

ADVANCED PHARMACY.

By BENJAMIN WALKER, L.R.C.P. Ed.

UNDER the above heading it is proposed to place before the profession the superiority and certain action of the alkaloids and essences of drugs, given at short intervals till their physiological action is produced. Nothing new is claimed for this method, for it has been advocated for some time past, but at present is little, or scarcely at all, resorted to by the general profession. It is only by constant dropping on the stone of the professional mind that any lasting impression is produced. Thus Sydney Ringer, in his "Therapeutics," recommends small and oft-repeated doses; as of aconite "in half-drop or a drop of the tincture in a teaspoonful of water every ten minutes or quarter of an hour for two hours and afterwards hourly;" lobelia "ten drops (of the simple tincture) every ten minutes or quarter of an hour till the dyspnoea gives way. It is better to adopt the smaller and more frequent dose, as the medicine can be discontinued should sickness or depression occur;" camphor, spirits of chloroform, every five or ten minutes in colic; chloral, in fifteen-grain doses every quarter of an hour till sleep is produced; alum, every ten or fifteen minutes (in croup) till vomiting is induced; perchloride of iron (in diphtheria) every hour; ipecacuanha (in dysenteric diarrhoea of children) drop doses hourly. This list might be indefinitely extended.

The believers in medicines and their efficacy in treating disease do not appear to increase. Indeed, it is most refreshing nowadays to meet with a practitioner with any reliance on drugs. What more lamentable in the glorious Congress just closed than the hiatus which occurs as to the treatment and cure of disease. Should we not welcome any advance which may tend to remove this scepticism, and restore the faith in our healing art? The crude remedies of a century ago contained abominations which make us laugh at the credulity which could either believe in or swallow them. Yet are we free from a similar reproach? And will not the next generation hold in as light estimation the mixtures, tinctures, and extracts which we use? The simpler our pharmacy becomes the better, will be admitted by all. We should prefer to give the essential and active parts of the drug in preference to the crude and more bulky drug itself. Thus from opium we obtain numerous alkaloids, some of which are of the greatest benefit to man, whilst others are useless or injurious. Ought we not to settle definitely the action of these ultimate principles of drugs, and discard altogether the cruder form which contains 90 per cent., say, of detritus, which, if not positively baneful, is at least superfluous, and increases the labour, or clogs the work of, stomach, bowels, and other emunctories? If so, we ought never to prescribe opium in solid or liquid form, for, if we have the alkaloids which it contains, with their distinctive actions understood, we shall have arms of precision with which to fight, and shall not be content to watch placidly the development of disease without opposing its progress, and remaining really but students of a "useless natural history." Instead of trusting, as most do, almost entirely to the *vis medicatrix naturee*, we shall then be potent allies and helpers of this beneficent power. We have learnt to prescribe quinine in preference to the cruder drug, morphia for opium; why should we not discard conium, belladonna, hyoscyamus, aconite, *et hoc genus omne*, for their alkaloids or essences? No man who has ever used aconitine for the reduction of temperature will hark back to the tincture (Fleming's though it be), or any crude form of the drug; and he who has not used hyoscyamine in troubles of the hollow viscera (stomach, bowels, bladder, &c.) has yet to experience the satisfaction and joy with which he will be greeted after prescribing it for a patient with spasm, retention, dysentery, or hernia, for this last is often spared the surgeon's knife by this beneficent drug.

The remedies with which the following cases were treated consist simply of the alkaloids and their salts, aconitine, veratrine, hyoscyamine, strychnine, digitaline, ergotine, and others, given in small doses ($\frac{1}{120}$ or $\frac{1}{80}$ of a grain of the more potent) at short intervals, according to the urgency of the case (every quarter or half hour or hour), and discontinued or given at greater intervals when relief is afforded. And here let me ask, Why should we on being called to a patient

wait for the malady to declare itself, or that we may make a nice diagnosis, before we commence active treatment? Say that a rigor has ushered in an acute illness—inflammation, fever, or what not—and there are already a quickened pulse and ascending temperature. We know these are hurtful, exhaust vitality, and tend to adynamy. Then why wait till crepitation, rose spots, or other signs or symptoms warrant an accurate diagnosis, and why stand useless onlookers, giving some simple *placebo* to satisfy the patient or his friends, when you can be doing good and doughty service in attacking the pyrexia and bringing down the temperature and quickened pulse by the defervescent alkaloids, aconitine, veratrine, digitaline, quinine (some or all of them) every half hour or hour, until the thermometer or other sign bids you hold your hand? It will be advanced that you cannot trust dangerous remedies to ignorant attendants. True, if you give these remedies at very frequent intervals you must be guided by more than the appearance of the patient or the feeling of the skin. It is necessary to take the temperature at frequent intervals, say every two hours; and when it approaches the normal to slacken or discontinue the defervescent. There is no difficulty in instructing even a poor cottager in so simple a matter, at least I have never found any. And these are rare and exceptional cases, demanding anxious care and vigorous treatment. In this way many a threatened severe illness may be made to abort or run a comparatively benign course. Let me illustrate this by an actual case.

A youth aged twenty was attacked with severe rigors, alternating with flushings of heat. He walked to me, a distance of a mile, when he was in a highly febrile condition, with dry skin, tongue, and lips, a pulse of 120, and a sharp pain in the right side. This was the fourth day of being unwell. Ordered to bed; to take an aperient, and $\frac{1}{120}$ gr. of aconitine every hour. Seen next morning.

Fifth day, 10 A.M.: Pulse 118, respiration 40, temperature 103°. Pain in side; cough; bowels moved several times. To take $\frac{1}{120}$ gr. each of aconitine, veratrine, and arseniate of strychnine half-hourly.—8 P.M.: Pulse 106; respiration 28, temperature 102°. Acute pain in side; cough; tenacious sputum, with blood; tongue parched. To continue treatment.

Sixth day, 10 A.M.: Pulse 96, temperature 101°. Sputum rusty and tenacious. To continue treatment.—8 P.M.: Pulse 94, respiration 28, temperature 102.2°. Two motions. To take one quart of milk, with two egg yolks, and mutton broth.

Seventh day, 10 A.M.: Pulse 102, temperature 103.4°. Two motions. The temperature had gone up since last night, and there was some delirium. To give remedies every quarter of an hour. Thermometer left, and temperature to be taken every two hours.—8 P.M.: Pulse 62, respiration 35, temperature 100°. Aconitine and veratrine suspended, and strychnine also, as some slight twitching was noticed. To take arseniate of quinine every half hour, and one ounce of port wine with one egg yolk, and half a pint of milk every three hours.

Eighth day, 10.30 A.M.: Pulse 72, respiration 28, temperature 98.6°. Restful night, though not much sleep. To continue treatment.—8 P.M.: Pulse 74, respiration 30, temperature 98.2°.

Ninth day: Progressing favourably. Asking for food.

Tenth day: Sitting up.

This patient had pneumonia and pleurisy, with a high state of fever, and a temperature reaching 103.4°, accompanied by delirium. This only required the remedies with double frequency to reduce the temperature in ten hours by 3.4°, and the pulse by forty beats; and in twenty-four hours to reduce the temperature to normal (nearly five degrees). In about four days his temperature and pulse were brought down to normal, and he was virtually well, though of course weak and exhausted. The strychnine was given with the defervescent, because it is found they do not produce the same depression if combined with it, and the strychnine seems to have a powerful influence in maintaining the vitality of the patient, and to be especially useful in adynamic cases, where tolerance of it seems very remarkable according to ordinary notions. The patient on the fifth and sixth days took equal to forty-eight minims of solution of strychnine in the twenty-four hours, and on the seventh day equal to forty minims in ten hours, when the physiological effect began to manifest itself. This quickly subsided on its discontinuance.

Next let me call attention to uterine hæmorrhage, either

post-partum, or in the common form of menorrhagia in young girls or adults of more advanced years. Of post-partum hæmorrhage one typical case will suffice, though others might be given.

Mrs. K—, aged twenty-eight. Fourth pregnancy. (My first attendance on her.) Always has most severe flooding after delivery. Nov. 1875, delivered of twins; within five minutes a pailful of blood (two to three gallons). Nov. 1876 (three weeks short of twelve months), again delivered of twins, with similar hæmorrhage. (All four children still living.) March, 1878, delivered of a living boy. Lombe Atthill's warm-water injection soon stopped flooding, which was again most severe. Dec. 1880, again delivered of twins (one only alive). When summoned to her this time, one-third of a grain of ergotine and one-sixtieth of a grain of sulphate of strychnine, given every quarter of an hour, had the effect of strengthening the uterine contractions, completing the labour expeditiously, and relieving the attendants of the previous dreaded and frightful concomitant—the hæmorrhage,—for the placenta were expelled without the slightest bleeding, and the patient was about in little over a week, the last visit being paid on the sixth day.

An equally good result was obtained, a month ago, in a primipara with atony of the uterus, delivery being effected by the forceps, when hæmorrhage was prevented by similar means.

In the treatment of menorrhagia the same remedies are given in like quantities, but three or four times a day, and during the intervals also, together with the arseniate of iron in $\frac{1}{30}$ of a grain doses.

A young lady aged sixteen, who had become quite blanched and exhausted by the great drain of blood, which lasted a week and returned in a week (thus she was losing one-half her time), under the above treatment was restored to health in about five weeks, and another was similarly relieved in seven weeks.

A kindred case to the above may here be mentioned—viz., hæmoptysis in a man in his fifth decade, who recovered under the employment of ergotine and strychnine, after various kinds of treatment had failed.

Spondon.

ON THE IMPORTANCE OF HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES.¹

By T. M. DOLAN, F.R.C.S. EDIN.

THE importance of adequate provision for disease is recognised by all who aim at the mitigation of suffering, and I may say that as regards what I may term surgical diseases, we have in the metropolis and in the provinces numerous and excellent institutions to meet almost every case where operative aid is necessary. The value of the voluntary work done by the surgeons attached to these hospitals can hardly be over-estimated, but the benefits derived are in a certain sense individual. If A breaks his leg, or B is suffering from stone, or C has an ovarian tumour, or D some obscure or malignant disease requiring operation, they will be admitted free of charge to one of the institutions devoted to such cases; they have the highest skill at their disposal, the best nursing and diet. But such accidents or complications only affect the patients; their misfortunes are, in a certain sense, personal. The importance of adequate provision for infectious disease is theoretically recognised by all sanitarians, but practically it is only imperfectly appreciated.

Infectious diseases are, for the most part, preventable and controllable, so that proper hospital accommodation is an essential element in grappling with them and stamping them out. Hospitals for infectious diseases have more than an individual importance. If A, B, C, or D, in place of suffering from surgical diseases, were so unfortunate as to contract typhus, typhoid, small-pox, scarlatina, &c., the hospital accommodation at their disposal would neither be of the same class nor obtainable on the same easy conditions. In most towns the patient or patient's friends would have to pay a certain sum per week for maintenance, medical attendance, and the rest, in the hospital set apart by the sanitary

authorities for infectious diseases. If unable to pay application would have to be made to the relieving officer, when a parish order would be obtained, and the patient admitted free of charge, and attended by a medical officer paid by a board of guardians, the patient in reality paying a penalty, as he is disfranchised by accepting Poor-law aid. This is a serious grievance. It violates a rule which has been often insisted on—viz., that the relief afforded to the sick in hospitals for infectious diseases should be completely severed from any relation with pauperism.

It is in the highest degree desirable that our general infirmaries should be maintained; it is more desirable that we should have hospitals for infectious diseases open on as easy terms, and that every encouragement should be held out to the working classes to avail themselves of this accommodation. It is more than satisfactory that any person who may break his leg in the crowded thoroughfares of the metropolis or in one of our provincial towns should have free hospital attendance of the class now supplied, though such an accident only affects the patient. It is a self-evident truth that it is of greater importance, should the same person be suffering from typhus, typhoid, scarlatina, or small-pox, that he be at once isolated and removed to a hospital, for he not only suffers, but becomes a danger to the household in which he lives, to his neighbours, and to society generally.

I think it cannot be denied that our present hospital accommodation for infectious diseases is defective. The institutions already in existence do not receive the pecuniary support they are entitled to, nor are they sufficiently appreciated by the public. In periods of epidemics there is special activity in providing for the accommodation of infectious diseases; and in many cases any old empty building is thought good enough for an infectious hospital. The latter is a grave fallacy. A fever hospital should not only be specially and hygienically constructed, but should be made even more cheerful and brighter than an ordinary hospital. There are financial difficulties in the way, but even these must be set aside unless we desire to render abortive the Sanitary Act of late years.

We now spend, I may say, some millions upon sanitary work, and we reap a rich harvest by this expenditure. We must not strain at a few extra thousands in order to gather richer fruits. Our medical officers of health cannot grapple satisfactorily with infectious diseases, even with the help of the model clause which requires householders to notify to them infection, unless there is proper hospital accommodation for infectious diseases in their districts. It is my aim in this short paper to prove that hospitals for infectious diseases are more important to the health of the community than general infirmaries. Once this truth is recognised, all difficulties should disappear.

Halifax, Yorks.

A CASE OF RUPTURE OF THE BLADDER.

By T. J. CALL, M.D., M.R.C.P. EDIN.

THE interesting editorial article on "Rupture of the Bladder" in THE LANCET of Nov. 12th, 1881, recalls a case which occurred in the out-patient department of the Alnwick Infirmary during the time I was house-surgeon there in 1858, the history of which I now relate from notes taken at the time.

J. R—, a chimney-sweep, between fifty and sixty years of age, had for a long series of years suffered from stricture of the urethra, through which, and only by dint of coaxing, a No. 3 was the largest size of catheter which could be passed. Although this stricture was the cause of frequent complete retention of urine, and at the best of times water could only be made through it in a very feeble stream, he would not consent to have any operation performed for its relief, nor would he attend with sufficient regularity to have it gradually dilated. He was content to go on as he had been doing for over twenty years, and to present himself in the out-patients' room once in every week or two, in order to have his bladder relieved.

One afternoon I happened to be passing his house when his wife called me in. I found him walking about the room, evidently in great pain, with no other clothing on than his shirt, and his bladder enormously distended; as, according

¹ A paper read before the State Medicine Section of the International Congress, London, 1881.