CASE
OF
CYNANCHE LARYNGEA,
IN WHICH
TRACHEOTOMY AND MERCURY
WERE SUCCESSFULLY EMPLOYED:
WITH REMARKS.

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COMMUNICATED BY

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PREVIOUS to the institution of the Medical and Chirurgical Society of London, the affections of the lining membrane of the larynx, as contradistinguished from those of the trachea, and constituting in themselves severe and highly dangerous diseases, were but little known, and less understood. A few detached cases, indeed, had appeared in periodical works, wherein the symptoms of this disease were marked with sufficient accuracy, and the appearances on dissection after death related

with fidelity : but with the exception of the several papers on this subject to be found in the Transactions of the Society, no publications have ever appeared, in which attempts were made to ascertain the distinctive characters between this and other affections of the adjacent parts, or to establish any rational mode of practice, founded on just pathological principles. Under these circumstances, I am induced to offer the following case, with the few hasty remarks that accompany it, to the consideration of the society, with a view of corroborating the observations that have already been made on the nature and symptoms of the disease, and of adding to the numerous and valuable cases that have been published by the Society to elucidate so interesting a subject.

On entering the Meath Hospital on the morning of the 2d of February, I was informed that a person, named Michael O'Neil, had come to the institution, labouring under excessive difficulty of breathing, and was waiting for assistance : indeed it required little discrimination to point out the nature of the case, for, at the distance of several yards, I could distinctly hear the sibilous whistling noise peculiar to the breathing of persons suffering from cynanche laryngea. Without delay, therefore, I commenced an examination of the case.

He appeared to be a man about thirty years of age, strong and well formed, but with a slight

stoop. His face was pale and swollen ; his lips livid ; he sat with his mouth closed, but his nostrils widely extended ; his eyes seemed protruded and starting from their sockets, but at the same time the conjunctiva appeared very white, and covered with a watery suffusion. There was altogether an expression of indescribable anxiety in his countenance. His pulse was hurried, but not irregular ; his breathing very laborious ; he made two, three, or even more attempts at inspiration for one expiration, and his muscular heavings and convulsive struggles for breath were truly painful to behold. He breathed with a peculiar hissing or whistling sound, giving a distinct idea of the forcible passage of air through a contracted aperture, and he had almost lost his voice, the utmost endeavour at speech amounting only to an indistinct whisper. On being questioned as to the seat of his uneasiness, he pointed to the situation of the larynx, and even appeared to feel pain on this part being pressed externally. On account of the great difficulty of breathing, it was impossible to place the patient in a position such as would allow an examination of the state of the fauces ; but what could be seen exhibited no mark whatever of the existence of inflammation, and it afterwards appeared, from the patient's own account of himself, that at no time did he experience the smallest impediment to deglutition.

It was extremely difficult, from the patient's

inability to speak, to gain any information as to the duration of the disease. At first I was led to understand that it had occurred only that morning; and afterwards, he seemed to say he had been ill for five weeks; so, not knowing what to believe, and being guided chiefly by the urgency of the symptoms, I immediately ordered that he should have a bolus containing ten grains of the submuriate of mercury, and that a large quantity of blood should be taken from the arm. The veins of both arms were opened at once, and between thirty and forty ounces of blood were abstracted, whilst the patient sat erect: yet to the moment before the flow of blood was stopped, he exhibited scarcely a symptom of weakness, and the difficulty of breathing was not in the smallest degree alleviated. Feeling now that any other mode of treatment directed to the removal of inflammation would afford but a slender prospect of relief, and that, under existing circumstances, the life of the patient could not endure many hours, it was resolved that the operation of tracheotomy should be performed with as little delay as possible.

In about two hours afterwards, (a delay which unavoidable circumstances rendered necessary,) I returned to the hospital to perform the operation, and found the patient labouring under symptoms peculiarly unfavourable, considering so short an interval of time had elapsed. There was scarcely a pulse to be felt at the wrist; his extremities

were cold ; he lay on his back, almost insensible, and seemed sinking with amazing rapidity. There was now not a moment to be lost ; and with a view of disturbing the patient as little as possible, I resolved that he should not be carried from the ward, and having had the bed on which he lay removed to such a position as afforded the most favourable light, I performed the operation, assisted by my friends Messrs R. MacNamara, and T. Roney.

An incision was made nearly three inches in length, commencing a little above the cricoid cartilage, and continued towards the sternum, dividing the skin and cellular substance down to the muscles. At this period of the operation two small lymphatic glands were exposed, which protruded forwards, and interrupting the view of the parts, were cut away. The incision was then carried deeper, still preserving the exact central line of the neck, until a fascia covering the trachea was exposed ; and here lay the greatest difficulty of the operation. The trachea was moved upwards and downwards behind this fascia, according to the patient's exertions to breathe, and it was impossible to open it satisfactorily until this membrane was completely removed *, a proceeding that

* This membrane, which is mentioned as a fascia, lies behind the sternothyroideus muscle. between it and the trachea, but with the latter it has no connexion. It is really the posterior part of the

occupied some time : it was however effected ; the trachea was laid bare in extent about three-fourths of an inch, and a circular portion removed, the diameter of which might have been nearly one-fourth of an inch. At the instant the bistoury was passed into the trachea, and the external air admitted, the patient seemed to experience an almost immediate change. He had before lain perfectly quiet, had scarcely winced under the knife, and appeared nearly insensible ; he now raised himself suddenly in the bed, and coughed with some violence. In a moment, however, he laid down again, and the operation was completed ; a silver tube was introduced into the aperture, and retained there by tapes passed through the rings attached to it. It is impossible to conceive any thing more instantaneous, or more complete, than the relief afforded by the operation. He now breathed freely through the wound, the convulsive muscular heavings ceased altogether, and the acts of inspiration and expiration were performed in regular and healthy alternations. I regret that I did not examine the state of the pulse after the operation, to ascertain if the restoration of respiration had any effect in altering its character.

It is to be remarked that all the steps of this

the cellular sheath of this muscle, and having no attachment to the trachea, that tube can move freely behind it, upwards and downwards, according to the patient's efforts for breath.

operation occupied but a few minutes, and though I believe the central slip connecting the two lobes of the thyroid gland (which in this instance must have been very small) was completely divided, there was scarcely any hæmorrhage; there was some from the superficial veins, but in all it did not amount to more than two or three ounces *.

The patient's bed was now rolled back into its proper place; and, as he seemed greatly exhausted, warm wine and water was administered; his feet were wrapped in flannel; warm bricks were applied to them; and having prescribed another bolus containing ten grains of the submuriate of mercury, I left him under the care of two intelligent pupils.

On visiting the patient in the evening, I found he had had some sleep during the day, and was

* The small quantity of blood lost by this patient should rather be considered as a fortunate circumstance attending this case, than one so frequently to be met with, as to warrant an operator's proceeding without caution. In two subjects that I dissected since this operation was performed, I found the central slip of the thyroid gland nearly an inch in breadth, and so full of small inosculating arteries, as would for a time have interrupted the operation by their bleeding. In both these subjects there was but one large thyroid vein, running precisely along the centre of the trachea, and which could not fail to be wounded by an incautious operator, but which certainly might easily be avoided by a careful dissection. This distribution of the vein is irregular, but I have, notwithstanding, seen it so frequently in the dead subject, that the possibility of its existence cannot be too strongly impressed on any person about to perform the operation of tracheotomy.

lying quietly, but extremely weak; his breathing was regular through the wound; his pulse about 110, but so small as scarcely to be felt under the finger. He had expectorated a small quantity of mucus through the canula. On being questioned as to his feelings, he wrote on a slate that he was wonderfully relieved. He now got ten grains more of the submuriate of mercury, making in all half a drachm in the course of this day; and a purgative enema was directed to be administered in a short time, if the bowels were not previously freed.

February 3. (2d day.) He had slept pretty well during the night, and had five or six stools, after the administration of the enema; but towards morning respiration became again in some degree impeded, and when I visited him he breathed with nearly the same sibilous hissing noise as before the operation. On examination, I found the tube had slipped out, and the size of the opening into the trachea was greatly diminished, from its edges being covered with inspissated mucus; this was cleared away with the end of a probe, and as the canula was found too short, a longer one was introduced. The patient now felt comparatively comfortable, and expressed his sense of relief by signs. Pulse 110, but still extremely feeble, and his extremities had not yet recovered their natural warmth. His allowance of warm wine and water was therefore continued, and he had half a drachm

of the submuriate of mercury in three separate divided doses on this day also.

February 4. (3d day.) He had slept tolerably well the preceding night, but had one or two attacks of convulsive breathing from the wound being obstructed. Pulse 100, something fuller and soft; his bowels were free, but his breathing still obstructed by inspissated mucus, and he was sometimes obliged to resort to the natural opening of the larynx, and to use strong muscular exertions in inspiration, although in a far minor degree to what occurred previous to the operation. The wound required to be kept constantly clean in order to prevent these attacks of obstructed respiration, and the patient was greatly teased with the quantity of mucus that accumulated in the throat, and which he was obliged to expel through the wound. The expression of his countenance was much altered. He had lost all the wildness and anxiety that formerly characterized it, and the livid, swollen appearance of the cheeks and lips had been completely removed. He still remained very weak, and had warm wine and water as usual. He took on this day a scruple of the submuriate of mercury in two equally divided doses.

February 5. (4th day.) Had rested well, and had four evacuations from his bowels; pulse 100, and soft; appetite good; he asked for food, but could

not be indulged to the extent of his wishes. His mouth was sore from the use of mercury, and there was strong mercurial foetor from it. He breathed partly through the wound, and partly through the rima glottidis, but without much noise, or any muscular exertion. On placing a finger on the wound so as to close the artificial opening, the amendment in his breathing became very apparent, and he could make a good attempt to speak. He had no cough, and in consequence of the mercury taking effect on his mouth, the large quantity was laid aside, and pills containing two grains each, combined with antimonial powder and opium, were ordered to be taken three times a day.

February 6th. (5th day.) Patient appeared very drowsy, seemingly from the effect of the opium he had taken, but signified that he was much better; had slept very well during the night, and had three evacuations from the bowels; pulse 102, soft, and rather fuller. He breathed entirely through the wound, but the passage of the air was accompanied by a hissing sound, in consequence of the edges of the opening into the trachea being covered with inspissated mucus, which required to be cleared away every two or three hours. In order to remedy this inconvenience, I resolved on enlarging the opening, and removed another portion of the trachea, which left the aperture three-eighths of an inch long, measuring from above. After this, there was no farther trouble in cleaning the wound,

and the patient lay perfectly quiet, breathing with great ease, and expectorating freely through the wound.

On visiting the patient in the evening, the advantage of having enlarged the opening was very apparent. There was not the least expression of anxiety or uneasiness in the countenance. His breathing very free; pulse full and soft; he had no cough; his appetite so good, that he had chicken this day. He wrote on a slate that he had experienced the greatest relief.

February 7th. (6th day.) Had slept extremely well, and the drowsiness observed on the preceding day had not entirely gone off; pulse 100; breathing very free, and without the smallest noise. The wound now discharged healthy pus in moderate quantity, some of which occasionally falling into the trachea excited cough, but he expectorated freely by the wound. The expression of his countenance was greatly improved, his complexion had partly returned, and his sister who attended him, said, that he appeared now nearly the same as before his illness. His mouth was very sore, and the ptyalism profuse.

February 8th. (7th day.) He had slept well, and was much better; breathed without any difficulty through the wound; coughed a little from pus getting into the trachea, but expectorated

freely ; pulse 96 ; his mouth very sore with a good deal of ptyalism, but not the slightest uneasiness in the situation of the larynx.

February 9th. (8th day.) The patient's mouth was very sore, but in other respects he was rapidly improving ; pulse 86 ; breathing very free through the wound. On placing my finger on the aperture in the trachea, he spoke in a full, clear, deep tone, and said that all uneasiness was completely removed.

After this day I made no report of the state of the patient, unless that he was recovering rapidly. His mouth continued for some days excessively sore, and there was profuse ptyalism ; to relieve which, he had some saline purges with the best effect ; and as the irritation continued in his mouth, and his jaws were greatly swollen, it was deemed right not to unite the external wound until these symptoms were abated, particularly as its remaining open did not produce any inconvenience. It was, however, completely united on the 22d of February : the patient was up, walking about the ward, and apparently in as good health as at any period of his life. He subsequently left the hospital on the 3d of March, and as I have seen him frequently since, I am satisfied not only of his entire, but permanent recovery.

When this poor man had completely recovered,

I endeavoured to ascertain from himself an accurate history of the case previous to his application at the Meath Hospital; and the following is the account he gave.—It was on the 16th December he first perceived a hoarseness in his voice, which seemed to have come on without any apparent cause; he had not committed any excess, nor exposed himself in any way to cold. This hoarseness lasted for ten days, but was unaccompanied throughout with difficulty of deglutition; soon after Christmas, the breathing became greatly obstructed, and then the distress he experienced drove him to seek relief at different charitable institutions. He had been bled and blistered at one, without the smallest benefit. He was twice bled at another, without relief. He applied to two private practitioners, from one of whom he got a great quantity of purgative and nauseating medicines, the latter of which relieved him more than any thing else; by the other he was ordered to apply blisters twice. On the very day before he applied at the hospital, there were three blisters applied in different situations; and as he observed that he was always much worse after the application of a blister, he attributed the great exacerbation of the disease to this circumstance. On the night before he came to the hospital, he felt a pain in the chest so severe as to prevent his lying down in bed, which continued all night and the next morning, until removed by the copious bleeding. Previous to the attack of cynanche laryngea, he

always imagined that he had bad lungs, he breathed short, and could not walk more than a mile without much distress. He had always a thick unpleasant sensation whilst speaking, and he says now that all these inconveniences are removed, and that he is really better than ever he was before ; probably the comparative comfort he feels now, with what he experienced for seven or eight weeks previous to the operation, makes him exaggerate the real relief he obtained from it.

The history of this case presents a strong illustration of a fact already established by the observations of some of the most able practitioners, namely, that local and general bleeding, blisters, and the various internal means generally resorted to for the purpose of subduing inflammation, are usually inefficacious in relieving cynanche laryngea. Every remedy had been resorted to with a view to alleviate the distress under which O'Neill laboured. He was bled three several times, he had no less than seven blisters applied, he had taken a large quantity of medicine, both purgatives and antimonials, and it appears not any of these had the smallest efficacy in checking the progress of the complaint, or abating the violence of any of its symptoms. The case, then, is particularly instructive, not only in proving the impropriety of wasting time in the use of remedies, from which there cannot be a reasonable expectation of success, but in affording an-

other example of recovery under a very opposite mode of treatment.

It ought not, however, to be asserted, that an obstruction of blood will not at any period of the disease prove serviceable, although hitherto there does not seem to have been much benefit derived from it. But a very little consideration of the nature of the affection, and the morbid actions that are induced by it, will perhaps shew, why bleeding has not been of use, why it may prove injurious ; and will also point out those particular periods of the attack in which it may possibly be employed with advantage. When inflammation occurs in the larynx, like a similar affection in any other part, its progress may be rapid or slow, and the violence of its effects proportionally encreased or diminished. If it assume a very acute form, it is possible to conceive an effusion of fluid to take place in the submucous structure in such quantity, and with such rapidity *, as absolutely to close up the natural passage of the air, and literally destroy the patient by suffocation. This, however, is not the usual mode in which cynanche laryngea carries

* A melancholy proof of this lately occurred in the person of a young gentleman of high attainments : he only complained during the day of sore throat, and on the morning following was found in his bed quite dead. On dissection, the rima glottidis was found completely closed by the œdematous swelling of the mucous membrane.

off its victim. Death, instead of being so sudden, generally occurs from the third to the fifth or sixth day after the commencement of the disease ; and if we examine into the nature and history of such cases, it will be found that the fatal termination is not induced by the absolute or immediate exclusion of the air, but by diseased action being occasioned in the lungs from a too trivial supply of it. In almost all the dissections on record, such diseased action was found to have existed *, and it was this circumstance that rendered the operation of Bronchotomy unsuccessful, inasmuch as this operation, although it might give relief to the present difficulty of breathing, could not remove the disease that so long an interruption of that function had induced in the lungs. When acute inflammation

* In the cases related by Doctor Baillie, “ the lungs did not collapse upon taking off the sternum and anterior extremities of the ribs.” (Medical and Chirurgical Transactions, Vol. III.)

Doctor Farre mentions, “ an appearance of slight congestion in the lungs,” and an “ effusion of serum into their reticular texture,” as appearances on dissection of two cases that ran their course very speedily to a fatal termination. In one of these, Bronchotomy was performed. (Medico-Chirurgical Transactions, Vol. III.)

Mr. Lawrence mentions a case where the operation of Bronchotomy was performed with the greatest promise of success at first, but after eight days the patient died, and on examination “ the chest exhibited marks of recent disease, and the lungs themselves were also considerably diseased ;” yet this patient did not manifest any accession of symptoms denoting the disease of the chest. (Medico-Chirurgical Transactions, Vol. VI.)

attacks the larynx, its first effect will be to produce a determination of blood to the part; the lining membrane will become highly vascular and thickened in its structure, and there will be a serous effusion under the mucous membrane. The tumefaction, however, seldom proceeds farther than partially to close up the natural aperture of the larynx, and thereby diminish the quantity of air admitted; and it is to the natural consequences of this diminution of the supply, that the symptoms attending the progress and termination of the complaint owe their origin. In this case, the vessels of the lungs soon become oppressed, and, in order to relieve themselves, they pour out a serous effusion into the bronchial cells. The blood cannot, in sufficient quantity, undergo those changes that are necessary for the support of life; the functions of the brain become impaired, and of course all the other functions of the body dependant on them must in proportion be imperfectly performed. Those violent muscular exertions that are made for the continuance of respiration, gradually become weaker, and the patient dies, worn out and exhausted.

When effusion has taken place in the sub-mucous structure of the larynx, bleeding will not be the means most likely to procure its absorption, and the consequent re-establishment of a passage for the air: or when the bronchial cells have become loaded with fluid, the functions of the brain impaired, and the powers of life sinking with

rapidity, such a mode of practice will not only be inefficacious, but in the highest degree injurious and improper. But although the effects of inflammation, when once established, are not to be removed in this way, yet it may be very possible to prevent their occurrence ; and a large, full and copious abstraction of blood might be employed with advantage, if the very first appearance of the disease could be laid hold on, before the convulsive heavings and muscular exertions that indicate an oppressed state of the lungs appear, or before there is reason to believe the rima glottidis obstructed to such an extent as would subsequently induce such a state of disease. It is possible, too, that bleeding may delay the occurrence of effusion into the bronchial cells. The pain felt by O'Neill, shortly after the accession of symptoms that made him apply at the hospital, might perhaps have been the forerunner of it ; and he referred the relief he experienced from this distressing symptom entirely to the large bleeding, which (he said) removed it instantaneously. The abstraction of blood, however, in such cases, is always hazardous, because it is almost impossible to ascertain the exact time when it might be called for, or the exact symptom to which its employment might be adapted ; and it is, moreover, dangerous in one respect, that the powers of life soon become greatly depressed in patients suffering under obstructed respiration, and where it fails of yielding immediate relief, it will

almost invariably have a tendency to accelerate a fatal termination of the case.

Of the efficacy of blisters in cynanche laryngea, whether of the acute or chronic form, it is impossible to speak in favourable terms. In inflammatory diseases their application is generally hazardous, unless measures of depletion have been previously resorted to, and they have been frequently known to aggravate instead of relieving, particularly if applied to the immediate neighbourhood of the disease ; and it will not be judicious, in so formidable a complaint, to admit of as long a delay as might be necessary in order to use these precautionary measures. Indeed, were there no other objection to the use of blisters, the slowness of their operation would be sufficient, in a disease that runs its course so speedily, and in which a few hours may make the difference of safety or destruction. But besides this, the testimony of experience is decidedly against them. I have not found one authentic case in which it is clearly and unequivocally shewn that any decided benefit was derived from their application ; and perhaps it is not too much to say that, at best, they will be found useless. There is one case in which the application of a *very large blister* * seemed to have

* Case of Dr. J. M. H.—Med.-Chir. Transactions, Vol. VI. page 135. It may be questioned whether this case could strictly be called inflammation of the larynx. The patient had not the well

produced a recovery, as the symptoms were a little relieved after it; but it by no means could be marked as the most efficacious remedy, because the patient had frequent attacks of the sense of strangulation afterwards, and there were other more decisive remedies employed, to which the recovery should be attributed. The effect of blisters in the case of O'Neill, certainly would not encourage me to recommend them, for he had no less than seven, three of which were applied on the day before his most severe attack, and from seeing what were the effects of that one which was placed on the front of the throat, I can safely say, that it was a very large one.

In those cases of cynanche laryngea where it has been deemed advisable to make an artificial passage for the air to the lungs, the operation has been sometimes followed by recovery, and sometimes otherwise. It would of course be in vain to expect unvarying, uninterrupted success from any one mode of practice; but quite independently of

well marked symptoms that characterize the disease; and although in every species of cynanche laryngea there are spasmodic exacerbations, yet this case was perhaps altogether purely spasmodic, and yielded to the use of the lancet. From one bleeding "the patient derived much benefit," although the paroxysms still recurred with abated violence; and the second time the lancet was employed, it "proved truly efficacious." From this period his safety seemed to be ensured.

that consideration, there are, perhaps, some cases in which it could not be reasonably hoped for. Whenever effusion has taken place into the bronchial cells, which in acute cases will very speedily happen, the admission of air into the trachea cannot remove the symptoms, although it may alleviate them ; and in such the most to be expected is, that the patient shall be freed from those violent exertions that he is obliged to make to force inspiration through a contracted aperture. If the lungs be diseased, tracheotomy is merely a palliative measure, and it is perhaps only successful where it is preventive, that is, where it is resorted to before the lungs have become oppressed, and consequently removes the exciting cause of the oppression. Under this view of the subject, the operation cannot be performed too early after the nature of the disease is ascertained, provided it be acute in its character, and the difficulty of breathing so great as to render it impossible that the lungs can long retain their healthy actions with so diminished a supply of air.

It is, however, easy to conceive the existence of cynanche laryngea in so mild and chronic a form as to be present for a length of time without causing the lungs to be in the smallest degree affected. The case I have related above is an example of this nature ; for it commenced so early as the 16th December, and continued for seven weeks before

any decided relief was obtained. The case related by * Doctor Marshall Hall is another example of the same kind, for it existed there for eleven months ; and yet in neither of these instances can we suppose the lungs to have been diseased, or they would not subsequently have had so favourable a termination. In both these cases, it is true, tracheotomy was performed, and the cures afterwards completed by the use of mercury ; but it becomes a question, whether the operation might not have been altogether avoided, had the medicine been resorted to in the commencement, whilst the symptoms were not aggravated, and before the excessive difficulty of breathing had absolutely rendered the operation the only chance the patients had of existence. It was remarkable in the case of O'Neill, that the moment his mouth became sore, there seemed to be a decided amendment in his respiration ; and in proportion as the ptyalism increased, the obstruction in the larynx sensibly diminished. The same fact may be learned from the report of Doctor Hall's case, for he says that when " the mouth became sore," the patient " experienced a mitigation of the difficulty in swallowing, and on applying the finger to the opening into the larynx, that she could breathe with greater facility than before the operation ;" and if tracheotomy be merely a palliative measure, to allow a free passage of air to the lungs, until the disease in the

* Medico-Chir. Transactions, Vol. X. Part 1.

larynx either declines spontaneously, or is removed by medicine, there can be no reason for supposing that it might not in every case similar to these be avoided by speedily bringing the patient under the influence of that remedy, which has hitherto been alone found efficacious in removing the disease *.

It would be extremely difficult for a practitioner to distinguish at first those cases in which he might trust alone to the use of mercury, in the hope of curing the disease without resorting to an operation; and it would be more difficult to point out those symptoms that might serve to guide and direct him. In all cases of cynanche laryngea in the acute form, there is scarcely a moment to be lost; the disease runs its course with extreme rapidity, and the only chance of safety to the patient will be from giving a free passage to the air. If, then, the disease has occurred suddenly, and its symptoms attained an alarming height in a

* Many instances of the efficacy of mercury in the cure of chronic inflammation of the larynx, without resorting to any previous operation, have come within my own knowledge. Amongst others, one is very remarkable, which was under the care of my friend Dr. Charles Johnson. The patient was a lady, beyond the meridian of life, and the difficulty of breathing at times so urgent, that her friends entertained little hope of her recovery, and were even warned by another practitioner, that the period of her sufferings was not far distant. By the rapid exhibition of mercury, however, so as to induce a speedy affection of the mouth, the symptoms soon began to yield, and a complete and permanent recovery was the result.

short space of time, if there is excessive difficulty of breathing, and laborious muscular efforts to carry it on, the practitioner has but one resource, and that one will be in an operation. And although it is very possible that even in this he may not prove successful, if diseased action has already been formed in the lungs, yet he will be justified in the attempt, from the consideration that it is the only hope of safety he can hold out to his patient, and he will at all events, be in some degree rewarded by the immediate alleviation it will afford to the most distressing symptoms. But acute inflammation of the larynx is very speedy in its effects, and usually, if unrelieved, terminates fatally in six or eight days at the farthest. If then a patient has existed for weeks under obstructed respiration; if it originally commenced with mildness, and encreased by slow degrees; if, generally, it is unaccompanied by any very terrible distress, although there will be violent and severe spasmodic exacerbations, yet it is to be considered a chronic disease, and there will be time for trying the efficacy of medicine. As yet we know of no remedy that can be placed in competition with mercury in the treatment of this disease, provided it be administered in such quantity, and in such manner as will speedily bring the constitution under its influence; at the same time, its use does not preclude the adoption of precautionary measures by topical bleeding, or otherwise, to prevent the irritation of the medicine encreasing the local disorder, and a

patient may be closely watched during its progress, lest any sudden or violent exacerbations should occur that would threaten the lungs with disease ; in which case Bronchotomy may be safely employed, and will, in all probability, be attended with the most favourable results.

The most disagreeable circumstance attending the treatment of cynanche laryngea is, that the precise nature of the attack cannot be ascertained, either from the history of the case, or a consideration of its symptoms. It has been found by dissection after death, that the larynx is liable to a variety of diseased affections, all more or less interfering with its functions, and all, of course, exhibiting nearly the same or similar symptoms. Thus the lining membrane has been thickened, puckered, and ulcerated ; there have been collections of purulent matter under the membrane ; the cartilages have been eroded and ulcerated ; with a variety of other diseased appearances, not one of which could be accurately distinguished from the other during life. The symptoms produced by these last mentioned affections will usually assume a chronic form, and may in this way produce great disappointment, if sanguine expectations of a cure are entertained merely on the ground of its being a chronic disease, and its being known that mercury has frequently been employed with success in its treatment. But such derangements of structure are in all probability beyond the reach of art.

Bronchotomy has not been attended with any permanent benefit, although it has relieved the difficulty of breathing by releasing the diseased larynx from the performance of its functions ; and perhaps every medical treatment that could be warranted by the symptoms has also been unsuccessful. It cannot be denied that under such unfavourable circumstances, mercury may be worse than useless ; but then it is at the same time the remedy that promises most, because it will relieve in cases where recovery is possible ; and where the exact nature of the affection cannot be distinctly ascertained, we should always give our patient at least the most favourable chance.

Kildare Street, Dublin, April 24, 1821.