasal Procedures for Correction of Deformities, successfully applied in over 1000 cases during the past twelve years.* GUSTAV TIECK (New York). (*American Journal of Surgery*, May 1920.)

The deformities mainly dealt with are hook or bent nose, saddle nose, laterally deviated nose, and the long nose. The author has not attempted to correct deformities due to syphilis, and has regarded as a contra-indication to operation infection of the accessory sinuses, Eustachian tube or middle ear. The article is illustrated by several very striking "before" and "after" photographs, which bear witness to the cosmetic success of his methods. The essential feature of the operative technique is an adequate exposure of the nasal bones and nasal processes of the maxilla and of the nasal cartilages, together with a very wide liberation of the overlying soft parts from these skeletal structures. The approach for this process is by some three or four intranasal incisions in each nasal fossa. Occasionally, it is necessary to saw through the nasal processes of the maxillæ and to mobilise the nasal bones. The author operates under local anæsthesia and describes his incisions in detail, with short notes indicating the manner in which this method of approach is utilised in correcting the deformities. Intranasal and external splints are used to support the nose after operation.

GILBERT CHUBB.

*Glioma of the Nose.* ANGLADE AND PHILIP. (*La Presse Medicale*, 10th July 1920.)

The patient was an infant, three days old, and unable to suck on account of nasal obstruction. The right nostril was filled by a smooth red tumour, and the root of the nose was broadened. The growth, which appeared to spring from the upper part of the nasal cavity, and was the size of a haricot bean, was removed by snaring.

Three months later it recurred, and on this occasion the base was curetted after removal, and a series of X-ray exposures were given, with apparently good effects. The tumour was covered by mucous membrane on its free surfaces, and presented the histological appearance of a glioma.

The authors suggest that the growth may have had its origin in the olfactory bulb, and have pushed its way downwards through the cribriform plate. They have found in literature only four observations

## Abstracts

on glioma of the nose, but consider that the condition would be more frequently recognised if a histological examination of nasal tumours were undertaken in all cases.

DOUGLAS GUTHRIE.

*The Treatment of Staphylococcal Infections of the Nasal Vestibule and Auditory Meatus.* HIRSCH & MAIER. (*Z. f. O.*, Bd. 79, 1920.)

The writers claim that a 10 per cent. watery solution of potassium permanganate is a specific for the local treatment of staphylococcal infections, particularly boils. The top of the boil is removed with forceps and the cavity cleaned out with a mop of cotton wool soaked in the solution. The surrounding skin is also swabbed with the solution and after drying is smeared with mercurial ointment. The painting is carried out several times daily at first. Potassium permanganate has no effect on distant lesions nor will it prevent recurrence, but it will materially reduce the duration of the boil. The authors show that potassium permanganate gives off five molecules of oxygen in an acid medium as compared with three in a neutral medium. As staphylococci are acid-producing bacteria they thus assist in their own destruction.

J. K. MILNE DICKIE.

*Treatment of Malignant Tumours of the Antrum.* G. B. NEW.  
(*Journ. Amer. Med. Assoc.*, 8th May 1920, p. 1296.)

The writer claims that treatment of malignant tumours of the antrum by the cautery and radium eliminates the operative mortality and reduces the percentage of recurrences. Heat in the form of a soldering iron is used through an opening made in the palate or in the canine fossa with ether anaesthesia followed by treatment with 100 or 200 mgm. of radium either immediately after cauterisation or ten days later.

Thirty-three cases were seen at the Mayo Clinic, of which 15 were inoperable and the remaining 18 were treated by the cautery and radium. Sixteen of the 18 treated cases were stated to be primary tumours of the antrum, and squamous carcinoma of the antrum represented more than one-half of all the malignant tumours and were more than twice as frequent as sarcoma. Of the 18 patients with malignant tumours of the antrum who were treated by the cautery 3 are dead, the tumour recurred in 2, no recurrence appeared in 10 from periods of eight to twenty-eight months. Seven of these were free of growth for more than twelve months; 3 patients could not be traced.

Seven of the 18 were squamous carcinoma, of which 4 had recurrence after operation; the remaining 3 were free from the growth for more than twelve months. Two patients lost the eye on the side involved from the reaction of the cautery and radium.

As a rule the diagnosis of malignant disease of the antrum is not

## Nose and Accessory Sinuses

made until the condition has become self-evident by the bulging of the cheek or palate, or by the involvement of the orbit or nose. In some cases the earliest symptom is pain frequently referred to the teeth, in others nasal discharge, and nasal obstruction is the first complaint. The paper is extensively illustrated.

E. D. D. DAVIS.

*Malignant Growths of the Upper Jaw and Antrum.* E. D. D. DAVIS. (*Lancet*, 1920, Vol. ii., p. 1090.)

Writes from an experience of 39 cases, the nature of which were as follows: squamous carcinoma, 19; round-celled sarcoma, 5; endothelioma, or columnar carcinoma, 7; papillomatous growth, 3; chondro-sarcoma, 2; spindle-celled sarcoma, 2; melanotic sarcoma, 1. The majority of the squamous carcinomata originated in the ethmoid and spread to the antrum *via* the orbital plate. Four of the round-celled sarcomata began in the ethmoid and were clinically identical with the last-named; one originated in the deep tissues of the cheek. The endotheliomata grew from the ethmoid. The papillomata occurred in the region of the inferior turbinal and were more benign, with recurrences at long intervals. The chondro-sarcomata were found in young subjects about sixteen years old, and were inoperable—their site of origin could not be ascertained. The spindle-celled sarcomata arose in the antro-nasal wall or palatal process, the melanotic sarcoma in the nasal vestibule. In no case could origin in the mucoperiosteal lining of the antrum be demonstrated.

Symptoms and operations are discussed. The development of these growths is insidious, and most commonly the first symptom is pain in the cheek, radiation to the forehead or temporal region. This, with severe epistaxis, is highly suspicious.

Operations by the author followed two principles:—

- (1) A thorough exposure of the growth to ascertain its limits as far as possible.
- (2) Complete excision of the growth together with a free margin of healthy tissue. The orthodox excision of the upper jaw was discarded. Mr Davis describes his method in detail.

MACLEOD YEARSLEY.

*Optic Neuritis, associated with Disease of the Nasal Sinuses. Report of Two Cases.* E. C. ELLETT, M.D. (*Journal of the American Medical Association*, September 1920.)

Ocular disease appears to arise from nasal disease in one of two ways; either by absorption of toxins from a focus of suppuration, or by contact between the pathological process in the nose and some ocular structure.

## Abstracts

The author presents in detail the reports of two cases of optic neuritis associated with disease of the nasal sinuses.

The close relation which exists between the optic nerve and the sphenoid sinus is well known. In a study of 100 skulls Francis and Gibson were struck with the thinness of the partition between the two, and noted that one-third of optic nerves are shielded from the sphenoid sinus by a thin paper-like bony wall, measuring a quarter of a millimeter or less in thickness. It is known that specimens are seen in which an actual dehiscence exists, and in such cases the likelihood of a sphenoidal or posterior ethmoidal suppuration affecting the nerve is very great. The nerve under these circumstances may show a retro-bulbar neuritis, manifested only by a disturbance of vision and a central scotoma, or less often, an optic neuritis with visible changes in the fundus.

The ocular lesion in disturbance from posterior ethmoidal and sphenoidal disease is practically always of the optic nerve. But this is certainly not often the case in affections of the anterior sinuses.

Looked at from the rhinologist's point of view these cases are rare. The author, judging from an extensive experience, thinks the number of affections of the eye in a given number of cases of nose and sinus disease of any character is very small.

Striking features of the condition under consideration are the sudden onset of the visual disturbance and its equally sudden improvement when the nasal condition is relieved. The care necessary to arrive at a diagnosis of disease of the posterior nasal sinuses is well known, but is a matter which mainly concerns the rhinologist. Nevertheless, we should bear this difficulty in mind, and request repeated examinations if necessary.

The development of a good technic for the radiographic investigation of these sinuses has put the question of their diagnosis on a much more satisfactory basis.

ARCHER RYLAND.

### *Optic Nerve Disturbances in Diseases of the Posterior Nasal Sinuses.*

JAMES BORDLEY, M.D. (*Journal of the American Medical Association*, September 1920.)

It has been the author's fortune to see a fair number of optic nerve lesions produced by quite evident sinus disease, and it has also fallen to his lot to meet more than a few which could be determined only by close and repeated observations.

There is a too frequent diagnosis of intranasal disease by those who judge the probability of ocular complication by the extent of disease found. There are others who apparently conclude that without visible evidence in the nose it is fair to assume that no sinus

## Nose and Accessory Sinuses

disease exists. Often neither of these assumptions is correct, and they may lead to very serious consequences.

Assuming that all probable causes have been eliminated, and that every means of diagnosis has been resorted to, the author suggests that when we are face to face with a serious optic nerve disturbance, the part of conservatism and good judgment requires an operative exploration of the ethmoidal and sphenoidal cells.

He feels confident that visual disturbances are frequently the first suggestions of serious sinus disease which may eventually lead to blindness or death.

It is only right to heed the warning and eradicate the disease before it has impaired function or destroyed life.

Details of five cases are reported.

ARCHER RYLAND.

### *The Diagnosis of Accessory Sinus Disease causing Loss of Vision.*

LEON E. WHITE. (*The Boston Medical and Surgical Journal*, 22nd July 1920.)

Three types of optic neuritis are due to accessory sinus disease.

1st. Those due to direct spreading of the inflammation to the sheath of the optic nerve from the foci of infection.

2nd. Those due to toxæmia from infection in the sinuses.

3rd. Those due to hyperplasia.

The presence of pus or polypi may determine the type, but diagnosis is often most difficult, especially in the hyperplastic type, when the conditions often vary only slightly from the normal. The author is of opinion that operation should be advised in all cases of optic neuritis in which pus is demonstrated by rhinoscopic examination or polypi are present, and also when there is marked blocking of the sinuses by a deflection of the septum or by hypertrophic turbinates. In many other cases relief has been found to follow the opening of the sinuses, although the examination of the nostrils gave no indication of sinus disease. Medical, dental, neurological, Wassermann and X-ray examinations should always be made, but in acute cases the danger of delay is very great. When toxæmia is suspected, its site of origin, which may be teeth, tonsils, accessory sinuses, intestinal auto-intoxication, alcohol, tobacco, or syphilis, should be investigated. The possibility of pituitary disease should also be considered. The author is of opinion that these investigations should not occupy more than forty-eight hours.

Details of 22 cases are given. Of these, all but three were operated upon. Of the latter, one with infected sphenoidal sinus refused operation, the affected eye subsequently becoming quite blind. The second recovered after hot irrigations of the nostrils.

## Abstracts

In this case tobacco poisoning was suspected. There was a case of sarcoma of the sphenoid. The post-operative results of the remaining cases are clearly given in 17. There was complete recovery or great improvement in 11, and in all there was some improvement. In 7 cases the nasal examination was negative, but in several of these some evidence of sinus disease was found at the operation, and there was invariably improvement afterwards. The X-ray findings were positive in 6 cases, but the author emphasises the view that a negative X-ray finding by no means contra-indicates an operation. The middle turbinal was removed in all cases, and the sphenoidal sinus opened in all but one. The posterior ethmoidal cells were opened as a matter of routine, but the other accessory sinuses were not interfered with unless suspected of infection.

In many specimens from the hyperplastic cases, changes were so slight that it was practically impossible to detect them. The author would not hesitate to operate on a perfectly normal-looking nose, if the symptoms were those of pressure on the nerve, after having reasonably excluded other possible causative factors. It would seem the wiser course to err on the side of advising operations than to permit a patient to become permanently blind through delay.

J. A. KNOWLES RENSHAW.

*Ethmoidal Operations for Pansinusitis.* REAVES.  
(*The Laryngoscope*, 1920, Vol. xxx., p. 289.)

Reaves states that the amount of cocain can be reduced by following it with 3 c.c. of 1 per cent. novocain and 2 mm. of adrenalin injected under the periosteum of the middle turbinate about the area of Meckel's ganglion and the septum just opposite the sphenoidal opening. The desire to leave the operative field covered with mucoperiosteum has robbed Reaves of his speed in ethmoidectomies. Preliminary submucous resection of the septum may be necessary. Reaves uses his special ethmoidal knives which fit one handle.

*Ethmoidal Cells.*—The first step is removal of the middle turbinate, the vertical plate of the ethmoid with the superior turbinate and lower half or two-thirds of the ethmoidal cells. In most cases, after this, the operator can see the roof of the ethmoid, his coveted "landmark." If not, he must gently bite off the most pendulous cells. The operator follows up the removal of the ethmoid cells forward and backward or *vice versa*, with forceps adapted to engage the cells which are even higher than the nasal roof. Reaves advises the use of forceps that are small enough not to crowd and sharp enough to cut cleanly. We should always remove the cell proper and not its accessory wall of attachment at the roof.

## Pharynx and Nasopharynx

*Frontal Sinus.*—After the ethmoid cells around the infundibulum of the frontal sinus have been removed, a curved probe can be passed into the frontal sinus. This opening is usually sufficient to effect a cure. The pernicious habit of curetting the frontal duct should be discouraged.

*Maxillary Antrum.*—If the space is sufficient between the inferior turbinate and orbital wall, it can be opened in the middle fossa. The inferior turbinate should never be sacrificed where an ethmoidectomy has been done. If the space is not sufficient, the turbinate can be pushed up and the punch passed under the turbinate.

*Sphenoidal sinus* is apparently opened in the usual way with punch forceps.

J. S. FRASER.

### *Exophthalmos and Third Nerve Palsy due to Posterior Ethmoiditis.*

VAIL. (*The Laryngoscope*, 1920, Vol. xxx., p. 355.)

Vail records the case of a male, aged 50, who complained of burning pain around the right eye and deep in the orbit. Within twenty-four hours his right upper eyelid fell down and the eye turned outward. On examination there was some exophthalmos, complete ptosis, divergence and mydriasis of the pupil. Ophthalmoscopic examination negative. X-ray examination showed complete clouding of right frontal, ethmoidal, and antral regions. Lamb used suction treatment for three weeks and later performed exenteration of the right ethmoid labyrinth, which was full of pus. Vail thinks that there was probably a subperiosteal abscess of the orbit which had broken through the orbital wall. This, fortunately, did not rupture through the periosteum to produce orbital abscess.

J. S. FRASER.

## PHARYNX AND NASOPHARYNX.

*Primary Actinomycosis of the Tonsil.* Dr VERNIEUWE (Ghent).  
(*Bulletin d'Otorhinolaryngologie*, Paris, Nov. 1920, p. 283.)

The author records a case of actinomycosis in a patient under treatment for pulmonary tuberculosis. Both apices were dull, also the right base, and there was some chronic pleurisy in this situation. Fistulæ remained in the eighth right intercostal space behind and over the sternum from evacuation of "cold abscesses." Examination of curettings from these fistulæ showed golden granules of actinomycosis, and this was confirmed on pathological examination. It now became clear that the base of the right lung was the earliest focus in the chest, and radiograms showed that the disease had

## Abstracts

extensively involved both lungs and the mediastinum. In this the disease appears to have pursued a typical course.

Less than a month before the onset of cough, the patient had had a tonsillar abscess. This was incised, and for five months discharged non-fœtid pus. At no time were the glands of the neck involved, nor could anything resembling Cheatle's "track" be made out. The path of infection seems to have been through the œsophageal wall into the mediastinum and right lung.

Treatment with Pot. Iod. gr. lx. to gr. lxxv. was commenced. At the end of a week this had to be stopped on account of hæmoptysis and dyspepsia with fever; a second attempt was abandoned in four days. Colloidal iodine was then given (local and intramuscular). Great improvement of all the lesions took place under this treatment.

The author gives statistics on the frequency of tonsillar actinomycosis. One author records it in 14 per cent. of tonsillectomies, but Vernieuwe regards this percentage as much too high (!). The patient in his case was a professional man who had nothing to do with fodder, etc., and no cause of infection could be suggested.

A bibliography of 68 references to actinomycosis in throat, nose, and ear work accompanies the paper. E. WATSON WILLIAMS.

### *The Renal Complications of Acute Lacunar Tonsillitis.*

H. L. CRONK. (*Practitioner*, Nov. 1920.)

The close relationship of tonsillitis to nephritis has escaped the notice of most authorities. As a rule, when albuminuria accompanies tonsillitis, it is regarded as merely the result of high temperature. Some recent writers, however, regard the throat as an important avenue of infection in kidney disease.

The author examined the urine daily in a number of tonsillitis cases, eliminating all cases of suspected diphtheria or scarlet fevers: albumin was present in 80 per cent. The albuminuria did not depend upon the height of the temperature. In 7 per cent. of the cases, nephritis was present, as indicated by casts in the urinary deposit. This nephritis was of a latent type, with few signs, and resembled scarlatinal nephritis in its tendency to recovery.

A good bibliography accompanies the paper.

DOUGLAS GUTHRIE.