





HOMCEOPATHIC TREATMENT

OF

DIPHTHERIA.

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EDITOR N. A. JOURNAL OF HOMEOPATHY.



NEW - YORK :

WILLIAM RADDE, 300 BROADWAY,

Philadelphia: Wm. Radde, 635 Arch-St.—Boston: Otis Clapp.—St. Louis: R. & H. Luytiès. Chicago: Halsey & King.—Cincinnati: J. M. Parks.—Cleveland: John B. Hall. London, Eng.: Balliere, 219 Regent-St.—Manchester: H. Turner. Annex WCC S671 h 1861

Film no. 10395, item 7

THE HOMEOPATHIC

TREATMENT OF DIPHTHERIA.

BY FREDERICK G. SNELLING, M.D., OF NEW-YORK.

DIPHTHERIA.—Diphthérite.—Angina Pellicularis.—Angine Couenneuse.—Pharyngite Couenneuse.—Diphthérite de Bretonneau.—Garotillo.—Charbon Angineux.—Angine Maligne.

HISTORY OF THE DISEASE.—On consulting the best authorities, it would appear that diphtheria is not a new disease, but that, on the contrary, many severe epidemics of it are on record. In describing it, however, the older authors have all, more or less, fallen into the natural error of confounding with it some of the other forms of malignant angina. Bretonneau is convinced of its great antiquity, and identifies the "malum Egyptiacum," so carefully described by Aretæus, with diphtheria. Very certainly Aretæus, in his account, speaks of it as a disease in which the tonsils are covered with "quodam concreto humore albo," and which "linguam etiam occupat, et gingivas." Macrobius mentions a similar epidemic in Rome (A. D. 330), and it appeared in Holland in 1337, and in Paris in 1576. It raged again in 1618 in Naples, and the writers of the seventeenth century especially directed attention to the symptoms accompanying the extension of the disease from the pharynx to the air-passages. Ghisi, in 1740, indicated the peculiarity of the pseudo-membranous concretion which lines the air-passages, but Dr. Bard, of New-York, was the first author (1771) who distinctly described the formation of a false membrane similar to that of croup, and he also speaks of cases in which there was angina alone, angina with laryngitis, and laryngitis alone. He carefully distinguished it from angina-gangrenosa, and scarlatinal angina.

The first connected and practical researches upon the nature of diphtheria were made by Bretonneau, in 1822–23. Since that time the disease has firmly established itself in France, more lately in England, and has now appeared here in the United States. Besides Bretonneau, it has also been carefully studied by Trousseau, Guersant, Isambert, Chomel, Andral,

Rilliet, Barthez, Bouchut, Empis, &c., and also by many

English writers.

It was in the rear of the Legion of La Vendée that the disease first showed itself, on its introduction into Tours, in 1826. The epidemic broke out among the soldiers of the barracks, and from them spread to the surrounding quarters. Gingival diphtheria was then its most common form among the soldiery, the air-passages being rarely affected. The proportion of those affected with the gingival form, to those affected with the larryngeal form, was nine to one.

From Tours it spread through the southern littoral districts of France, until 1828; after which we do not hear so much of it, until the Paris and Boulogne epidemics of 1835, which were soon succeeded by the one which has passed over England within the last two years. It appeared in this country a few years since, and a severe epidemic of it has also visited San

Francisco.

Symptoms.—A capital description of the invasion and symptoms of diphtheria has been given by Dr. Ranking, of Norwich, and to it we are indebted for a part of the following description. In some cases the child-for children are, in a majority of cases, the subjects of it-appears to ail so little at the outset that the parents will with difficulty be persuaded of the gravity of the attack. The patient may, in fact, be running about, and, beyond some slight difficulty in swallowing, making little complaint. In other cases the child, after rigors and vomiting, is prostrated at once, and the lapse of a few hours is sufficient to make it manifest that the system has succumbed to some overwhelming morbific influence. either case the earliest complaint is apt to be of the throat, although I have seen cases where the fever was the earliest sign of anything amiss, and the throat was not complained of until some hours after. On inspection it displays a condition varying in appearance according to the stage of the attack and its actual severity. Sometimes the tonsils, soft palate, and uvula are seen to be simply red and ædematous, and, on a casual view, nothing more would be noticed, so that the disease might be set down simply as a case of tonsillitis. But, even in a few hours after the first feeling of uneasiness, a careful examination of the fauces will disclose one or more white patches on the tonsil, not larger, perhaps, than a split pea, but enough to warn any one who has previously seen the disease that he has to arm himself for a conflict which the inexperienced would scarcely anticipate. This apparently insignificant patch or patches is, in fact, the diagnostic sign of the malady, and, unless speedily cheeked by appropriate treatment, is destined to spread over the whole soft palate, and, too often, to invade with fatal effect the trachea and larger bronchial tubes.

In those cases in which the disease has made its assault with greater violence, and which are marked by more intense general distress, the throat will likewise be found tumid and vascular; but the vascularity will be of a more dusky character, like that of erysipelas, and the diphtheritic exudation will, even at this early period, be found to have invaded the greater part of the tonsils and soft palate. In fact, the entire fauces may be invested with the membrane in twelve hours from the first complaint. A very brief period more, and a serious increase has taken place in all the symptoms. The system has now taken the alarm, and there will be intense heat of skin, with excitement of the pulse, or, in cases of still greater severity, collapse and a cold surface. The act of deglutition, which, at first, was but slightly embarrassed, now becomes difficult and painful, so much so that the child refuses to make the attempt, either with food or physic, and this, in fact, constitutes one of the main difficulties of the treatment. If the patient, by force or persuasion, be induced to swallow under these circumstances, the scene is often a fearful one, and the child gasps for breath, while the food is violently ejected from the nostrils and mouth. A glass tube, in these instances, inserted far back into the pharynx, will be found of signal service in enabling the patient to swallow.

The case has now assumed a most formidable aspect: the child is enfeebled by its inability to take food, and harassed by the necessary attempts to swallow the saliva and other secretions. The false membrane has invaded every visible portion of the pharynx, which appears as if coated with dirty wash-leather, and discolored with the blood and sanies which exude from the congested vessels beneath it. The breath has for some time been offensive, but is now horribly so, so that the most tender mother can hardly nurse her child without feelings of repulsion. The glands of the neck, externally, are, in many cases, enlarged and tender, and the surrounding cel-

lular tissue infiltrated, thus adding materially to the embarrassment of deglutition.

In a certain proportion of cases, we are at this time warned, by increased difficulty of breathing, attended with a peculiar croupy sound, that the diphtheritic membrane has spread to the larynx and trachea, producing a state of things which may be regarded as almost inevitably fatal, so few have been the recoveries under such circumstances. Symptoms of asphyxia soon show themselves; the countenance becomes livid and ghastly; the skin cold and covered with petechiæ; and yet the little sufferer struggles on, hours after the pulse has ceased, fighting for breath, imploring to be left to die, and, in its distressing restlessness, violently throwing itself about until within an hour of its death.

The above description applies to the steady progress of the disease in the severest cases, and it may be taken as typical of diphtheria in its most aggravated virulence; but, in many cases, perhaps equally fatal in the end, the symptoms do not explode with such violence, or reach their acme with such rapidity. On the contrary, in some instances, the throat-symptoms, never very pronounced, appear to be readily amenable to treatment, and the child seems again, in a few days, to be exempt from immediate danger. The same mildness of symptoms may, however, exist in other cases in which the amendment is fallacious, and in which the patient, to all appearance free from risk, is suddenly seized with croupy breathing, and is, in a few hours, beyond hope. In alluding to these deceptive cases a practitioner says: "I have seen them die in four hours from such sudden invasions; they may linger five or six days, with intermissions of eight or twelve hours; the croupy breathing would suddenly cease; the little sufferer would sit up, smile, eat, drink, and amuse himself. The delighted parents would point to him in admiration of your skill. The sonorous breathing, which told so plainly that death was there, had disappeared; and, off your guard, you, in general, pronounce him safe. A few hours suffices to turn this joy into mourning, and the stridulous breathing returns, to end only with life."

It must not, however, be imagined that diphtheria always declares itself with such fatal virulence. Happily, it is, in numerous instances, a far less formidable disease, either when mild from its commencement, or met by prompt medical treat-

ment at the outset. The membrane is stayed in its fearful progress in these cases, and gradually exfoliates and is expectorated, while the subjacent mucous membrane begins to resume its natural color and appearance, at the same time that the sympathetic glandular swellings subside, and the pulse improves. But it must be remembered that these favorable changes are often slow and uncertain, even when fairly established, and many weeks sometimes elapse before the patient can be pronounced convalescent.

Before quitting the symptomatology of diphtheria, it may be well to remark that the urine has been stated to be albuminous in severe cases. If it be so, it but adds another, and the strongest proof of the grave extent to which the system is involved, and the frightful manner in which the poison strikes at the very foundations of life. When this condition is present, it must, of course, always add to the unfavorableness of

our prognosis.

In different seasons it may follow different habitudes; and in one we find it inclined to invade the nasal fossæ, while another epidemic is characterized by a prevalence of croupal diphtheria. In those cases which I myself have had an opportunity of treating, both these forms have been exemplified; in one, the case of an adult, the tendency was very great to invade the larynx and trachea, and the attack was one of much severity and slow in convalescing. In another, the case of a child, the tendency was markedly towards the nasal fossæ, and the disease proved much milder in every way than I had dared to hope, and the patient made a rapid and satisfactory recovery. Whether the difference in the severity of these two cases was due to the different direction in which it extended, I have not yet seen a sufficient number of cases to enable me to say; but the idea, at least, appears to me to be a reasonable one, since it is conceded on all hands that one of the most formidable difficulties which beset the practitioner, in the way of treatment, is the impossibility of deglutition.

The sequelæ of the disease show how deep a hold it takes upon the vitality of the system. In a case, which I have under treatment at present, the debility and nervous depression is extreme, although convalescence has been some six weeks established, and certainly I did not regard the case as a severe one at the time. It seems temporarily to have completely destroyed the vigor and elasticity of the nervous sys-

tem. In another case there was paralysis of the upper extremities, lasting for some months; and Dr. Gray, of this city, has lately mentioned to me a case in which complete hmiplegia ensued. I suggested to him the endermic use of Strychnine, but whether it will prove efficacious or not is still sub judice.

It should never be lost sight of that diphtheria may arise in the course of, and complicate a great variety of diseases; and this is especially true when an epidemic of diphtheria is prevailing. It may then impress the diphtheritic character, I am inclined to believe, upon almost any of the different throat affections, whether croupal, pharyngeal, tonsillary, or scarlatinal.

Pathology.—All the accounts which we have of diphtheria concur in pointing to the false membrane as the great feature of the disease. This is developed after a variable amount of constitutional disturbance, and more or less fever of an adynamic type. The local affection may, however, precede the fever. Its site is mainly confined to the fauces and upper part of the respiratory tract, and, upon examination, the soft palate, the back of the pharynx, and the tonsils will be seen to be covered with an ash-colored, or white, or yellow, or brownish leathery false membrane, of a fetid odor, possibly more or less torn up, and detached by the repeated manipulations which may have been employed. Below this, the mucous surface is livid, possibly exceriated; but, unless from the use of caustic, does not show either ulceration or sloughing, as in those forms of angina known as "ulcerated" or putrid sore throat.

Wherever the diphtheritic membrane is detached, from beneath its edges a bloody and fetid sanies will be seen to exude, and in some cases, according to Bretonneau, little filaments may be observed, running from its under surface to the mucous crypts of the tonsils. The membrane itself, in some cases, extends to the upper part of the esophagus, and may be traced into the posterior nares. In addition to this, it is found to have invested the glottis, and, in fatal cases, to have traversed the entire larvnx and trachea, and even to have reached the larger bronchial tubes, forming a cast of these tubes, and more or less completely impeding respiration. These cases, as has been said, are almost invariably fatal. But the lesions after death are not entirely confined to the parts above mentioned; in those cases in which there has been much external swelling the submaxillary glands will be found engorged, and the surrounding cellular tissue infiltrated with a sanious pus.

The physical appearance of the false membrane itself, likewise claims some special attention. When closely examined, by the unaided sight, it has all the character of a fibro-plastic membrane, similar to that thrown out in true inflammatory croup: but it is softer, soddened, as it were, by the sanious matter which exudes around and from beneath it. In the larynx it is much whiter in color, and would scarcely, if at all, be distinguished from the croupal membranes. In fact, my own understanding of its character would be this-viz.: That, when it invades the larvnx and trachea, it becomes true croup, or the same thing; and that, while in the pharynx, it is a croup of the pharynx. Under the microscope it exhibits the ordinary elements of such structures, as fibrils and corpuscles; but, in addition to this, some authors have associated with the disease the presence of a parasitic fungus, which fixes itself upon the mucous membrane of the fauces, and is supposed to be the starting-point of that vascular condition which subsequently gives rise to the exudation.

In true diphtheria (and this may be regarded as a pathognomonic test) any cutaneous surface, deprived of its epidermis, may take on the diphtheritic action, and become covered with false membrane. Thus, blistered surfaces are especially apt to become affected in this way, and it has been known to invade sores accidentally brought in contact with the diphtheritic matter. Scheenlein places the disease among the neurophlogoses, or inflammationes toxica, in company with stomacace, noma, gangrenous angina, gastromalacia, bronchitis-maligna, gangrene of the lungs, metritis-septica, malignant dysentery, anthrax, pustule-maligne, &c. By a neurophlogosis Scheenlein understands a species of venous, somewhat typhoid, or low grade of inflammation, attended with blood-poisoning and marked nervous prostration. Rokitansky places it among the pseudo-croupous, or malignant-croupous, or typhoid-croupous affections, in company with malignant dysentery, metritis-septica, cancrum-oris, &c.; in which diseases he supposes there is a putrid or typhoid blood-poisoning, attended with a low grade of fever, and croupous exudations, which differ widely from the pure, frank, inflammatory, and plastic-membranous inflammations, such as attend pleurisy, peritonitis, and pericarditis, with exudation of purely inflammatory coagulable lymph.

Course, Duration, and Termination.—The duration of this disease is extremely various. Mr. Ranking has seen it fatal in

forty-eight hours from the first seizure; while, on the other hand, it may continue for two weeks or more, and prove fatal long after all active symptoms have subsided, either by pure exhaustion, or by the supervention of other lesions. Among these, paralysis of the muscles of deglutition has been observed, as well as a state approaching to more or less complete hemiplegia. In favorable cases, improvement may be looked for on the fourth or fifth day, and is indicated by the expectoration of membranous shreds, which have become detached from the fauces, a general improvement of aspect, and increased facility of swallowing. Even when the symptoms have been decidedly croupal, the false membranes have, in some rare instances, been expectorated, with immediate relief to the urgent difficulty of breathing.

INFECTION.—There can be little doubt of its contagious and infectious nature, though it does not act with the same unerring certainty as does the contagion of some diseases, and its infecting distance is less. Arising, in the first place, from a specific miasm, it becomes capable of transmission from one to another, without any recurrence to the original source of the poison. Some surgeons have been seized after a portion of saliva or false membrane had fallen upon the lips or mucous membrane of the nose, while engaged in cauterizations, and have died from the effects of it; while, in other cases, this susceptibility did not seem to exist. But, when once the disease has arisen and become epidemic, even those living at a distance (as is the case with many of the zymotic diseases), and under conditions the most favorable to health, may yet become its victims, and, under these circumstances, it spares neither age, sex, nor profession. I have known a child from the country, merely carried through one street in Albany, a short time since, who sickened with the disease in six hours, and died within a few days.

Causes.—The study of its causes has been particularly elaborated by the Lancet Sanitary Commission, as well as by the French investigators, and it seems to be universally conceded that, although *leiphernal** influences may greatly assist in its propagation, its original cause lies in the presence of decomposing animal *excreta*, and the vicinity of uncleansed *latrinæ* inseparable from a metropolis. It is quite unnecessary to go into detail, and describe all the steps by which this conclusion was arrived at. Suffice it to say that not a doubt now remains

^{*} Ai φερνεο, to be poor.

that it often is the result of insufficient drainage, from sewers and water-closets, and the impregnation of the air, and more especially of the drinking-water, with noxious animal matters. Prophylactic measures should be addressed to those matters in preference to the system of the patient.

TREATMENT.—When first called to a case of diphtheria the condition of the patient should be carefully marked. If, as is often the case in the milder forms, there be sharp fever, heat of skin, rapid and full pulse, dry tongue, offensive breath, highly injected or dusky-red fauces, with a patch or two of washleather exudation upon one of the tonsils or the posterior paries of the pharynx, Aconite should be given at once, and, generally, the tincture of the root is preferable. Veratrum-viride I have not felt disposed to use, as it seems merely to lower the pulse without specifically influencing the febrile action, as does Aconite, and, therefore, it would rather seem to favor the prevailing tendency of the disease towards low fever and adynamia. As soon as the acute febrile symptoms have become reduced in severity the dose of Aconite should be reduced to a minimum, and the patient put immediately upon one of the prominent croupous remedies, according to the indications. Generally, in the class of cases I am now describing, the Kali-bromidum will be found the most successful. Bromine, as is well known, causes inflammation of the fauces with an exudation of plastic lymph, and its pathogenesis seems to indicate that it is more adapted to the cases characterized by a febrile and sthenic condition than to those of an advnamic type. Therefore I generally give it the preference when there is quickness of the pulse, fever, and heat of the skin at the outset. But it will be necessary to watch the patient most closely, and to carefully discriminate as to the turning point when support and stimulation become necessary. As one of the essential characteristics of the disease is depression and nervous prostration, as soon as the initiatory febrile disturbance passes off there is no impropriety in at once adopting a sustaining regimen. A great deal depends upon the way in which this is done, and upon the digestibility of the stimulus used. The stomach, of course, as we may see by the dry and brown tongue, shares in the extreme depression of the system, and it would never do to choose food or stimulus hap-hazard, and administer it blindly, simply because we know that the patient wants support. We should have things well and carefully prepared from the best materials, seasoned palatably to the sick person, and administered fresh and at suitable intervals. Beef tea, of course, stands first as food, but it is not once in twenty times that it is properly prepared. The raw beef should be cut into pieces about an inch square, or less, and put into a wide-mouthed stone or glass jar, with a suitable quantity of salt. The mouth is then covered with a piece of muslin tied over it, and the jar placed upright in a kettle of hot water, and simmered gently over the fire until the juice of the beef is extracted. Care must be taken to prevent the water from getting into the beef, and the lid of the kettle should be left off. This may be seasoned with a little pepper, if the patient likes it, and administered warm, or at least not cold or tepid. I generally allow them to have as much as they please of it, and if they are too sick to care for any thing, I direct the nurse to give two or three spoonfuls every hour or so, as if it were medicine. The soft parts of raw oysters are, also, a capital substitute or change for the beef tea, and the stomach will dispose of them almost always with little or no difficulty. If the act of chewing is painful they may allow them to glide down the throat without it. Ice-cream may sometimes be grateful. I remember one patient who could tolerate nothing else.

If the case is one of extreme depression, without febrile reaction, Aconite, if given at all, should be administered in very minute doses, and, in addition, Acid.-muriat.; and Kali-chlor. should be given at short intervals, and in appreciable doses. The Kali-chlor. is especially indicated if there be extreme depression, imperfect vitalization of the blood, a septic condition generally, and a tendency to stupor. It is a remedy of great power in diseases of debility; it contains a large amount of oxygen, in an assimilable form, and would seem especially adapted to those malignant cases where the poisoned and carbonized blood is laboring, slowly and painfully, through the gorged and turgid vessels of the brain. I should recommend it in appreciable doses. Here, also, alcoholic stimulus becomes necessary, and it should be graduated to suit the age and constitution of the patient and the severity of the disease. For children, wine-whey is the best. It should be made by scalding the milk over the fire for a few moments, and then adding enough wine to separate the curd. About a wineglassful of wine to a pint of milk is generally the best proportion; but wine varies in its strength, and milk sometimes curdles quicker at one time than at another. After adding the wine it should be stirred once, and then allowed to stand (by the side of the fire); if the curd does not separate in a short time a little more wine must be added. This may be administered as often as the patient will take it. Port wine, champagne, and claret are all good stimulants, and often ale or porter are better than any others, and fresh brewers' yeast may also be used. Eggs, beaten up with brandy, hot water, and sugar; beef tea, mixed with port wine, or port wine and arrow root, or sago are all excellent. Milk punch made with rum or brandy is also a capital mode of administering stimulus and nutriment at the same time. If the patient cannot swallow, nutritive injections must be given from the commencement, and not abandoned until great exhaustion ensues.

Along with these prominent remedies which I have named, others should be used in alternation, or substituted for them according to the special indications, as given further on.

The true croupous remedies, or those which prominently produce the exudation of false membranes, are Bromine, Bichromate of Potash, Ammonium-causticum, Muriate tincture of Iron, Muriatic-acid, Arsenicum, Bromide of Potash, &c.

As early as 1846—viz., fifteen years ago—Dr. Peters was the first to call the attention of the school to the truly homeopathic remedies against membranous croupous affections. See Homeopathic Examiner, new series, Vol. I., p. 191. Ammonium-causticum causes reddening of the nasal mucous membrane, which is coated with an albuminous layer; reddening of the posterior surface of the epiglottis and of the entrance of the rima-glottidis, which are covered with a false membrane; great redness of the whole trachea and bronchi, which are coated here and there with membranous patches. After it was thus pointed out to the profession Ammonia became a favorite remedy in croupal affections by the late Dr. Curtis, of this city. It may be used in diphtheria, when the prostration and exhaustion are very great, and the disease tends to extend down into the larynx, trachea, and air-passages.

Bromine was suggested at the same time; for it causes inflammation, of a transudative character, in the larynx and trachea, with commencing formation of false membranes; violent inflammation of the fauces and coophagus, and coating of them with plastic lymph; intense inflammation of the

larynx and trachea, with exudation of plastic lymph, in such abundance as quite to block up the air-passages. This, I think, is rather more applicable to the inflammatory cases tending towards the larynx with sharp fever at the outset. On the suggestion of Dr. Peters, this also became a favorite remedy with Dr. Curtis, who recommended it to Dr. Ball, of this city, who aided much in the practical introduction of this remedy. Dr. Belcher has lately suggested the Bromide of Potash.

The celebrated allopathic physician, Bretonneau, was the first to introduce the local use of *Muriatic-acid* against diphtheria; he states expressly that, if it be applied too strong or too frequently, it will produce an ulceration which will become covered with a white exudation and heals slowly; so that the physician ought to be well acquainted with the possibility of this accident, in order not to mistake a similar ulcer for the effect of the disease. All the mineral acids are more or less homœopathic to diphtheria, but are most useful when the disease bears a typhoid or septic character.

Dr. Kidd thinks that the essential pathogenetic action of Iodine comes nearest of all remedies to the special characteristics of diphtheria, in its constitutional and local manifestations; he also regards it as the best of all remedies in croup, aphthæ, glandular swellings, and of more value than Chlorine as a disinfectant in throat diseases. Iodine is especially indicated in the early stage, when there is much glandular irritation, and the disease threatens to extend to the larynx. To produce a prompt and perfect influence over the disease Dr. Kidd thinks it is best to administer it, "similia similibus curantur," in the mode of entrance of the disease itself—viz., by inhalation; or the Iodine, in substance or in tincture, may be placed in an open vessel near the patient, as it is thus slowly evaporated, and mixes with the air in a highly divided but quickly acting form. Its internal use should be in frequent repetitions, as few diseases require more prompt and vigorous treatment than diphtheria in its severe forms. Dr. Kidd thinks, if Hahnemann were alive to prescribe it, he would be as likely to advise the lowest and strongest dilutions, in substantial doses, frequently repeated, as when he recommended the strongest solution of Camphor, in frequently repeated doses, in cholera.

Muriatic-acid, he assumes, comes next to Iodine in the closeness of its pathogenesis to diphtheria, and asserts that it is in-

contestably of the utmost value in the disease, especially after the action of Iodine has lessened the glandular irritation. He uses it by inhalation, gargling, and swallowing, as any medical man, who has seen much of the severe forms of diphtheria, will only be too glad to bring the appropriate medicine into action in every way that it is possible to do so, in order

to arrest the disease speedily.

In the last stage of the disease Dr. Kidd thinks Arsenicum is closely indicated, more especially when the swelling of the neck and throat is ædematous, as it often is, and when the odor from the throat is putrid, with typhoid exhaustion. He also says that Ammonium-causticum deserves a most careful trial in the latter stages, while China or Quinin-sulph. may be advantageously alternated with the Arsenicum. Dr. Kidd also relates cures effected with Chlorate of Potash and Nitricacid.

Dr. Madden's first introduction to the disease, in the autumn of 1857, was most discouraging; for, of six persons attacked, he only saw one recover; but a closer acquaintance with the disease, and a less bigoted treatment, were followed by very gratifying results. Many more persons have complained of their throats the last year, and he has examined more cases than during any five years of previous practice. He, like the

rest of us, has met with the following varieties:

1. Common catarrhal angina occurred in unusual abundance, but generally of the follicular variety, marked by the presence of a large number of elevated follicles or tubercles, somewhat similar in appearance to the large flat papillæ which occur normally on the root of the tongue; they presented themselves in considerable number over the arches of the palate, the velum, and posterior wall of the pharynx. Baryta-carbonica and muriatica and Antimonium-sulphuretum quickly cure this form. This variety has long been very common in the United States.

2. Next, in point of frequency, was acute sensibility, with an unusual amount of swelling of the glands, the mucous membrane being of a dark or dull red, and rapidly passing into suppuration or ulceration; when the ulcers appeared early, were clean from the first, and not surrounded with a dark fiery-red line, the cases proved very manageable, and ran their course in two or three days. Many very severe throats have a great tendency to get well on the fourth day. Dr. Madden found Biniodide of Mercury and Kali-bichrom. invaluable.

- 3. The third set of cases commenced like the second, but the ulcerated surface became speedily covered with a whitish curdy deposit, very similar to the curdy part of a suppurating scrofulous gland. In these cases some of the patients were scarcely ill at all, others had high fever, with more or less delirium, while others were very low and physically depressed. But all these cases recovered favorably. This latter variety is very common in New-York.
- 4. The next type was a much more serious disease, for the whole soft palate was much swollen, ædematous, and pale red, while the mucous surface was smooth and glazed, the tongue thickly furred, the difficulty of swallowing great, and the whole attended with a marked adynamic fever. These cases yielded with difficulty to treatment, and convalescence was slow. Aconite and Veratrum-viride in the first stage, aided by an occasional dose of Mercurius, Tartar-emetic, followed by Cantharides or Rhus, will generally carry the case through in four days; an occasional dose of Morphine adds much to the comfort of the patient. But Dr. Madden recommends Apis and Rhus, Bromine and Kali-bichrom., or Merc.-biniod.

5. True diphtheria, characterized by the *peculiar wash-leather deposit*, extremely fetid exhalation from the mouth, deep phagedenic ulceration below and around the deposit, and

profound general adynamia.

All these cases Dr. Madden treats with the Muriate tincture of Iron. As soon as the deposit begins to appear he directs the tonsils and velum to be painted over with pure glycerine, four times daily, and about every twelve hours he applies, in person, the pure tincture of Muriate of Iron, with a camel's hair brush, to the whole surface affected. Internally, he gives the Biniodide of Mercury and Bichromate of Potash, and, in the event of the prostration being great, he gives Arsenicum and Carb.-ammonia. Of nutriment he gives as much as possible. Under this treatment the swelling and redness of the mucous membrane steadily subsides; the excessive fetor of the breath rapidly decreases; there is less difficulty of swallowing; and the deposit shrivels up, becomes loose and erected at the edges, and soon falls off. He has not yet seen a single case which resisted this treatment, and sincerely trusts that his medical brethren will give the plan a fair trial and meet with the same success.

