

practical value in snaring post nasal hypertrophies. When a turbinated body is hypertrophic along its entire length we draw three lines of cauterization from behind forward with the knife shaped point, one above, one below, and one in the middle. I find that the results are much enhanced if the furrows thus burned are then carefully rubbed over with a crystal of trichloreteic acid. The reaction after such an application instead of being more severe, is less, and the relief of obstruction thus obtained instead of lasting for only a year or a year and a half as is often the case when the cautery alone is used, is nearly always permanent.

Atrophic Rhinitis.—It has been my fate, it seems to me, to have to deal with more than my share of this disease. It commenced while at work in Chiari's Clinic in Vienna, when he portioned out to me six cases to be treated by Braun's vibratory massage. Instead of trying to dodge such a fate I have yielded and given the subject a good deal of careful attention. I will be as terse as possible in my description of the treatment which I have found most beneficial. It is an open question in my mind as to whether or not the fears of the douche causing ear trouble is well founded or not. I am aware that we have strong authority for such fears and such ones as Roose, Mackenzie, etc., are not to be ignored. Still, and it may be that my experience has been peculiarly happy, there have come to me no untoward effects from this valuable therapeutic agent, with the one exception of a man who in my presence deliberately turned his head to one side while taking a douch. At least I have my patients who are suffering with foetid rhinitis take a douch once or twice in a day, but only in this disease is it ever used. I have the directions plainly printed on a slip which the patient takes away with him.

First let me digress long enough to say that after thoroughly testing Braun's vibratory massage in the Vienna Clinics I gave the results in a paper which I read last year before this Section. One of my conclusions therein was that to the cleanliness which is so essentially a part of this mode of treatment is due most of the speedy relief of disagreeable symptoms, foetid secretions, etc. Braun claimed that under his method the atrophic turbinated bodies returned to the natural proportions. My experience has not substantiated this latter statement. During the past year I have modified Braun's methods in the following manner: The patient comes to me daily. A piece of absorbent cotton loosely pulled from the roll is torn to a size which will completely but loosely fit the inferior meatus and space included between the middle of the inferior turbinated body and septum. This *dry* cotton is held in the accompanying instrument, and the vibratory movements carried over the inferior, middle and superior turbinated bodies, pharynx (as far as possible), septum and floor of the nose. From three to six pledgets of cotton may be necessary in each nostril to entirely bring away the discharge, scabs, etc. Allow me to accent the fact that the cotton is dry, as I believe this dry method distinctly superior in its results to the moist method as recommended by Braun. This absolute cleanliness cannot be too strongly insisted on. On examination after this massage the mucous membrane looks pink and clean, and the patient often expresses a feeling of comfortable warmth and relief. Immediately afterwards we may use balsam peru, 10 per cent., iodo-glycerine,

thymol in albolene, or any of the many good things recommended for the disease provided they are not too irritating. But I am convinced that the vibratory massage carried forth as above described has a distinct worth, and will shorten the treatment of foetid rhinitis by many months.

I had intended to speak further on the treatment of simple laryngeal inflammation, especially as it occurs in singers, but I fear that I have had more than my share of time.

I have intentionally refrained from speaking of defective septum in connection with rhinitis, as it would lead me into too vast a field,

In conclusion I would say that there are few cases that do not require constitutional treatment,

Rheumatism or the rheumatic diathesis, plethora, scrofula and alcoholism should be carefully watched for and treated according to the well known lines. We cannot cry out too loudly against smoking as a cause in many individuals of disease of the upper air tracts. Especially harmful are cigarettes, because the smoke from them is inhaled and this causes atrophy of the vocal cords. A recent case of this kind vividly brought the effect of cigarette smoke to my notice. An actor after two years of excessive cigarette smoking applied to me for an increasing loss of vocal resonance and timbre with recurring attacks of hoarseness. I found the vocal cords atrophied to two thirds their former size. I had examined them when they were normal.

MENTAL ABERRATION ATTENDING HYPERTROPHIC RHINITIS, WITH SUB-ACUTE OTITIS MEDIA.

Read in the Section of Laryngology and Otology, at the Forty-third annual meeting of the American Medical Association, held at Detroit, Mich., June, 1892.

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Mental aberration attending intra-nasal affections and their sequelæ is considered rare by the profession; yet, it has been the experience and observation of many of the Fellows of the American Rhinological Association, that mental aberration, or insanity *per se*, has appeared upon the existing intra nasal disease, that removal of the latter often causes the former to subside.

Roosa gives, in his valuable books on "Diseases of Ear," a case of insanity and suicide, on account of tinnitus aurium. Experienced rhinologists can recall one or more cases of mental aberration due to intra-nasal disease. In fact, so much importance is attached to disease of the upper air passages, being the *fons et origo*, of mental aberration, that a committee was appointed, consisting of Fellows of the American Rhinological Association to examine inmates of State Insane Asylums, and ascertain the per cent. of patients affected with disease of upper air passages.

While consent has been given by the Superintendents to make the rhino-pharyngoscopic examinations, the committee has not yet reported, owing to the difficulty in getting the insane to submit to the necessary investigation.

It has been the common experience of practical

and experienced rhinologists to almost daily have patients with impaired intellectuality, the mind going into vacuity, the lawyer or speaker losing the thread of argument, the accountant making egregious blunders in his addition, another unable to concentrate his mind to read an interesting chapter or column or carry on a spirited conversation; another will hear an interesting discourse or enjoy a thrilling article, yet unable to give the salient points presented, is neglectful, absent-minded. A prominent farmer, in settling with his tenants, made numerous blunders, making mistakes in dollars and cents, as often against as for self. Is sad and despondent, very melancholic thinks he is losing his mind. A prominent merchant often fails to charge merchandise sold, or recharges the second or third time, or fails to enter the credits, is not dishonest and suffers much mortification on finding the stupendous errors, is irritable, easily insulted, has presentiment of sudden death, feels that he is losing his mind, is quite emotional. A young lady of good social position thinks herself unclean, unfit to keep company with her mother, sisters, sees numerous imaginary unclean spots on her dress and clothing, is morose, seeks solitude, is melancholic, says she will be lost on account of her sins, is often found walking the porch or kitchen in night clothes in mid-winter, or wandering in this nude state out in the yard; she had been formerly quite anæmic, had retroversion and catarrhal endometritis, and with proper treatment, the latter was cured, but the mental aberration continued and was cured by treatment directed to the naso-pharynx and galvanization. Another patient, married lady, with chronic rhinitis, becomes intensely sick, excited, emotional, and has fear of impending death; sheds tears freely on going to church or to any public gathering; is despondent and seeks solitude. Treatment directed to the upper air passage and galvanism effect a cure. Another patient, a maiden, has been afflicted with symptoms enumerated in the last case, is afraid to be left alone, sleep by herself, or sleep in a dark room; at night, keeps the lamp burning brightly, the window shutters open, the window blind up so that she may see any burglars who might chance to disturb her quietude; she has insomnia, has the most intense aversion to her family, afraid of her uncles and aunts, seeks solitude; will not be seen by friends or strangers, has constant presentiment of death and other evil omen; only through force, will she leave her house; has violent headaches, highly emotional, brings forth tears in abundance, is suspicious of mother and sister, has many delusions. Treatment directed to upper air passages, nerve tonics, galvanism and proper attention to retroversion effected a cure.

Mrs. —, age, 35 years, former health good, family history excellent, has had hypertrophic rhinitis for years, nasal occlusion, though a woman of strong mind and body, is quite emotional, subjected to any great excitement or bad news, develops the tetanoid state; is given to frequent shedding of tears, seeks solitude, is melancholic; is restored to health by cauterizing the turbinated bodies (lower and middle). In twenty-four hours amelioration of her mental condition is perceptible to her family and friends: restoration to health is quickly accomplished.

Mr. T., age 25 years, has naso-pharyngeal catarrh and aural catarrh, with tinnitus aurium and deafness, acquired irritability of temper, melancholia; partial loss of memory, inability to think any length of time on one subject; has either frontal or occipital headache all the time; has insomnia, agoraphobia and anæsthesia of the skin in spots; has ocular catarrh and asthenopia and neuralgia in different

parts of the body. Tuning fork heard best in left ear; drum-heads slightly opaque and without polish. Hearing S. A., six inches; D. A., eighteen inches. This is a case of extreme neuræsthesia. Patient has been, on account of the above conditions, tempted to commit suicide, and will not remain alone night or day; "says he will kill himself if left alone, and can't help it," is deluded.

Mrs. M. D., age 40 years, has been affected with intra-nasal disease about 15 years; the time dates to an attack of acute rhinitis during the influenza, 1872. There was extensive hypertrophy of the lower and middle turbinated process, marked nasal stenosis causing pressure. Symptoms—headache, both occipital and frontal; patient seeks solitude, is melancholic, wants to stay at home all the time; though she has a lovely home and earthly blessings, her sadness and despondency last; sheds tears without provocation, is not, in feeling and disposition, her former self. Cauterizing the turbinated bodies and other local treatment, with a blood and nerve tonic, effect a cure.

Mr. H., age about 40 years; farmer, family history good, general health excellent, excepting the affection in upper air passages. Though he has been a hard worker and able to transact business, his health, for the last year or two, has been greatly impaired; he feels languid, indifferent, tired, that he is losing interest in business, has nasal stenosis, is a mouth breather, has an oppressed, full sensation in the nasoorbital regions; constant headache, greatly aggravated by colds, sudden changes in weather and hot sun; dislikes to be in company, seeks solitude, is melancholic, irritable, peevish, morose; has an indifferent, stolid, and insane expression; has constant pains in various regions of the body, at times increased in severity.

In the spring of 1891, his symptoms for worse were increasing; he sought no professional advice, but tried to work or wear off his indisposition; he went to the field to plow, had a violent headache, stopped plowing for a while and lay down on the ground; from this time has no recollection of what transpired for days. He failed to come home, left horse in the plow. Family and neighbors institute a search, but Mr. — could not be found. A nephew was in the city of Lexington and saw Mr. — on the street in his shirt sleeves and old working clothes. Mr. — could give no account of himself, did not know where he was, how or when he came to that city, nor on what business; said he "had a bad headache and lay down in the field," and was aimlessly wandering over the city, speaking to no one, and like the "Wandering Jew," finding no rest but continually passing on, virtually was lost to himself and family and friends and surroundings. His nephew brought him home; he does not sleep well, appetite capricious; is very weak and nervous, says his "head (forehead) and left half of head hurt terrible bad, that the left half of head throbs all the time." A rhinoscopic examination reveals a naso-pharyngitis, hypertrophy of the lower and middle turbinated bodies, nasal stenosis; the post nares and vault of pharynx is a purplish red, and swollen, angry appearance, coated with thick, tenacious inspissated mucus; great tumefaction; the left side of the head is sensitive to touch; the tragus and mastoid and auditory canal show great pain and anguish on touch, the drumhead is bulging and greatly congested; paracentesis is resorted to; the throbbing pain, abnormal sensations rapidly subside. The naso-pharyngeal chambers are sprayed and cleansed with a mild antiseptic wash and daily medicated for a week with mild, soothing astringent non-irritant remedies, the congestion and inflammation reduced to a minimum. Now the turbinates are cocaine and cauterized, and the nasal stenosis relieved in 72 hours. From the latter treatment, the mental faculties begin to clear up; the clouds gradually pass away; patient is sprayed for three weeks with mild astringent, anti- and aseptic, soothing remedies and in a month is cured of all mental aberration. The nasal stenosis and enlarged turbinates have been removed and the lining of the naso-pharyngeal chambers placed in a healthy state; patient is restored to former health and has no appearance in manner, expression or acts to what he was before the treatment.

Formerly, it was difficult to get the general profession to attach much importance to diseases of the upper air passages. They consider them local, and not capable of producing constitutional manifestations, and will tell a patient his intra-nasal disease does not amount to much, it will never kill him; to take outdoor exercise, eat nutritious food, and sleep

eight hours out of every twenty-four, and then laugh at patients for having acquired great irritability, melancholia, or tinnitus aurium from having rhinopharyngitis, and will jocularly remark: You are hysterical, or are malingering. What absurdity! How irrational are these remarks to an intelligent and honest sufferer, whose only desire and prayer are relief and cure. I know no more troublesome affection than naso-pharyngeal and aural disease to the patient. Intra-nasal affection was, a few years ago, considered incurable; but now the light has dawned, and cure after cure is being made, though it will take the profession at large many years yet to realize what is the pathology, etiology, differential diagnosis, prophylaxis, the best therapeutic measures, and the sequels of intra-nasal diseases.

The symptoms characteristic of hypertrophic catarrh are, more or less impairment of the faculties of the will, intellect, emotion, and memory, irritability, anger, nasal obstruction, impaired nasal respiration, oral respiration, and hawking from the posterior nares of the characteristic yellow, ropy mucus. When the recumbent posture is resumed, there is a dropping or gravitation of the secretion to the posterior pharyngeal wall, which often causes irritative cough; at morning, when the patient arises, there is a great commotion of the respiratory muscles, produced in trying to rid the naso-pharynx of the abundant tenacious secretion, and nausea and vomiting are often the results. Other results are headache, either frontal, vertical, or occipital, impairment of one or more of the senses of smell, sight, taste, or hearing, hæmoptysis, and epistaxis, impaired articulation, tickling in the throat, constant inclination to swallow, paroxysms of sneezing, insomnia, frightful dreams, suicidal tendency, and inclination to suspect and doubt the sincerity of the truest friendship. The catarrhal inflammation may extend to the larynx and trachea, and give rise to the symptoms of laryngitis and tracheitis. Many catarrhal patients regard the thick, white, yellowish inspissations of mucus which are hawked from the naso-pharynx as tubercles expectorated from the lungs, and if a slight hæmorrhage of the throat occurs from the irritative cough and violent rasping of the throat, they think they are the subjects of prodromal phthisis. Even in epistaxis, if the blood gravitates and trickles from the vault and posterior nares into the pharynx, producing cough and irritation of the throat, and is ejected by the mouth, it is supposed to have come from below the glottis, when, if a minute physical examination of the chest, and a rhinoscopic and laryngoscopic examination were made, the site of the hæmorrhage would be located in the vault or posterior nares, and all mental and nervous shock, which are often more prejudicial and enervating than the occurrence of a true pulmonary hæmorrhage, would be avoided. Many victims of catarrh have a vacuous and depressed expression, and are gloomy, absent-minded, easily harassed, so that life seems a burden to them. Cold hands and feet, impaired circulation, numbness, anæsthesia, or hyperæsthesia of one or more parts of the body, peripheral neuralgia, palpitation of the heart, and anorexia, are frequently present in catarrh of the upper air passages.

COMPLICATIONS AND SEQUELS OF CHRONIC CATARRH.

It is very easy to account for the diverse affections following catarrhal inflammation of the upper air

passages when the anatomical, pathological, and neurological relations of the parts are considered. The meninges and base of the brain are in close proximity to the catarrhal mucous membrane, and many blood vessels that the latter supply, also supply the former, either directly or indirectly. The same is true in regard to the distribution of the cranial nerves. They communicate with various ganglia and proximate and remote organs, and convey irritation directly or reflexly to different parts of the body. With what facility, then, when irritation or pain is produced in the terminal filaments of the nerves supplying the mucous membrane of the upper air passages, can it be transmitted to distant organs or members or brain! It is equally as easy to have irritation or congestion of the brain follow chronic catarrhal inflammation of the upper air passages. In the nasal cavities are the special nerves of smell, the olfactory nerves connecting the olfactory ganglia with the central parts of the brain, and communicating with the nasal branch of the ophthalmic, the anterior dental branch of the superior maxillary, the sphenopalatine, and the naso-palatine ganglia.

The gustatory, one of the special nerves of taste, is distributed to the tongue, and communicates with the submaxillary ganglion and hypoglossal nerve. The chorda tympani is a nerve of taste, a branch of the facial, and supplies the *mucous membrane of the drum*, also communicating with the gustatory. The glossopharyngeal arises from the medulla oblongata, and is distributed to the mucous membrane of the base of the tongue, pillars of the *faucæ*, *tonsils*, *soft palate*, *middle ear*, *Eustachian tubes*, *drums*, and *upper part of pharynx*. It is a nerve of taste, sensation, and motion. The sphenopalatine ganglion supplies the *tonsils*, *soft palate*, *uvula*, *pharynx*, and *Eustachian tubes*.

The pneumogastric nerve, communicating with other important nerves, as the spinal accessory and the glossopharyngeal, and with important organs (four vital ones—the heart, lungs, stomach and liver) supply the mucous membranes of these organs and that of the respiratory tract. They also supply the mucous membrane and muscular coat of the *œsophagus*, and send the superior laryngeal nerves to the mucous membrane of the larynx and crico-thyroid muscle. The inferior laryngeal nerve is a motor nerve, and supplies all the muscles except the crico-thyroid.

The spinal accessory nerve is a motor nerve, arising from the medulla oblongata and spinal cord, but receives sensitive filaments from the pneumogastric. It has external and internal branches, unites with the inferior laryngeal and recurrent branches of the pneumogastric, supplies the cleido-mastoid and trapezius muscles, and gets sensitive branches from the first, second, and third cervical nerves. The internal branches are directly connected with the vocal movement of the larynx; the external with respiration. The hypoglossal arises from the *medulla oblongata*, and is a motor nerve of the tongue, but receives sensitive filaments from other nerves after it leaves the brain.

The facial nerve, arising from the *medulla oblongata*, is a motor nerve to the muscles of the face, to those of the *external ear* and, by its *tympanic* branches, to the *stapedius* and *laxator tympani*, through the *otic ganglion*, the *tensor tympani*, through and by

connection of its trunk with the *vidian* by the petrosal, the *levator palati*, the *azygos uvulæ* and a few muscles of the neck, and receives sensitive filaments from the fifth.

The fifth nerve, the great cranial nerve of sensation, is divided into three branches. First is the ophthalmic, which supplies the lachrymal gland sac, conjunctiva and ophthalmic ganglion of the sympathetic and nasal branch to *Schneiderian membrane*.

The second division, the superior maxillary, supplies the teeth of the upper jaw and *mucous membrane* of the *antrum maxillare*, and the third division, the inferior maxillary, supplies the external ear and meatus, filaments to anterior two-thirds of tongue, lining of cheek, fauces and lower jaw, integument of chin, lower lip, and lower half of face and muscles of mastication. It is both a sensitive and a motor nerve.

Through the medulla oblongata and spinal cord, irritation of the mucous membrane of the upper air passages is conveyed to the brain, to the arm, forearm and hand by the brachial plexus, to the chest and its contents by the dorsal and sympathetic nerves, to the abdomen and its contents by the lumbar and sympathetic, and to the lower limbs by branches given off from the lower portion of the spinal cord and the sympathetic.

Neuralgia, partial paresis, hyperæsthesia, analgesia of the extremities, epilepsy, chorea, and accompanying chronic naso-pharyngeal catarrh, are readily explained through reflex irritation, and subside when proper treatment is given the catarrh.

The sequels of naso-pharyngeal catarrh are reflex cough, sneezing, stenosis of nasal cavities, ocular catarrh, asthenopia, aural catarrh, headache—either frontal, vertical or occipital—nasal polypi, tonsillitis, enlarged tonsils, hypertrophy of the submaxillary, anterior and posterior cervical glands, patulency of Eustachian tubes, hæmorrhage from the throat—either the naso-pharynx, larynx or trachea—epistaxis, laryngitis, tracheitis, bronchitis, and catarrhal phthisis, neuralgia, or numbness of the limbs or trunk, anæsthesia or hyperæsthesia of the skin, paresis of arm and forearm, dyspepsia, hay fever, irritability, melancholia, partial loss of memory or intellectual faculty, insomnia, frightful dreams, agoraphobia, vertigo, palpitation of the heart, neurasthenia, stammering, suicidal tendency, asthma, chorea, epilepsy, loss of taste, anosmia, anæmia, anorexia, deafness, reflex irritation of the genito-urinary organs, an abundant discharge of nasal mucus or sneezing during coitus, aphonia, erythema and herpes of the nasal integument and lining, tinnitus aurium, otalgia, dysphagia and constipation. In cases of naso-pharyngeal catarrh of long standing there is a tendency to irritation, catarrhal inflammation or debility of all the mucous membranes of the body.

When we consider the pathological elements of the various forms of chronic catarrh, and engrafted upon them, the very frequent or recurrent subacute naso-pharyngitis, with increased dilatation of the blood-vessels, hyperæmia, redness, heat, tumefaction and pain, followed by exudation of liquor sanguinis, diapedesis of the leucocytes, increased infiltration of the connective tissue, cell proliferation and disorganization of lymph; rhinoscopic examination showing a congested, red, dry and swollen appearance of the mucous lining—later on the dryness gives way to moisture and an abundant secretion of mucus or

mucopus, the mucous and submucous tissue is cedematous, infiltrated and thickened, and the glands and follicles are distended and abnormally active; and often added to this, the pressure of a polypus, septal spur, ridge, an exostosis enchondroma, deflected septum and adenoid growth in the vault and fauces causing irritation and pressure symptoms, congestion, and producing irritation and inflammation by continuity, contiguity and reflex imitation in distant organs and nerves; it is very easy to explain why mental aberration should attend long continued disease of the upper air passages, as well as other sequelæ.

About, or less than, a decade ago, the rhinologist was considered to exist only in name—a myth, and not entitled to a foothold in the profession; but to-day, rhinology has become one of the chief corner-stones of the temple of medicine and surgery. It is built on physiological, histological and pathological rocks; upon these we, the rhinologists, have builded our church. The gates of doubt, charlatanism, ridicule and infidelity shall no longer prevail, and now, in this enlightened day, "*he who doubts is damned already*." To the general practitioner we say: Give the stomach, liver, heart and alimentary canal and chest organs a rest, and come up higher and see the light turned on, not through a glass darkly, but see new realms, diseases and pathological lesions, for old things have passed away. Behold a new creation!

To the gynecologists and genito-urinary surgeons the rhinologists are ready to say, Through reflexes and neuroses we meet you, not only halfway, but all the way. The intra-nasal tissue is glandular, erectile, and has various nerves, blood and lymph channels ramifying it like the utero-genital organs, and on proper provocation, sends out reflex irritations and congestions to the spinal cord, brain and other remote organs.

To the alienists we say, Look into the naso-pharyngeal chambers, and often a cause for insanity can be found. To the oculist, aurist, dentist: You must bow in reverence to rhinology, for your work is very often *nil* unless you pay your respects to the rhinologist, for often he only can solve your difficulties, and cure your patients. The more frequently you consult him, the better it will be for humanity. To the surgeon we say: You are indispensable.

The successful rhinologist, like the ideal gynecologist, must, from necessity, be a skilful and conservative surgeon.

Rhinology is a haven in which many "mortals" find rest, ease, surcease of sorrow, health, peace, joy and long life.

INFECTIOUS PSEUDO-MEMBRANOUS FOLLICULOUS TONSILLITIS AND PHARYNGITIS.

Read in the Section of Laryngology and Otology, at the Forty-third Annual Meeting of the American Medical Association, held at Detroit, Mich., June, 1892.

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Repeated confirmation of the discovery of the specific bacillus of true diphtheria has stimulated renewed clinical as well as bacteriological study of other pseudo-membranous inflammations of the tonsils, pharynx and nose, so that our literature of the