the knife must traverse. When the bleeding goes on to too free an amount, it is useless, in the small central wound, to search for the bleeding-point, even if there were any one vessel to tie; but usually, as I have said, it is the bulbous structure which affords the blood, and the plug is the proper remedy; and I am free to allow that, with the plug fairly pushed in *above* the tube chiefly, arrest is easy—more easy, indeed, than to compress the artery of the bulb by the plug in lateral lithotomy.

If, then, it be admitted that the median operation is unsuited for children; that, for the average of cases, the mortality is as great as in lateral lithotomy; that the operation is more difficult; that hæmorrhage is more troublesome, and wound of the rectum more frequent, than after lateral lithotomy—it will naturally be asked, What are the advantages of the central operation? and to what cases is it applicable?

My present experience teaches me that it is advantageous and suitable only for those patients in whom the stone is of small size—about that of a date or a filbert—and where, for some sufficient reason, lithotomy is not available. Within these narrow limits, median lithotomy is admirable; the incisions are small, and there is but little fear of bleeding or injury to the rectum; the recovery is rapid; the bladder retains the urine, and voids it voluntarily almost from the first; the patient is saved from much of the discomfort of lying in wet sheets with an urinous smell; and the wound heals almost by the first intention. I repeat that, within this limit, the operation is excellent; and every patient who is cured by it may rest assured that he is cured with as little pain, discomfort, and injury, as surgical science is capable of. Beyond this limit, the path becomes thorny and dangerous; and, in the lung run, he who treads it will, I firmly believe, repent and fail to obtain the success which is so dear to all lithotomists. I have traversed that path, but prudence bade me retrace my steps; and I have ventured to think that this imperfect record of my doings may interest some, and enable others, who perchance have fewer opportunities, to profit and guide their practice by my experience.

THE USE AND ABUSE OF NUX VOMICA AND ITS ALKALOIDS.*

By JAMES THOMPSON, M.D., Leamington.

FOR the sake of form, I have named this paper on the use and abuse. Of the first, the *use*, I intend to say but little, as this is known well to all; the *abuse* will be what I desire to make some remarks on. My attention was drawn to the subject by some cases which I have had during the present year, and, as I can find no reference to it in any works on therapeutics which I have been able to consult, I have deemed the subject not unworthy of being considered in this Section. I remember, when a student, spending some time in a house where homœopathy was followed, and the inmates seemed, at all hours of the day, to amuse themselves by swallowing globules and tinctures, the active ingredient of which was said to be derived from *nux vomica*; thus, during the day, they took a sufficient amount of this powerful tonic to feel invigorated and stimulated.

The matter passed out of my mind until recently, when an American gentleman came under my care; he had been sent to England for change of air and scene. He had, from his account, suffered from some cerebral attack, due to excitement and overwork in commercial pursuits. His American physician had prescribed Easton's syrup in drachm-doses three times a day. When I saw him, he was taking such doses several times a day, and had done so for a long time. He was in a highly nervous state, sleepless and excited in manner; he took a dose of syrup, and then felt better; but the stimulation was temporary, and then he was more depressed than ever, and he required another dose before he could attempt anything. At first, I did not realise the cause of this state. Medicine and regimen were of no avail, as he continued to take the syrup. After some persuasion, he consented to give it up, although he declared he thought he would die. I advised a course of mineral water, a Turkish bath twice a week, and a shower bath every morning. In a fortnight's time he was all right, and has continued so up to the present time.

Now this patient seemed on the verge of what was very like delirium tremens, and I have no doubt that the strychnine in the syrup was the cause. He drank nothing save a couple of glasses of sherry at dinner and lunch.

Among my patients I have a highly hysterical lady of middle age, much in society, who, when she is going out, takes twenty or thirty

drops of tincture of *nux vomica* in a little water. Formerly she took sal volatile, and she says she finds the tincture much the more potent. She is aware of the power of the drug, and she only uses it on particular occasions. When much is used, she finds herself so excitable that she takes some aperient medicine for some days and a dose of chloral at bedtime. I find, on inquiring, that a medical man, whom she met at an hotel when travelling, had first suggested it to her.

A medical friend, whom I asked if he had ever noticed any deleterious effects from the use of these medicines, admitted that every day he longed for 11 A.M. to come, as, for a very long time, he had taken a dose at that hour, and that he could not get through his work without it. I made an experiment on myself to ascertain the exact effects, and, although I never take any stimulant before dinner, I soon found I could not get on without it. I took the syrup in drachm-doses once daily for three weeks, and in the fourth week I found myself so shaky, with crampy pains in the abdomen and legs, that I was warned to give up. The next week I was low and depressed, but soon recovered. I satisfied myself that it was producing much the same effects as repeated nips of brandy or glasses of sherry.

From inquiries I have made, I am satisfied that this form of indulgence is on the increase. Prescriptions containing preparation of strychnine are treasured up, and sent to the chemist to be dispensed whenever the holder feels a little low. I am much impressed with the necessity of marking such prescriptions, so that they may not be dispensed without a countersign. Recently a patient drank at a draught eight ounces of a mixture, which she had found comforting on a former occasion; it produced most serious symptoms, and might have proved fatal had not assistance been speedily summoned and active measures taken.

RETROSPECTIVE JOTTINGS.

By C. M. DURRANT, M.D.,
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It has been often, and truly, remarked that a very large field of unproductive but valuable matter has been, and still is, allowed to lie waste for want, not so much of cultivation, as of circulating for practical purposes the extensive experience which almost every medical practitioner possesses, even if he be only of comparatively few years' standing. To leave metaphor, I would say that, if only one-half of the practitioners throughout the three kingdoms were to detail the practical facts which have been impressed upon their own minds, the profession would possess an amount of experience that, if properly collated, would be invaluable. Believing, as I do, that the advance of our knowledge of disease will be in proportion to our future understanding, with certainty, the functions and derangements of the nervous system, how helpful would be a constant afflux from all parts of the kingdom, especially in reference to the conditions of this economy. That we are continually passing through cycles of diseases, mainly caused by disturbance of nerve tension, cannot, I think, be doubted; and although in our present ignorance we attribute, with the vulgar, all kinds of noxious influence to the weather, I am persuaded that the time will come when we shall be able to associate, with far more certainty than at present, meteorological and barometric changes with direct nervous influences, either functional or organic.

How frequently do we notice a complete absence of expected disease during weather to which we, in our present wisdom, feel disposed to attribute everything that is bad; while, on the contrary, how often, in the finest, and apparently most health-giving weather, do we find the largest amount of sickness, and often a wide-spread epidemic. To take a simple example, I need only allude to ordinary catarrhal affections, to show that, if the peculiar paresis upon which these depend were better understood, the accumulated evidence of the many would become very valuable in reference to locality as an exciting disturber of nerve influence. Again, the phenomena of asthma, chorea, and many other affections that occur, more or less, in groups, might be largely elucidated by the repeated addition of wide-spread observation.

I merely set down these ideas; believing that, if they were worked out, a mass of what is now but wasted experience would furnish, in time, a basis upon which the most valuable data might be obtained and a more exact knowledge acquired.

SPINAL AFFECTIONS.

I do not know whether it has struck other practitioners, but I have been impressed myself with the fact of the increase of spinal paralysis generally, and of certain forms of the malady in particular. In referring to this, however, I confine myself strictly to the symptoms produced

* Read before the Medical Section at the Annual Meeting of the British Medical Association in London, August 1873.

by lesions of the cord itself or its membranes, not referring to disease of the bones or cartilages, which more immediately fall under the surgeon's care.

Many of these cases of spinal weakness are slight, and scarcely admitted by the patient, but nevertheless they exist. So far as my observations tend, loss of motion more frequently preponderates over defective sensation; and, when once this is fully developed, the restoration of lost power becomes difficult and doubtful. There is one form of spinal paralysis referred to by Sir Thomas Watson, in which the symptoms yield rapidly and perfectly to treatment. This variety is caused by effusion of serum between the cord and its membranes. It is generally excited by cold and damp, in a previously healthy person, and, if treated actively at the onset, yields quickly and satisfactorily. Of this variety, I have lately seen a well-marked instance. The patient, a middle-aged man in perfect health, took cold, and, within three weeks, became paralysed, dragging his legs, which had considerably lost their natural sensibility. There was distinct tenderness on sharp percussion over the lower dorsal spines. A blister to this spot, with the perchloride of mercury and a stimulating diuretic, removed rapidly the paralysis, and he was walking as well as before in five weeks from the application of the blister. Of far more serious import, unhappily, are the class of paralytic affections to which I would now refer. These are cases, obscure frequently in their origin, for they are essentially latent, and spring from subacute myelitis, very chronic in its progress, and often very unyielding to treatment.

As I have remarked before, I believe that these cases are on the increase, and I am disposed to regard them as one only of the many evils resulting from the present competitive "rush to live" and its inevitable exhaustion, which we may witness so painfully in every walk of life. Two causes may be mentioned as the chief exciters of this paralytic condition: one being an exhaustion of nerve-force from prolonged over-fatigue, giving rise to irregular vaso-motor nerve-influence and impaired nutrition, and the other (to which may perhaps be added a syphilitic taint) being excessive indulgence in venery, than which, though little suspected by the patient, there is no more influential cause existing. In other words, any circumstance inducing an extraordinary demand on the spinal cord, may produce in the predisposed this chronic inflammatory affection. A long and exhausting walk, or prolonged unaccustomed exertion in the erect posture, have been known to produce chronic myelitis. The more severe cases of this affection fall, of course, immediately under the supervision of the medical attendant; but the results of the latent or more chronic form may be detected constantly in the streets, especially of our more busy centres, as indicated by the partial dragging of one leg and the consequent interference with perfect walking.

A delicate-looking patient will complain to us that, after prolonged exertion, and perhaps exposure to cold, he has been seized with pain in the dorsal region of the spine, which has partially subsided on rest, but again returned in a mitigated degree; that he has had a tingling sensation in his feet and legs, which he describes as "going to sleep"; and that latterly he has experienced a disagreeable sensation of tightness round the waist. On questioning, we shall find that the bowels are difficult to move, and that the urine does not flow so readily as has been usual, and that there is a tendency to an involuntary escape of a small quantity from time to time. Such are the features observable in the early stages of an attack originating in cold or prolonged fatigue; but, if we also can obtain a confession of sexual excess (for what is healthy to one is enormously excessive in another), we may have, in addition, intermittent priapism accompanied by diminished sexual power.

Such are the more prominent characteristics of this by no means uncommon and, I believe, increasing disorder; and, as the restoration of spinal nerve-power, when once decidedly impaired, is difficult to accomplish, so does it become all-important to detect the lesion early, and to lose no time in adopting remedial measures. Although I regard the condition of the cord in chronic myelitis as essentially one of impaired nutrition, I am convinced that, if the patient be seen early, the application of a blister over the affected portion of the cord will be found of real service, both by relieving local congestion and acting as a direct nerve stimulant. After this, with a view of further exciting functional activity, the alternate application of cold and hot sponges to the part will sometimes greatly counteract nerve-atony.

Among the more valuable of the nerve-tonics in spinal malnutrition, I would particularise perchloride of mercury, arsenic, and cod-liver oil. These may be supplemented by large doses of the perchloride of iron. In no case should a persevering trial of these medicines be omitted; and, if a syphilitic complication be suspected, large doses of the iodide of potassium will also be demanded. I have frequently prescribed belladonna, ergot, and strychnia in chronic myelitis, when prolonged

and unyielding; but I cannot say that I have been impressed with their value, or witnessed any positively beneficial results from their use.

There remain yet two other measures which must not be overlooked as valuable auxiliaries in the treatment of this affection. The one is the persevering, but not exhausting, use of the galvanic current. The use of this agent, if limited to alternate days, will often be seen to materially assist in restoring lost power to the weakened limbs.

Another suggestion of importance is to carefully ensure warmth to the debilitated nerve-structures. This may be best accomplished over the cord, by wearing a protecting unstimulating plaster, than which nothing is perhaps better than belladonna. At the same time, the limbs should be carefully enveloped in flannel drawers and worsted stockings; and all exhausting procedures on the part of the patient must be absolutely and unconditionally forbidden.

An interesting case of functional ataxy, or interference with perfect co-ordination in the movement of the lower limbs, has recently come under my notice. The patient, a young woman, who was suckling her fourth child (she having borne them very rapidly), was attacked with intermittent hæmoptysis, and for this condition I was requested to examine her chest. The lungs were healthy, but she was anæmic and weak, with an excess of impoverished milk in her breasts. She was directed at once to wean her infant; and steel and quinine with ammonia were prescribed. She improved under this plan, but she now complained of inability, when walking, of keeping her limbs under control. At the same time, she was attacked with what she termed rheumatism in the right humeral and scapular region, but which, although not amounting to hyperæsthesia, was clearly traceable to nerve-irritation. She was at once put upon cod-liver oil, and full doses of perchloride of iron, when these (to her, alarming) symptoms gradually subsided. This case was simply functional, depending upon an exhausted state of the spinal cord, so far as the ataxic symptoms were concerned, and not (as would have been pronounced but a few years back) upon a congestive or inflammatory condition of that structure, and was treated accordingly. The neuralgic disturbance of the shoulder depended probably rather either upon a temporary congestion of the meninges of the upper part of the cord, or upon a similar condition limited to the covering of the nerve-trunk itself, the result of malnutrition.

In similar cases we must not lose sight of the fact, as has been shown by Sir William Gull, Dr. Wilks, M. Charcôt, and others, that arthritic affections are not an uncommon accompaniment of meningeal or myelitic diseases of the spine. In all cases of nervous affections, correct treatment can alone be based upon correct diagnosis. Hence the very great importance of advancing our present knowledge, especially by collective information, as suggested at the commencement of this paper. There is a wide and but partially explored field before us, which will amply repay minute and precise investigation.

The deposits in the nerve-structures as the result of syphilis are becoming better understood; but to be able to demonstrate, which we cannot do at present, the subtle changes in the texture of the brain, spinal cord, or nerve-filament, under the influence of hereditary transmission, or even in a case of hysteria, would prove an enormous advance in nerve-pathology. I feel persuaded that the more the nervous origin of disease is admitted, the more surely shall we find ourselves steering in the right direction.

[To be continued.]

THE ETIOLOGY OF PYREXIA.

By CHARLES MACLEAN, M.B., Applecross.

I THINK I need offer no excuse for bringing under the notice of the profession the undermentioned facts; for, considering how important it is that we should ascertain what is the true pathology of fever, any contribution towards that object, however small, must receive a welcome. I had hoped that these or similar experiments might be undertaken by abler hands; but, as they were not forthcoming, I decided on making them myself, the subject being full of interest. I leave the facts to speak for themselves, only observing here that, being purely experimental, they bear out all that I have said in my paper on Fever (BRITISH MEDICAL JOURNAL for June 7th and July 5th), which was based on almost entirely clinical observation.

I made the first set of experiments in order to ascertain the effect on temperature of bromide of potassium and chloral respectively. The temperature was in every case rectal. The second set of experiments was to observe the effects of these same medicines on the capillaries.

1. *Temperature.*—Normal temperature of a kitten (mean of three times a day), 99.8 deg. Fahr.; next day, after bromide of potassium, 99.3 deg. Same kitten, on another occasion, after chloral, 100.3 deg.