

peculiar expression, of the Eyes ; and, 4. Remarkable visible pulsation and vibratory thrill throughout the whole Arterial system. Of this "tetrad" of symptoms, the first and fourth are always present ; the second and third may each be absent. Without cardiac and vascular derangement, the disease has no existence. An exquisite illustration of the malady, however, presumes the presence of all the features now mentioned.

In discussing the essential pathology of "struma exophthalmica," Virchow has justly observed that anæmia, granting its existence, cannot directly produce the results which are witnessed. While the "primum mobile" is, however, seated in the blood, it is abundantly evident that an injurious influence is largely exerted on the nerves. A decided advance in our knowledge on this point has recently been made, for Peter, Reith, and Von Recklinghausen have each discovered a distinct lesion of the sympathetic nerve and its ganglia, while Virchow himself so far confirms their interesting and probably important observations as to have found in a case not exactly of the "struma exophthalmica," but bearing a certain resemblance to it, a lesion of the same nervous trunk.

Further observations are, however, required in order to determine, with any amount of accuracy, what value is to be attached to these morbid appearances in relation to the intimate pathology of that strange disease with which they have been found connected.¹

It cannot be too distinctly stated, nor too carefully borne in remembrance, that, in this disease, *iodine* is an unsuitable remedy—its administration, so valuable in ordinary goitre, is in the "struma exophthalmica" not only useless, but injurious. From *iron*, *digitalis*, and *belladonna*² discriminately employed, and from the steady perseverance with an invigorating plan of treatment, the best effects have been found to follow.

ARTICLE III.—*On the Therapeutical Action of Medicines in Dilated Conditions of the Bloodvessels—Aconite.* By ARCHIBALD REITH, M.D., Physician to the Royal Infirmary of Aberdeen.

IN a former communication I endeavoured to point out the analogy between the incipient steps of the inflammatory process and those of medicinal agents, with the practical conclusions suggested thereby. I stated that, if the double property of contracting and dilating the bloodvessels—in other words, of stimulating and paralyzing the

¹ I have observed a decided feebleness in the lower extremities, almost amounting to paraplegia, in two or three aggravated cases of the disease. This also points to the implication of the nervous system. In two of these instances, the patients walked with considerable difficulty, and had acquired a peculiar rotatory movement in progression.

² On Vascular Bronchocele and Exophthalmos, by the translator; Edinburgh Medical Journal, 1863, page 217.

sympathetic—be characteristic of medicines in general, in morbid conditions, where dilatation was a prominent symptom, the medicines, acting physiologically on the affected part, would be the proper remedies; and, if given in sufficiently small doses, would, by contracting the dilated vessels, tend to alleviate or cure the disease.

I stated also that, in accordance with the experiments of physiologists, the vaso-motor system, when paralyzed, was more susceptible of stimuli than in the natural condition; and that, in consequence, only very small doses of medicines having an affinity for the affected organ were required to contract the unduly dilated vessels.

I now proceed to bring the theory to the test of experience. In doing so, I shall confine myself entirely to my own observations, which, though at present limited, are sufficient to warrant me in laying them before the profession. I could not hope, in a reasonable time, to collect such a mass of facts as would carry instant conviction to every sceptical mind. My observations, therefore, though satisfactory to myself, may not be so to others; and the utmost I expect, meantime, is that the ice being broken, my experience will be taken as a groundwork of further investigation, and either controverted or established.

One of the first medicines on which I experimented was *Aconite*, to the therapeutical application of which, in accordance with the foregoing theory, I shall devote this paper. I do not intend to touch upon all the remedial uses of this drug, but merely to show its great value in one morbid condition of the system, namely, the febrile state. Before doing so, however, it will be proper to notice some of the more prominent characteristics of aconite, as recognised by the latest authorities who have made it the subject of their observations.

In my last paper I stated that medicines, viewed in relation to their effect on the bloodvessels, might be divided into two classes—the first consisting of those which merely induce contraction without subsequent dilatation, the pure astringents, acting chemically on the tissues; and the second, much the larger class, comprising those whose primary action of contraction (stimulus of sympathetic) is followed, sooner or later, by a corresponding dilatation of the vessels (paralysis of sympathetic). Passing by the former for the present, we find that the second class, those possessing the afore-mentioned double property, may be subdivided into two sections:—1. The medicines whose primary stimulating action on the sympathetic (contracted vessels) is prolonged and decided, and whose influence must be partially or wholly removed before re-action takes place (dilated vessels and paralysis of sympathetic); 2. The medicines whose primary action of spasm is momentary, scarcely, if at all, perceptible, though intense, and is followed, during the continuance of their influence, by very manifest and decided dilatation of the bloodvessels (paralysis of sympathetic). Cold is an example or type of the one class, heat of the other. Perhaps the greater number of drugs belong to the latter class, manifesting considerable

variety in the intensity and duration of their temporary stimulant action on the sympathetic, but resembling each other in the shortness and comparative imperceptibility of the stimulus. Aconite, on the other hand, is an example of the former class of medicines. The analogy between its poisonous action on the system and the effects of cold are very striking. The prolonged contraction of bloodvessels with the numbness characteristic of cold, when applied to the body, have their counterpart in the phenomena exhibited by aconite. Hence these two agents have hitherto occupied a place in the *Materia Medica* different from most other remedies. I stated formerly that what were known as the physiological or toxic properties of medicines were in reality their secondary effects, being a reaction from a previous, often invisible, or, at least, unobserved state of spasm of the bloodvessels. In experimenting with drugs, observers had overlooked this primary condition, and had wholly concentrated their investigations upon the secondary condition of dilatation. The majority of agents belonging to the second class, mentioned a little ago, their primary action is comparatively of short duration, and it is not surprising that it should have escaped attention. With aconite and cold the case is reversed. The primary effect of these agents, that of contracting the bloodvessels and exciting the sympathetic, is so decided and prolonged that it has constituted their main feature in descriptions of their properties. Thus the recognised physiological properties of cold and aconite are due to their primary action, those of other remedies to their secondary. It is easy to see what confusion this has introduced into therapeutics. The double action of medicines has been entirely disregarded; in some the primary, in others, such as aconite, the secondary phenomena have been overlooked. Both these actions, however, must be taken into account before we can form a correct estimate of the therapeutical value or application of remedial agents.

The chief brunt of aconite falls on the nerves of the heart. When taken internally, although other organs of the body come under its influence, its main action is upon the centre of circulation. If we could suppose Dr Richardson's ether spray directed on the heart, it would give a fair idea of the effect of aconite upon that organ. Its mode of operation seems to be to cause excitement of the cardiac plexus with consequent contraction of the bloodvessels supplying the tissue of the heart. There is a diminution of blood in, and a decrease of the vital properties of, the organ. Its pulsations become less frequent, and may fall so low as forty per minute. The surface of the body becomes cold; there are rigors, shiverings, cramps, denoting defective circulation in the system. The general condition of the patient in this state resembles the collapse of cholera. In fact, it is a true collapse, induced by a poison, as much as is that of cholera. The sympathetic system is in a state of excitement, and the bloodvessels in a state of contraction. If a moderate dose of the poison be taken, the symptoms induced are those of the chilly stage of a fever, a less advanced degree of collapse. These, then,

are the recognised physiological effects of aconite on the circulation. The attention of observers seems to have been arrested at this stage. Any further phenomena, characteristic of the medicine, appear to have been totally overlooked, or, at least, considered unworthy of special notice. Whereas the truth is, that the subsequent manifestations of aconite on the circulation are equally important with, if not more so than, those just mentioned. In all cases of collapse, unless the influence be strong enough to extinguish life in that stage, there is of necessity a reaction to the opposite condition. So much is this recognised, that it is the practice in India to abstain from all interference with cases of cholera during the stage of collapse, and to wait for the reaction which is certain to occur in the majority of the patients. The chilly stage, also, of a fever is succeeded by the febrile stage. In like manner, the primary symptoms of aconite just detailed are followed by a corresponding reaction. In proportion to the stimulus exerted upon the cardiac nerves, more or less paralysis ensues. The bloodvessels of the heart are preternaturally dilated, more blood is sent to its tissue, and there is a consequent increase in its vital properties. The pulsations are increased in frequency and strength, the circulation is more active, and there is consequently a febrile condition present. Had our nomenclature been consistent, this aconite-fever should have been regarded as the physiological action of the drug, and brought it under the same category with other medicines whose secondary symptoms have been considered their proper physiological manifestation. If the duplicate phenomena, however, be admitted, the nomenclature is of little importance. Now, these febrile symptoms exhibited by aconite, though acknowledged by the profession, are nevertheless practically ignored. They are never mentioned as affording any indication of its therapeutical application. All our ideas of aconite have hitherto been confined to its primary action as much as they have been to the secondary action of other medicines. But, in possessing a double property, its use in disease is rendered more intelligible and accurate.

It is unnecessary, I think, to enter more minutely into the influence of aconite on the circulatory system. Its action is so well known, that any detailed account would be superfluous. As I intend to confine my remarks to its remedial uses in the febrile state, it is equally unnecessary for me to enter upon its effects on other parts of the economy.

The secondary action of aconite being attended with dilatation of the cardiac bloodvessels and quickened circulation, it follows that, in accordance with the views formerly expressed, it should prove more or less remedial in conditions of the system where such dilatation existed—the dose, of course, being small enough to induce only the primary effects. The febrile state is that for which aconite is specially indicated. And herein is exemplified the advantage of recognising the double properties of medicines. Aconite, viewed solely as a depressor of the heart's action, that is to say, a stimu-

lant of the cardiac plexus, has been strongly recommended by some physicians in various kinds of febrile disorder. But overlooking the secondary action of the drug, and guided only by its primary, they have prescribed it on the principle of the larger the dose the more powerful the effect. The experience of its use in this way is very diverse. Sometimes it has succeeded; but it has as often failed, and in many cases dangerous symptoms have occurred. Sir James Simpson says, "One medicine has of late been supposed to produce this sedative effect on the heart, without exerting any other appreciable therapeutic action. I allude to aconite, a strong tincture of which has been employed by various European surgeons in surgical fever; but it is difficult to regulate it in its effects, and in many persons it produces an almost dangerous and depressing effect, even in very small doses."¹ Aconite has therefore not come into general use as a febrifuge. But when the principles are applied, which I endeavoured to expound in my last paper, we obtain the true conception of its therapeutical application. The two following points may be noticed:—

1. In the first place, the secondary action of aconite being analogous to the febrile state, we infer that it will prove remedial in cases of simple uncomplicated fever only.

2. In the second place, the effect desired being to produce moderate contraction of the cardiac bloodvessels such as will not be followed by undue reaction, the dose of aconite must be correspondingly small; and on account of the extreme susceptibility of the paralyzed sympathetic to stimuli, care must be taken to regulate the dose accordingly.

The first proposition excludes aconite almost entirely from the domain of specific fevers (except, perhaps, rheumatic fever, of which I shall speak presently). I have used it extensively in typhus and enteric fevers, without the least advantage. Sometimes I found the pulse to come down a little, but it invariably rose afterwards. In the majority of instances no impression whatever was produced on it. It is therefore vain to expect any good from the employment of aconite in such cases. I should think, also, that in other specific fevers, such as measles, scarlatina, smallpox, or erysipelas, the same negative results would be obtained; but I have not tried it in these cases. Mr Liston spoke highly of it in the last-named disease, but his example does not seem to have been followed. Belladonna is so beneficial that I have not resorted to aconite when treating erysipelas. My experience of the latter medicine in the two continued fevers I have mentioned is decidedly unfavourable, and confirms the impression I had formed from its secondary action, that it would be useless in fevers depending on the presence of a specific poison in the blood. Then, again, even in inflammatory fever, for which it has been highly extolled, and with reason, no impression will be produced on the symptoms *if there be extensive local lesion*. In such a case, the medicine acting physiologically on the affected part is the remedy properly indicated, whether it be

¹ Medical Times and Gazette, 1859, vol. i. p. 516.

belladonna for meningitis, antimony for pneumonia, or cantharides for nephritis. Aconite may and does prove very serviceable in conjunction with these, but by itself it will probably fail. Its use must therefore be limited to simple fever without local complication.

Next, as to the dose. There can be no doubt that the conflicting testimony regarding aconite is in great measure due to the quantity prescribed. Forgetting the febrile reaction which takes place, the tendency among observers has been to use gradually increasing doses. Finding injurious effects produced, they went backwards; only, however, to a certain extent. In some cases even small doses were found capable of acting injuriously. The medicine was consequently abandoned altogether. It never seems to have struck any one that, by still further diminishing the dose, more accurate results would have been obtained. On the contrary, the idea has been taken up, as with many other medicines, that unless benefit were derived from the doses of the Pharmacopœia, it was contra-indicated. The old-fashioned phrase of "not agreeing with the patient," became the usual house of refuge. Now, I beg to call attention to the following fundamental axiom of therapeutics, which has never, so far as I am aware, been stated before. It is this:—*Medicines, whose recognised physiological action is in reality their secondary manifestation, when indicated by the pathology as proper remedies for a particular disease, are unsuitable for, and injurious in that disease, when given so as to develop the physiological symptoms.* We have a notorious example of this in quinine, which "disagrees" with so many people. The disagreement is merely the development of its secondary or physiological action. If it be the proper remedy for the patient's ailment, the dose ought to be reduced. If one grain disagree, less and less ought to be given till the proper quantity be found. Many a case of this kind have I met with, and many a case of dyspepsia have I cured with that very quinine which the patient fancied he could not take. What is called idiosyncrasy is, in nine cases out of ten, merely greater susceptibility to the action of medicines; and if the dose were regulated in accordance with the foregoing principles, these peculiar abnormalities would be less frequent. In the case of aconite, the physiological action being primary, we are merely called upon to deal with an excess of that action as manifested in the experiences of those who have used it. They find that, in febrile cases, even five minims of our tincture, or three minims of Fleming's, will often cause alarming symptoms. Such a dose would have little effect on a healthy subject. But in conformity with that morbid susceptibility which I have repeatedly insisted on, in the febrile condition it becomes excessive. Why, then, not diminish it? This is the very point where experimenters have failed. It seems singular that when they found five minims to depress the heart too much, they did not try four, three, two, or even one. If they had done so, the value of aconite would have been by this time universally acknowledged.

The preparation I used in my investigations was the common

tincture of the British Pharmacopœia. Keeping in view the theory on which I was experimenting, I gave much less doses than the minimum of the prescribed standard. I found then, that to answer all the purposes for which aconite was indicated, it was not necessary to give more than one drop, nor less than a quarter of a drop. On three occasions I found even this latter quantity to act too powerfully. It may be satisfactory to give these cases, the symptoms being alike in each.

A gentleman, aged 30, who had a feverish catarrh, took, according to my prescription, one quarter of a drop of tinct. of aconite, in water. In a few minutes faintness came on, the pulse became very feeble, and there was a feeling of loss of power in the left arm. Brandy was administered, and recovery gradually took place. This patient is liable to feverish colds, but he never takes more than one-eighth of a drop of aconite, which he finds invariably to act as a specific.

A lady, aged 28, in similar circumstances, took a quarter of a drop of the tincture. Soon afterwards her pulse fell very low, and this symptom was attended with powerlessness in the left arm.

A lady, aged 31, suffering from febrile catarrh, took tinct. aconiti gtt. $\frac{1}{4}$. In a few minutes similar symptoms came on as in the other two cases. On two succeeding occasions I prescribed the same quantity of aconite, with the same results.

With these exceptions, then, the remedial dose of aconite I have found to lie between the quarter and the full drop. It may be given in water simply every half-hour, every hour, or every two hours, according to circumstances—always, of course, upon the empty stomach. This quantity may, at first sight, appear absurdly small, and to approximate the homœopathic infinitesimals. It is not, however, a great reduction from the minimum dose of the Pharmacopœia (5 minims), which is confessedly too energetic in many cases. There is a wide difference also between gtt. $\frac{1}{4}$ as a minimum dose, and the thousandth or millionth part of a drop given by Hahnemann, in accordance with his theory of potentization. I do not know the strength of the homœopathic preparations of aconite, nor the relation they bear to our tincture; but it is plain enough, from homœopathic publications, that the more intelligent and enlightened members of Hahnemann's school are giving up the theory of their founder, and prescribing doses more consistent with reason, although still on the principle of *similia similibus curantur*. The spread of Homœopathy is due to the powerful effect of small doses of such medicines as aconite. Separate it from infinitesimals, and there is little fault to find; but an illogical public reasons in this way:—"Aconite cut short my cold, ergo, Homœopathy is right." The more intelligent method is certainly to reason, as a gentleman did who, having been cured of a feverish cold in a few hours by some aconite given to him by a homœopathic friend, said to me:—"It convinced me that aconite was a very powerful medicine, but it did not convince me that Homœopathy was true." Now, if the middle position were adopted, which I have indicated in these papers, the

present homœopathic system would not have a leg to stand upon. The doses I recommend are what come short of reaction, whether it be 20 grs. of bromide of potassium, or one-fourth of a drop of tincture of aconite. The connexion between this and infinitesimalism is certainly very slight.¹

I come now briefly to indicate the applications of aconite as a remedy for febrile disorders, in so far as I have made it the subject of personal observation.

I. *Catarrhal Fever*.—We possess in aconite a medicine which quite supersedes the purgatives and antimonials with which patients are too often drenched, *usque ad nauseam*. By purgatives the dilatation of the cardiac bloodvessels, or paralysis of the cardiac plexus, is sought to be relieved, by creating dilatation of the abdominal bloodvessels, or paralysis of the solar plexus. With antimony it is the same; acting by preference on the stomach and lungs before the heart, it lowers the pulse only at the expense of the first-named organ, and after a large dose. Aconite, on the other hand, acting directly on the heart, controls its force prior to any influence exerted on other organs, and therefore, in quantity insufficient to operate elsewhere, lowers the pulse without the weakening effect of purgatives, or the nausea and unpleasant consequences of antimony. It is scarcely possible to speak of it too highly as a remedy for febrile catarrh, in the doses recommended above. For this it acts like a specific. It will not cure the attendant coryza, or tonsillitis, or bronchitis; but a few oft-repeated doses will, almost to a certainty, bring down the pulse, rendering it softer and less frequent. Its operation is usually attended with more or less perspiration, and followed by the removal of the oppression and restlessness under which the patient laboured. In order to save time, I have frequently administered the medicine myself, and have, before leaving the room, witnessed the good effects of a single dose. It is quite common for me to hear parties express themselves as greatly relieved a few minutes afterwards. I have frequently had occasion to use it myself, and it has always within ten minutes removed the distressing feelings. A second supply was never required. In the majority of cases, three or four doses are sufficient. Indeed, if within twelve hours no improvement takes place, it is to be inferred that there is a specific poison at work; and hence aconite forms a diagnostic element. In not a few instances I have predicted the outset of typhus or enteric fever from the failure of aconite to bring down the pulse.

¹ I find that many of the enlightened and intelligent homœopathic practitioners are of the same mind. They are prepared to abandon Hahnemann's system, and to occupy a middle position such as I have indicated, did they receive encouragement from our side. Would it be too great a concession to give them that encouragement? We are fully aware that Homœopathy contains an element of truth: shall we continue to reject that element merely because Hahnemann buried it in so much rubbish? I cannot believe so; and I think that the recognition of the double action of drugs might serve as a basis on which the two opposing schools could ultimately be reconciled—a consummation devoutly to be wished.

It would be impossible, within the limits of a short paper, to give even an abstract of the numerous catarrhal cases treated in this way and cured. Their number is legion. I shall therefore give only a few as examples of the whole.¹ They do not differ materially from each other, and it would be an unnecessary repetition to detail every one.

CASE 1.—A. G., female, aged 50, had suffered from general restlessness and feverishness for several days. When I saw her, the pulse was 120, the skin hot, and the tongue furred. She complained very much of "pain in her bones." I gave her at once gtt. $\frac{1}{4}$ of tincture of aconite in water. In five minutes, before I left the room, she felt very much relieved, and expressed her astonishment at the rapid effect. Before morning (it was 8 P.M. when she first took the aconite), she was quite well, and able to be up.

CASE 2.—H. M., female, aged 13, was seized with rigors and general coldness on a Sunday afternoon, followed in the evening by great feverishness, headache, and oppression. I prescribed gtt. $\frac{1}{4}$ of tinct. aconiti every two hours, to be suspended if she felt better after one or two doses. She did not require to take it more than twice, and before morning she was well.

CASE 3.—A. B., male, aged 60, had smart coryza, with great restlessness and general oppression. He had been in a "burning fever" the whole of the previous night. He was ordered to take gtt. $\frac{1}{4}$ of tinct. aconiti during the night, at short intervals. A few doses relieved the symptoms, but without perspiration, and in the morning he was well.

CASE 4.—I was called at midnight to see a child, aged $2\frac{1}{2}$ years, said to be attacked with croup. I found him in a strong fever, with flushed face, swelled tonsils, and great dyspnoea. The croupal symptoms had lasted for more than an hour, but the child had been feverish and unwell for several days. On the first appearance of the stridor and hoarseness the parents had very properly put the child into a warm bath, and applied a poultice to the chest. I ordered mustard to the throat, and gtt. $\frac{1}{2}$ of tinc. aconiti every hour. I was so satisfied that this was more than laryngismus stridulus, that I told the parents to call me at 7 A.M. if the child was not better. I had some misgivings about not giving the usual antimonials, and determined that, should the aconite fail, as little time should be lost as possible. I was not sent for; and when I called in the morning I found the child quite well, free of stridor, and hoarseness, and fever. He was, in fact, amusing himself with his toys. I was told that the alarming symptoms had subsided about 4 A.M. Query, Would antimony or any other medicine cut short threatened croup so effectually as aconite did in this case?

Aconite is also very useful in the chill which precedes the fever.

¹ I intend to publish separately a full list of all my cases, but wish to compare them with the experience of others. In the text, therefore, I only give examples.

I have met with several cases of this kind. One, a young man, sat shivering over his fire for an hour before he took the medicine. In twenty minutes the shivering ceased, as also the malaise which accompanied it. I infer that the aconite prevented the usual reaction which would probably have taken place.

Notwithstanding what I have stated, aconite does sometimes fail, even in catarrhal fever. Success, however, is the rule; want of it the exception. The reason of the exception I have not been able to make out; but it ought to be regarded, perhaps, as a confirmation.

II. *Rheumatic Fever*.—Aconite has been recommended by many for acute rheumatism, but very conflicting accounts are given regarding it. By some it is extolled highly; by others as much depreciated. Lombard of Geneva, who used it extensively, gives the following conclusions:—

1. The alcoholic extract of *aconitum napellus* is endowed with a specific action against acute articular rheumatism.

2. It speedily dispels the pains and the swelling, and dissipates the effusions of synovia in the articulations affected by acute rheumatism.

3. The medicine does not act as a derivative on the intestinal canal or on the skin.

4. Given in large doses, it produces a strong stimulus on the brain, and appears to modify the circulation.

5. The alcoholic extract of aconite contains the active principles of the substance, at least as regards its anti-rheumatic properties.¹

Fleming and Neligan in our own country have followed Lombard in their appreciation of aconite in rheumatic fever. All these observers, however, used gradually increasing doses; and this is probably the reason why, as I explained a little ago, conflicting results have been obtained, preventing the general adoption of their practice. My experience of aconite in rheumatism is very favourable. The small doses are unattended with the risks of larger ones, and produce all their good effects. I always trust to aconite for the reduction of the pulse, and it seldom fails, although it does not operate so speedily or so effectually as in catarrhal fever. For there is undoubtedly a poison in the system, and its presence there must necessarily interfere with the free play of aconite on the circulation. But the rheumatic poison does not resist aconite so completely as other febrile miasmata, and consequently the remedial effect of the medicine is far from being antagonized. While the symptoms in catarrhal fever ought to be relieved within a few hours, twenty-four at the most, I am satisfied if, in rheumatic fever, the pulse come down in two or three days from the time of administering the aconite. The utmost I expect from this is, not the instant cure of the disease, as some have hoped, but the protection of the heart from

¹ Trousseau and Pidoux, *Traité de Thérapeutique*, 7th ed., tom. ii. p. 119.

complication, and, by the quietness of the circulation, giving full advantage to the excretory organs to eliminate the morbid element. This is all that aconite will do, and it is a great deal. It prevents us being driven by the entreaties of the patient to that most mischievous drug, opium, and so saves the sufferer weeks of misery. It shortens the duration of the fever, if it does not arrest it. It is an invaluable auxiliary to the alkaline and blister treatment, and by itself alone will often save the necessity of resorting to either. The following cases will serve as illustrations:—

CASE 1.—J. F., æt. 21, male, affected with acute rheumatism. Pulse 120, very strong and full; knees very much swollen, especially the left; ankles painful and red. Ordered gtt. $\frac{1}{4}$ of tinct. aconiti every two hours. Next day the pulse had fallen to 80, and the swelling of the knees had almost entirely disappeared. This patient's illness lasted a week. He had been ill three days before I saw him; he was relieved of the more severe symptoms in twenty-four hours, and in two days more he was comparatively well. Cases of this kind are frequently met with, where aconite alone suffices to effect a cure.

CASE 2.—E. A., female, aged 28, a servant, was admitted into the Infirmary on the 2d January. She had been ill for a week with rheumatic fever. When seen, all the joints of the limbs were swollen and painful, the two wrists and the right knee being most affected. Pulse 120, full and strong. No cardiac complication. She was ordered gtt. $\frac{1}{4}$ of tinct. aconiti every two hours. The pulse fell at the end of two days, and her general distress was much alleviated, but the joints, especially the wrists, continued painful. The blister treatment was then adopted for the wrists and right knee with complete relief, and she rapidly recovered. The pulse never rose after it had been reduced. This case is a good illustration of the failure of aconite by itself to cure the disease, but that it is very beneficial in conjunction with other remedies. Perhaps if it had been prescribed at the outset of the fever, it might have been successful alone.

The next case is an example of the complete inefficacy of aconite in severe local complications.

CASE 3.—A. R., female, æt. 18, admitted to the Infirmary on 9th January, suffering from rheumatic fever of several days' duration. She had formerly had the same disease about two years ago, and was then under the care of Dr Smith. The heart was affected at that time. On admission, the knees and ankles were found most affected, and there was a double murmur over the aortic valve, and apparently a to-and-fro sound over the apex. A few days afterwards, pericarditis was fully developed, and ran its usual course. From the first she took gtt. $\frac{1}{4}$ of tinct. aconiti every two hours, without the smallest impression on the pulse, and it was not till after smart blistering that it began to fall. This is the only case of the kind I have met with for some years, as very few of the

patients suffering from rheumatic fever are attacked with cardiac complications under the improved treatment now in vogue. It was not a case where aconite might be expected to do good, and larger doses than what I gave might have proved too depressing.

In mild cases, then, of rheumatism, aconite will in most cases lower the pulse and very materially shorten the disease, without further medicinal agency. In more severe cases, while it will prove serviceable in controlling the heart's action, it will be necessary to give it in conjunction with the full alkaline or blister treatment. In carditis, it will probably prove ineffectual.

III. *Inflammatory Fever*.—Aconite has been highly recommended for the fever symptomatic of inflammation. As in rheumatic fever, however, it has been pushed to an extreme, and disappointment has consequently been experienced. So far as I can at present judge from my investigations, it has a certain range of application, but, as I said before, it has no place when there is extensive local lesion. The medicine then indicated is the one acting physiologically on the affected part, such as ipecacuan and antimony in bronchitis and pneumonia. The true place of aconite is at the onset of local inflammation or the congestive stage. I can truly say from experience that it is then most beneficial. It will often prevent the mischief from fully developing itself, producing all the effects formerly said to be derived from bleeding, without the loss of blood. I speak chiefly of its influence on pneumonia, where I have tried it most frequently, the opportunities I have had of testing it in other inflammations being as yet too few to enable me to speak positively as to its value. The following cases will serve as specimens of the behaviour of aconite in pneumonia, etc.

CASE 1, *Pneumonia*.—A. B., aged 35, an inmate of the Infirmary, suffering from bronchitis, with copious muco-purulent expectoration. A few days after admission, feverish symptoms came on with pains in the right side: pulse 120, full, slight dulness over the right base, with crepitant râle; rusty sputa. Ordered gtt. $\frac{1}{4}$ of tinct. aconiti every two hours. Next day the pulse had fallen to 80, the sputa had become natural, and the crepitant râle was replaced by fine bubbling. This is a case not very frequently met with, where pneumonia is found in its first stage. The action of aconite was very decided; and the improvement obviously cannot be set down to the usual hygienic influence of the hospital on a patient newly admitted, for the pneumonic symptoms supervened a week after he had been placed in a comfortable bed. Cases of this kind are met with mostly in private practice, and the disease detected at once. Aconite, then, in this stage takes the place of the lancet.

But the more common cases are such as the following:—

CASE 2, *Pneumonia*.—C. D., aged 40, admitted to the Infirmary affected with pneumonia. Dulness over base of right lung, with

tubular breathing; rusty sputa; pulse 120, full. He took, according to order, grt. $\frac{1}{4}$ of tinct. aconiti every two hours. Next day the pulse was 80; and there was copious perspiration over the body. In three days the tubular breathing was replaced by moist crepitus, and the sputa were purely bronchitic. Cases advanced to the stage of hepatization are not so successfully treated by aconite alone, as in the following instances.

CASE 3, *Pneumonia*.—B. M., female, aged 18, affected with pleuro-pneumonia. I was not called to see her till twelve hours after the onset of the symptoms, when hepatization had taken place in the right lung. Pulse 120; sputa of the prune juice character; breathing very much oppressed. She took aconite in drop doses so long as the pulse remained rapid, but it never made the smallest impression on it. It was at first given alone, and then in conjunction with antimony. The pulse at the end of a week stood one evening at 140, and the symptoms looked unfavourable. Next day, however, the pulse had fallen, and by degrees the patient recovered. Her recovery I believe to have been purely natural, and in nowise retarded or accelerated by the medicines employed.

CASE 4, *Pneumonia*.—J. M., female, aged 22, affected with pneumonia of the right lung. The symptoms were the same as in the above case, and were entirely uninfluenced by aconite or antimony. Delirium supervened, and death occurred on the sixth day.

These cases well illustrate my experience of aconite as a remedy in pneumonic fever. I have found it, as a rule, useful only in the very earliest stage.

CASE 5, *Pelvic Inflammation*.—J. A., female, aged 35, of a strong hysterical temperament, admitted into the Infirmary 9th December 1866. Since the birth of her last child, about fourteen years previously, she had been the subject of chronic enlargement of the uterus, and has undergone an immense variety of treatment. She became so familiar with the names and properties of medicines, and their effects upon herself, that I could seldom deceive her. On a former occasion she had been affected with pelvic inflammation, not, however, ending in abscess. On admission, the resident physician diagnosed the case to be one of peritonitis; there was high fever, severe pain at the lower part of the right side of the belly, and tenderness on pressure over the whole abdomen; tongue dry and brown. When I saw her, I found considerable fulness in the right hypogastrium, and also *per vaginam*, I detected a swelling at the upper part of the right side, without hardness or fluctuation. The symptoms had come on in consequence of sudden suppression of the menses, caused by over-exertion during washing. Poultices and fomentations were ordered to the belly, and drop doses of the tinct. aconite every two hours. In twenty-four hours, the fever had subsided so far that the patient, with her usual curiosity, desired to know the name of the medicine which had done her so much good; and a few days after, when fever had been rekindled, she begged

for the same thing again, which was given, with the same effect. The local effusion caused a good deal of trouble, but eventually it completely disappeared.

I have seen one or two similar cases, though not so severe.

I have also tried aconite in other inflammations, but without much apparent benefit. Perhaps if the cases had been seen early enough, it might have succeeded, but it is seldom that medical advice is sought at the first commencement of illness. In mild cases of tonsillitis, coryza, gum-boil, etc., aconite has acted against the fever like a charm, but in more severe inflammations, such as nephritis or pneumonia, it has generally failed. Further observation may disclose its true position in these cases.

IV. *Nervous Shock*.—The influence of aconite on the reaction from nervous shock is equal to, if not more marked than its effect upon catarrhal fever. Numerous cases have come under my notice, of which the following are examples:—

CASE 1, *Concussion of Brain*.—W. G., æt. 4, a boy, was knocked down by a spring-cart, the wheel coming into violent contact with his head. He was completely stunned, and brought home insensible. I saw him in the evening. He was then quite unconscious, but in a state of high fever. I prescribed nothing then, but gave a few general directions for his care during the night. In the morning he was no better, if anything worse; the fever was intense, the skin hot and burning, and he was lying in a state of partial insensibility, from which he could with difficulty be roused. I gave him gtt. $\frac{1}{3}$ of tinct. aconiti, to be repeated at the end of an hour if necessary. The first dose acted like a charm: in five minutes there was a perceptible difference, and in two hours he was so much better that his mother thought it unnecessary to continue the medicine. He had taken but two doses. In the evening of that day I found him well.

CASE 2, *Concussion of Chest*.—R. B., æt. 8, a boy, received a smart blow on the chest from a stone. When seen three or four days afterwards, he was in a high fever, and complained of pain in the part where he was struck. He did not tell of the accident till a few days after I saw him, when he confessed to his nurse that a boy had thrown a stone at him. I apprehended at first some specific fever, but, as soon as I was told of this, I gave him gtt. $\frac{1}{4}$ of tinct. aconiti. In a few hours all fever had disappeared and he was quite well.

CASE 3.—Mrs T., æt. 30, confined of her first child. The labour was severe, but I terminated it within twelve hours by the forceps, as the outlet presented an obstacle to natural delivery. The shock was severe, and I dreaded reaction, but having taken gtt. $\frac{1}{4}$ of tinct. aconiti every two hours, she rallied well, had no fever, and made an excellent recovery.

CASE 4.—Mrs G., æt. 22, confined of her first child. It was a footling presentation, and, as there were no pains of any value,

delivery was effected artificially. A few hours afterwards, she was in a state of great collapse, feeble, almost imperceptible pulse, pinched features, and coldness of the surface. The case looked very bad indeed. She was ordered gtt. $\frac{1}{4}$ of tinct. aconiti every two hours. Next morning she was perfectly well: reaction had taken place, but only to the natural state, and she made a good recovery without any further bad symptom.

In the shock after severe labours, I always prescribe aconite as above, and can testify to its great value, not only as a febrifuge, but as an antagonist to the usual febrile reaction which then takes place.

I intended to have entered on the consideration of Digitalis as a contrast to Aconite, but must leave it, as well as the question of the antagonism of medicines, to a future occasion.

ARTICLE IV.—*Case of true Polypus of the Left Auricle of the Heart.* By Dr DOUGLAS, one of the Vice-Presidents of the Medico-Chirurgical Society of Edinburgh.

(Communicated to the Medico-Chirurgical Society.)

MORBID growths in the interior of the heart, whether sarcomatous or carcinomatous, are very rare, and almost nothing is known of their clinical history. The best clinical record I remember to have seen of any case is given by Andral in his *Anatomie Pathologique*;¹ but in his narrative there is nothing that would decide the nature or the seat of the lesion.

In the case I have now to record, perhaps some progress is made in the knowledge of the symptoms—specially of the physical signs which may be looked for in such a state of the heart. Moreover, between this case and that of Andral, as well as one depicted by M. Cruveilhier,² and one referred to by Dr Bright,³ there are certain resemblances, and some contrasts, attention to which may help to advance our knowledge of the disease.

For the anatomical description of the case, I am mainly indebted to Dr Grainger Stewart, who kindly made the dissection for me, and favours me with the account I give of the relations and minute structure of the tumour.

On the 28th of December last, I was requested by Sir James Y. Simpson to visit the patient, a gentleman, aged 35. He was of large frame and development, and of extraordinary physical power. He had been more than ordinarily addicted to habits of active life in the country; he lived in easy circumstances, was temperate, but ate largely, especially when actively engaged. It was remarked by his friends that within a year he had made flesh considerably, with great abdominal fulness, considering his age.

At my first visit, I found him supported in bed, with the

¹ Edit. 1829, vol. ii. p. 328. ² Anat. Path., liv. xxix. pp. 2 and 3.

³ Med.-Chir. Trans., vol. xxii.