

CASES ILLUSTRATING VARIE

Sex.	Age.	Symptoms complained of.	Duration.	Nasal conditions.	Relationship between nose and symptoms complained of, and how determined.
M.	42	Asthma	Three or four years; began as hay fever twenty years ago.	Deviation of septum to right apex pressing hard on lower turbinate; hypertrophy of left middle turbinate pressing on septum and of left lower turbinate pressing on floor of nose.	Wheezing, cyanosis, and dyspnea almost instantly and completely relieved when the congestion of the interior of the nose was relieved by cocaine and contact prevented.
M.	..	Asthma	Nightly for ten years.	Bilateral ethmoiditis with polypi	By exclusion and result of operation.
M.	44	Severe asthma	Three years	Polypi	Cocaine gave relief as did partial removal of polypi.
M.	49	Asthma, severe whenever nose obstructed; neurotic temperament.	Several months	Exostosis of left septum; hypertrophy of right inferior turbinate; mucous membrane very sensitive; watery discharge; obstructed nostrils, worse at night.	Severe asthma only when nose occluded; under nervous excitement mucous membrane would swell and asthma come on at once.
F.	40	Asthma and cough	Asthma several years during wet months; cough six months.	Right middle turbinate much hypertrophied; septal crest on right side.	Asthma always relieved by cocaine spray.
F.	30	Asthma	Twelve months	Abscess of antrum	Evacuation of pus from antrum followed by immediate relief; recurrence of empyema caused return of asthma.
F.	46	Asthma, nasal obstruction, headache.	Years	Large rhinolith with hypertrophy of turbinate tissue.	By treatment
F.	40	Asthma	Five years	Hypertrophy of posterior ends of inferior turbinates with complete nasal stenosis.	No exciting cause except general nervousness outside of nose; touching diseased parts with probe brought on attacks of dyspnea.
F.	30	Cough; larynx irritation; occasional hoarseness.	Several years	No complaint of nose, but spurs in contact with inferior turbinate of each side were found.	Treatment for cough and larynx did little good; cautery of each inferior turbinate so as to remove contact with septum, afforded relief.
F.	30	Severe coughing	Several months	Hypertrophied inferior turbinates, and later, stenosis at night.	Diagnosis in doubt for some time; involvement of lung and unfavorable prognosis given by competent physician; taken to a specialist who examined nose and suggested treatment for nasal conditions.
M.	57	Dyspnea, severe, continuous	Three months	Septal spur on right side with deflection of septum to the left and enlarged inferior turbinates.	By result of operation; no organic cardiac disease; some emphysema.
F.	68	Spasmodic breathing at night	Fifteen years	Two small polyps at lower edge of right middle turbinate, none elsewhere; no nasal obstruction.	Irritation of polypi with probe caused spasmodic, almost convulsive breathing.
F.	23	Spasmodic cough	Twelve years	Hypertrophied inferior turbinates	Had been treated for uterine trouble, vesical trouble, rectal trouble, and nervous trouble with no result; cocaine to nose caused cessation of cough.
M.	16	Epilepsy	Two years	Deflection of septum with complete stenosis.	History of trauma followed by attacks of epilepsy.
M.	22	Epileptiform attacks every two to three weeks.	Six years	Complete closure of left nostril due to deflected septum and left nasal bone.	Followed a broken nose
M.	11	Epilepsy	Nine years	Marked lymphoid hypertrophy	Removal under ether was followed by cessation of attacks for eighteen months.
F.	40	Sneezing and watery discharge from nose with erythema of the skin of the external nose.	One year	Both middle turbinates hypertrophied and pressing against septum; edges of turbinates puffy and red.	Determined and verified by treatment.
F.	22	Paroxysmal sneezing	Three years	General swelling of nasal mucosa; sensitive to probe; sneezing induced by contact with flowers and intensified when nervous.	When away from flowers sneezing stopped.
F.	45	Vaso-motor periodical neurosis (hay fever) followed by severe attacks of asthma.	Twenty years without relief.	Hypertrophied inferior turbinate, left long bony spur on septum of the same side pressing on turbinate.	Other treatment ineffective; operation on nose suggested as offering some hope.
F.	75	Hay fever. Attacks began June 1st every year.	Fifty years	Hypertrophy of both middle turbinates; complete stenosis at time of attacks which have occurred in the winter also.	Relief from cocaine and from local treatment of the nose.
M.	49	Vertigo with tendency to falling	Three months	Hypersensitiveness of mucous membrane; general hypertrophic rhinitis; swollen middle turbinate; deviated septum.	Treated for liver, kidneys, and nervous system without avail; spasmodic cough elicited on touching sensitive area together with sense of giddiness.
M.	65	Tic douloureux		Pressure deviation of septum on anterior end of right middle turbinate which was hypertrophied.	By area of pain and result of treatment.
M.	45	Tic douloureux		Hypertrophy of septum and opposing middle turbinate of right side.	No treatment except to the nose gives any relief; cocaine and adrenalin give temporary relief.
M.	42	Conjunctival congestion; photophobia	Three to four years.	Deflected septum causing intranasal pressure.	

TIES OF NASAL NEUROSES.

Treatment.	Result.	If improvement, has it continued?	Reporter.	Where reported.	Remarks.
Refracture of the septum and replacement in median line; reduction of swellings and abolition of contact. This treatment continued off and on for two years as occasional colds caused renewed thickening, rendering cauterization necessary.	Attacks gradually diminished in severity and complete relief was finally attained.	So far as known; relief since 1893, last report 1899.	G. A. Leland	Personal communication.	
Removal under general anesthesia of all necrosed bone and polypoid tissue.	Almost complete relief.	Yes	G. B. Rice	Personal communication.	
Complete removal of polypi with cauterization at point of origin.	Cure	Yes	Wm. Porter	Personal communication.	
Exostosis removed; turbinal hypertrophies reduced; sensitive area cauterized; temporary change of climate; general tonic; treatment with regulation of habits of life; stimulants and tobacco stopped.	Apparently complete cure.	Yes	C. F. Theisen	Personal communication.	Reporter thinks this case one of pure rhinitis nervosa.
Right middle turbinate removed February, 1894, followed by relief from asthma and cough for one year; recurrence was followed by further operative work, since which no further trouble.	Cure after second operation.	So far as known; last heard from in 1901.	W. A. Martin	Personal communication.	Reporter regards impacted or hypertrophied middle turbinate responsible for more nasal neuroses than any other condition.
The usual treatment for cure of antral empyema.	Cure	Yes	Chas. W. Richardson	Personal communication, also <i>Laryngoscope</i> .	
Removed rhinolith which weighed fifteen grains and had a cherry stone as nucleus.	Cure	Yes	M. D. Lederman	Personal communication.	
Removal of hypertrophies	Cure	Yes	J. E. Schadle	<i>Northwestern Lancet</i> , 1890.	
Occasional cautery; relieved and declined any further operative treatment.	Improvement	Two years to present.	Author		
Cautery to turbinates	Cure	Yes, for ten years.	Within knowledge of author		This case was a patient of the author's many years ago; the correct diagnosis was made by Dr. F. I. Knight, to whom credit for suggesting treatment is due.
Removed spurs and corrected deviation of septum.	Worse for ten days then great improvement.	Yes, but still has sensations of pressure about the chest.	M. D. Lederman	Personal communication.	
Removal of polyps with cold snare	Complete and immediate relief.	Yes	L. B. Graddy	Personal communication.	
Cautery to turbinates	Complete and lasting relief.	Yes	J. A. Stucky	Personal communication.	Reported by author in article on "Reflex Cough," <i>Medical Record</i> , August 5th, 1899.
Operation on septum	Relief for six months then returned, but after second operation there has been no attack for two years.	No seizures since; four days previous to operation.	T. J. Harris	Personal communication.	
Operation of straightening septum	Apparent cure after last operation until a blow on the head brought on petit mal again.	Yes, since January, 1902.	Name unknown	Personal communication.	
Operation as stated and then reoperation after attacks began again.	Apparent cure after last operation until a blow on the head brought on petit mal again.	Yes, since January, 1902.	Urban G. Hitchcock	<i>N. Y. Medical Journal</i> and personal communication.	Petit mal has continued; operated on for hypertrophy of the inferior turbinate in last two years without result.
Removal of tips of each middle turbinate	Cure	Yes	C. N. Cox	Personal communication.	
Tonics, adrenalin 1 to 10,000	Two or three slight attacks in past three years.	Yes, as far as known.	C. F. Theisen	Personal communication.	
Removal of septal spur; galvano-cautery applied to turbinate.	Four weeks after treatment annoying symptoms disappeared.	Yes	M. D. Lederman	Personal communication.	
Removed anterior end of each middle turbinate.	Great improvement; no June attack; August attack less severe.	Yes	Author's case		No attack in year 1902. Patient apparently permanently cured.
Removal of right middle turbinate; cautery of inferior turbinate.	Cure		O. J. Stein	<i>Laryngoscope</i> , December, 1898.	
Septum placed in proper position; worse immediately after, then gradual diminution of attacks in frequency and severity.	Final cure	No return of attack since 1896.	G. A. Leland	Personal communication.	
Galvanocautery	Good		W. Cheatham	Personal communication.	Many cases nasal reflex relieved by cautery but many not; is not so hopeful as to results as formerly.
Removal of piece of septum with saw relieved pressure.	Permanent relief.		G. D. Murray	Personal communication.	

CASES ILLUSTRATING VARIOUS

Sex.	Age.	Symptoms complained of.	Duration.	Nasal conditions.	Relationship between nose and symptoms complained of, and how determined.
F.	24	Intense supra- and infraorbital neuralgia, right side of face.	Four years.	Exostosis of right lower turbinate pressing on septum.	Shrinking under cocaine relieved pain at once.
M.	36	Severe pain in head	Two years	Intranasal pressure from spur of left nostril.	Constant pain more noticeable during cold in head.
F.	23	Headache	Two to three years.	Chronic hypertrophied rhinitis.	Headache worst when hypertrophy is greatest.
F.	40	Sick headache (migraine) with complete prostration.	Each attack several days.	Sharp exostosis buried in posterior end of inferior turbinate.	Increased tension in nose from any cause brings on attack.
M.	..	Headaches, chorea, pain in eyes; inability to fix vision.	Several years	Polypus in left nostril; closed ethmoid cells.	Complete relief from treatment of nose; none from other measures.
F.	23	Following nervous excitement had increased conjunctival congestion, lachrymation and profuse watery nasal discharge.	Three to four years.	Septum thick; spur on one side; turbinate boggy; polypoid degeneration of left middle turbinate which was pressing against septum.	By result of treatment
F.	37	Headache; inability to fix vision; chorea in arms and legs; skin sensations neurotic type. For years in sanatoriums. Diagnosis of petit mal (neurotic family history).	Several years.	Both middle turbinates solid; no cells.	By result of treatment
M.	13	Unable to swallow solid food since early childhood; if attempted always vomited.	Many years	Adenoids	Suggested as possible cause
F.	37	Indigestion with cough	Several years	Reported nose perfect but examination showed spur in each nostril and hypertrophied tubercles of each septum.	By results of examination and treatment.
F.	20	Dysmenorrhoea	Several years	Hypertrophy of middle turbinate	Results of treatment
F.	41	Diffuse oedema joints, hand and ankle		Polypoid degeneration of mucous membrane near hiatus semilunaris.	
M.	9½	Tachycardia		Pedunculated myxofibroma of the posterior end of middle turbinate.	
M.	10	Temporary insanity	One week	Followed removal of adenoid and operation for deflection of septum, done under ether.	Seemed to be due to effect of plugs placed in nose to hold septum in position.

having been given the author in the form of personal communications, and to the writers of which he desires to express his indebtedness.

George L. Richards.

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- 9 Beziehungen zwischen Augen- u. Nasenkrankheiten. Monatsheft für Ohrenheilk., 1893.
- 10 Phila. Med. Journ., July 16th, 1898.
- 11 Trans. Amer. Med. Assn., 1897, section on Laryngology.
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NASAL CAVITIES, DISEASES OF: NEW GROWTHS.

—Perhaps contrary to what is quite generally believed, new growths in the nose are exceedingly rare. Mucous polypi, spurs, and thickenings of the bony and cartilaginous septum are seen more commonly than any or than all forms of new growths combined, but, being of purely inflammatory origin and not tumors in the true sense, are not described under this heading.

Moritz Schmidt, among 32,997 nose and throat patients seen in ten years, found that but 24, or 1 in every 1,370, presented some form of true neoplasm in the nose. Of these, 757, or 1 in every 43, had mucous polypi; *i. e.*, mucous polypi occurred more than forty times as often as all forms of true new growths combined. Of benign and malignant neoplasms, there would seem to be about an equal proportion; if anything, malignant growths appeared more often than benign tumors.

TIES OF NASAL NEUROSES.—Continued.

Treatment.	Result.	If improvement, has it continued?	Reporter.	Where reported.	Remarks.
Removal of right lower turbinate with saw and scissors in 1898.	Complete cessation of pain.	Yes	P. S. Donellan.	Personal communication.	
Removal of spur	Instantaneous relief from pain.	Yes	G. D. Murray.	Personal communication.	
Chronic acid to turbinates	Relief	Yes, for six years.	J. C. Thompson	Personal communication.	
Shrinking turbinate with cocaine, and suppranal, as patient declines operation for permanent relief.	Temporary relief.		J. A. Kenefick.	Personal communication.	
Removal of polypi; opening of ethmoid cells.	Cure	Yes	P. J. Gibbons.	Personal communication.	
Removal of left middle turbinate and the septal spur.	Complete relief	Yes	J. F. McCaw	Personal communication.	
Opened through middle turbinates and drilled into left sphenoid sinus; antipyrin and suprarenal locally; general tonic treatment.	Cure	Yes, has gained thirty pounds.	P. G. Gibbons.	Personal communication.	Was of suicidal tendency and when worse iodine was detected in secretions.
Removed	Swallowed solid food next day.	Yes	Unable to credit as reporter did not sign name.	Personal communication.	Reporter thinks trouble due to abnormal reflex causing spasm of pharyngeal and cesophageal muscles.
Removal of spurs and hypertrophies of septum and of diseased tonsils by electro-cautery dissection.	Entire disappearance of cough and indigestion.	Yes, six years	Ed. Pyncheon	Personal communication.	
Usual surgical measures	Cure	Yes, six years	Henry L. Wagner.	Personal communication.	
Surgical	Cure	Yes, eight years.	Henry L. Wagner.	Personal communication.	
Surgical; removal	Cure	Yes	Henry L. Wagner.	Personal communication.	
After removal of plugs was all right in a few days.	Cure	Yes	Author's case.		

tom," secondary to an hypertrophy of the mucous membrane of the middle turbinate, causing the inferior border of this to curl outward and upward until it met the body of the bone above where at length adhesion took place, finally causing a closed bony cavity lined within and without with mucous membrane. Another explanation is that the cyst results from a rarefying osteitis, the inflammation beginning in the mucosa, involving later the periosteum and bone, and finally resulting in the porous formation observed in other hyperplastic processes. A simpler and more probable explanation than either of these is to be found in the fact that there frequently exists in the anterior end of the middle turbinate bone an ethmoid cell, which communicates with the middle meatus or with the other cells of the ethmoid labyrinth. Inflammation causes complete or partial stenosis of the orifice, the secretion is retained, and the cell gradually becomes larger as the walls distend, until finally there is produced a bony cyst. This is covered externally with mucous membrane that may either be normal or have undergone polypoid degeneration with polypi resulting, or, again, may have atrophied. The mucous membrane lining the cavity has columnar ciliated epithelium, and, through pressure of the retained secretion, often becomes attenuated, the glandular elements undergoing absorption, the membrane becoming polypoidal or granulating. The cyst contains air or may be filled with a yellow viscid fluid, muco-pus, or clear pus. On several occasions the writer, on opening the cyst, found a mucous polyp present in the cavity.

The tumor presents itself as a smooth, rounded, anterior end of the middle turbinate body, and varies greatly in size, being often so small as to pass unobserved, while at other times it may be so large as to reach down to the inferior turbinate or even to the floor of the nose, and frequently pushes the septum over sufficiently to cause stenosis of the opposite naris, the tumor occupying the concavity of the septum which it has produced. The symptoms are those due to pressure of retained secretion and to obstruction. Hemiparalysis with exacerbations of acute pain during colds in the head is the most characteristic and distressing symp-

tom. The pain is referred to the inner side of the eye, radiating to the forehead or across the face, causing often intense trigeminal neuralgia. There is a feeling of pressure and throbbing. Actual exophthalmos may occur from the outward pressure. Attacks of megrim with vertigo and partial unconsciousness and vomiting are often complained of. Nasal obstruction, depending upon the size of the tumor, is present on the affected side and may be quite marked in the opposite naris.

Prognosis is good and recurrence is not to be expected following proper treatment.

Treatment is surgical and consists in the removal of the cyst (under local anesthesia) by the cold wire snare, Grunwald's or other nasal cutting forceps.

FIBROMA.—Fibroma is a connective-tissue growth, somewhat resembling histologically the mucous polyp, but differing from it in the large amount of connective-tissue fibres crowded together with but few intervening interstitial spaces. The epithelial covering is the same as that of the polyp. It springs from the submucosa or outer layer of the periosteum, and arises from the posterior third of the middle or superior turbinate bodies or from the roof of the nose, and is said never to spring from the septum. It may arise in the sinuses, and often extends from the nasopharynx into the nasal fossae. It has a rather thick, firm pedicle or may have a very broad base. If pedunculated, the growth is downward and backward into the nasopharynx, where it appears as a round or pear-shaped grayish-pink tumor, firm and hard to the finger, bleeding easily on probing, having a rather smooth surface, and tending to fill the postnasal space. In the nose it is of the same character, but is longer and more slender, conforming to the shape of the nasal cavity. Its growth is steady and persistent, pushing aside adjacent bones, causing ulceration and adhesions, invading the neighboring sinuses and orbital cavities, and producing finally much deformity, such as the characteristic frog face and exophthalmos. The tumor is very vascular and the walls of the blood-vessels are very much thinned. This form of growth occurs in early life, between the ages of fifteen and thirty or forty, and in males more often than in females. Of six cases of