ON THE
USE OF MERCURY IN INFLAMMATION.

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ONE of the "fallacies of the faculty" of the present day is the too early adoption and too exclusive use of mercury in the treatment of inflammatory diseases. Mercury is, in fact, looked upon as the sheet anchor of British practice, and from the youngest tyro to the octogenarian practitioner. If you asked what would be their treatment of inflammation, the "almost" universal reply would be, "calomel and opium," regardless of all other remedies. Depletion may be conjoined in some cases; but this is looked upon as of so secondary and unimportant a character, that there are not wanting individuals who discard it altogether.

Now, while I admit that mercury is a very useful and a very valuable remedy, if judiciously employed, I think that there is so strong a prejudice in its favour, that we are induced to resort to it too early, and to rely upon it too exclusively; the consequence of which is, that we give it in many cases in which it is altogether unnecessary; and in most we are compelled to give it in larger quantity than the immediate circumstances of the case would justify.

In cases of acute inflammation, the all-absorbing thought is to induce mercurialization; and when this is accomplished, whatever may be the result, the routine practitioner considers that his patient has had every advantage which medicine can afford.

But the result of my observation convinces me that indiscriminate use of mercury is quite unnecessary; and that even those cases in which it may be required can be successfully treated with a much smaller quantity of it than we now employ, by deferring its administration to a more advanced period of the disease, and previously adopting bloodletting, antimonials, and other measures calculated to reduce the force of the circulation, and relieve the loaded state of the capillaries. Many cases of inflammation will yield to this premonitory treatment alone; and even when mercury is required, a much smaller quantity will suffice than when it is given at an earlier period, before the system has been prepared to receive it. We are all aware how much more readily all medicines are taken into the system after such preparation, and the modern treatment of syphilitic diseases fully testifies to the advantages and importance of subjecting the patient to a course of preliminary treatment. There is a very general belief that in inflammation of an important organ it is indispensable to place the patient under the mercurial influence as speedily as possible—not alone (by its *supposed* antiphlogistic properties) to arrest the attack, but also, by its more specific action, to prevent the organization of the effused lymph. A case of pericarditis which came under my observation in 1847 first induced me to question the correctness of this opinion, and further observation leads me more strongly to believe that the administration of mercury may be delayed, not only with impunity, but with the advantages previously alluded to—the necessity of a much smaller quantity, and, as a consequence, less injury to the constitution. In addition to which, I believe that by deferring the use of mercury, we are enabled to recognise attacks of recurrent inflammation; which, if they occur while we are giving mercury, are too apt to be passed over unnoticed or uncared for; in consequence of a belief that they are attributable to the excitement which mercury is known to produce.

The following is a brief summary of the case of pericarditis alluded to. P. R.—, aged 23, a domestic servant, was admitted, April 27, 1847, into the Essex and Colchester Hospital, labouring under pericarditis of a week's duration. Previous to her admission she had been treated exclusively by bleeding and opium, as the gentleman in attendance was unwilling to give mercury, in consequence of the exposure which her removal would necessarily involve. Suffice it, then, to say, that she laboured under well-marked pericarditis; pulse 108, and weak; bowels inclined to be relaxed. I applied a dozen leeches to the cardiac region, and gave two grains of grey powder, with one-third of a grain of opium, thrice a day. As soon as the mercury began to act upon the system the pericardial friction gradually decreased; and by the 1st of June, all evidence of the attack had disappeared. She remained in hospital for four weeks subsequently, to recruit her strength; and was discharged, in perfect health, without a trace of disease in any portion of the heart, so far as stethoscopic evidence could be relied upon.

I merely adduce this case to show that no ill consequences

ensued from the delay that occurred in giving mercury; indeed, I doubt if it were possible to have a more perfect recovery. And we know how difficult it is to find an individual who has had an attack of pericarditis, and who does not ever after present some vestiges of it. I have alluded to the effect which mercury has of causing its peculiar excitement, and so, confusing or even masking the symptoms due to the disease. When we are administering mercury we feel a sort of security that renders us indifferent to those frequent and minute examinations which all acute diseases demand; and so it is—that even while using mercury, it is possible for inflammation to arise, and, in delicate structures, to produce some mischief. We have a beautiful example of this in iritis, where we are enabled to see the results of the inflammation, and the influence of the mercury, and where, notwithstanding that the constitution is saturated with mercury, fresh inflammation will arise, which can only be subdued by ordinary antiphlogistic treatment—mercury being discontinued. Dr. Taylor—who has communicated a very valuable paper, on the use of mercury and bloodletting in pericarditis, to the Medico-Chirurgical Society—states that he has seen pericarditis occur in persons under the influence of mercury; and I have seen typhus fever occur under similar circumstances, although mercury is considered by some writers as an antidote and remedy in this disease.

In virtue of the universality of its action—as a purgative, cholagogue, and diaphoretic—its limited use is beneficial in the majority of diseases; but it is with its antiphlogistic properties, as a remedy in inflammation, that we are at present concerned; and I think that we can have no difficulty in saying that it is not the remedy to be resorted to at the commencement of an inflammatory disease. That it exerts its influence in restoring the tone of the capillaries, and in exciting the absorption of the inflammatory products, cannot be doubted; but to produce these effects it is necessary that vascular action should have been previously subdued by the use of depletion (not venesection exclusively) and antimonials.

And while I consider that our continental friends entertain a very unjust prejudice against the use of mercury, I am equally of opinion that we are too apt to place an undue reliance, to the neglect of other measures.

It is of no small importance to be able to cure disease with the minimum quantity of so powerful an agent as mercury. Indeed, even at the present day (although much less than formerly), we frequently meet with cases of shattered health, the result of the too liberal use of mercury. I believe, however, that it may, when requisite, be given in adequate quantity even to the most delicate constitutions; by adopting correct principles the modern treatment of syphilitic diseases affords convincing evidence of the value of a just appreciation of the difference between its use and abuse. How seldom do we observe the now dreadful consequences of the combined poisons, so prevalent formerly!

It is in diseases of the serous membranes that we witness the most striking effects of the value of mercury; it proves equally beneficial in their chronic and acute affections; but even in the chronic affections, the influence of preliminary treatment is no less beneficial. I have had considerable experience of its effects in chronic pleuritis, and with such satisfactory results, that I am disposed chiefly to attribute my success to the invariable practice of leeching, and employing counter-irritation first, although their necessity was not indicated either by the pulse or the presence of pain; and, in one case of tubercular peritonitis, I saw recovery ensue under circumstances of a most extreme description.

It frequently happens that inflammation occurs in persons of a delicate, irritable, habit, to whom we are afraid to give mercury; but if we find that after a trial of ordinary means, the disease continues to progress, we may then resort to the use of mercury with the fullest confidence; and I have frequently, under these circumstances, given it, in cases in which it is generally supposed to be inadmissible. The following is an instructive example.

A young gentleman, aged twenty-two years, requested my advice, complaining of a pain in the side; on examination, I detected a limited pleuritis; at my next examination (within twelve hours) it had extended, and it gradually extended over the whole lung. As the patient, who was of a nervous temperament, had been weakened by a previous illness, which was pronounced to have an acute attack of tubercular deposit, he did not appear to be a fit subject for mercury; and the patient's father, who is a practitioner of experience, was also opposed to its employment. Under these circumstances, we used successively—local depletion, antimonials, nitrate of

potass, iodide of potassium, and blisters; but the disease continued unabated, and became so serious that life was implicated. I mentioned to the father that I believed that mercury was our only hope; he was so averse to it, and my responsibility being so much increased thereby, I requested him to take the opinion of Dr. Williams, the late distinguished professor at University College.

The patient was accordingly taken to Dr. Williams, and without knowing what had occurred, he prescribed grey powder. The case was also seen by Dr. Copland, and without any knowledge of either Dr. Williams or my opinion, he too prescribed mercury; fortified by these opinions, mercury was given, and (with the exception of a slight check from an incautious exposure) under its influence, the case gradually progressed to perfect convalescence.

The subject of it has become a member of (and will, I doubt not, prove an ornament to) that profession to which he is so much indebted for his restoration.

In the treatment of inflammatory diseases, it is all-important to remember the exact period "of their existence" when they come under observation; because on this will depend the degree of energy with which they are to be met. Depletion I look upon as entitled to the first consideration; but if the period for general bloodletting has passed, or if it is not otherwise admissible, we must be content with that depletion which we can effect either by purgatives or other evacnants, and cupping, or leeches. It is too much the fashion to deny this or that remedy, and at present I think venesection is most out of favour; but if diseases were treated more on general principles than by names, it would free us from the influences of prejudice, and prove of advantage to our patients.

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REPORT OF AN EXAMPLE OF THE PASSING OF LIVING LARVÆ FROM THE URETHRA OF A MAN, AGED TWENTY-TWO.

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I AM induced to send to THE LANCET the following remarks on a case recently occurring in this Infirmary, for the sake of its *prima facie* truthfulness, and the interest of the subject; it is that of a man passing by the urethra above seventy living larvæ of a dipterous insect.

G. F——, aged twenty-two, a baker, of nervous temperament, and of delicate health from infancy, became the subject of continued fever, and was admitted to the fever wards of this town, the first week in June, 1849; a few days after the attack, he was seized with acute pain in the right hip, which continued—notwithstanding his convalescence from the primary affection—to progress in its severity, and in spite of every remedy that could be called into use, until, at length, having reached its *acmé*, the intensity of suffering subsided, synovitis passing on to the implication of cartilage and the consequent transition of pain to that of the dull gnawing character so well known to accompany chondrous ulceration. At this stage of the disease, (July 17th,) he was transferred to the surgical wards of the Royal Infirmary, where, under the ordinary treatment for hip disease, he continued gradually to improve up to the time of his being made out-patient, the 15th of October. On the morning of the 11th September, soon after awaking, he felt an irresistible desire to empty his bladder, but the night-vessel having been taken away, according to custom, to be cleaned, and not having yet been returned, he was obliged to request a fellow-patient to fetch it for him; when the vessel, perfectly empty, and lately purified, is brought, he micturates, but doing so with difficulty and with pain; and wondering at the cause of such unusual sensations, he directs his attention to the stream as it flows, and notices "little pieces of skins floating about" (these are his own words); fearful that they are the evidences of some new disease, he tells the man nurse, who happened to be passing his bed, all about it, and the latter, taking charge of the urine, shows it to me on making the usual round of the wards at nine o'clock. On examination, I found the contents of the vessel to be literally alive with little animals having the appearance of cheese maggots, and moving about after the fashion of larvæ of the gnat; at the end of thirty-six hours, the urine having become strongly ammoniacal, it was found that all save a dozen had perished; these, however, were removed into some fresh medium of the same

patient, and at the end of twenty-four hours more, six still continued brisk and lively; of this number five were now sent to one of the surgeons of the Institution, and the remaining one kept for my own examination lived, notwithstanding rough handling, other forty-eight hours, and was then lost sight of: altogether, above seventy larvæ were collected and preserved; the patient never passed any subsequently, and the only alteration in the symptoms caused by this evacuation, was the cessation of a dull, aching pain, which he had constantly complained of across the lower part of the back.

Having occasion about this time to go to town, I availed myself of an opportunity to ask from the kindness of Professor Owen, at the College of Surgeons, an examination of a few of the specimens, and in the most courteous manner he has recently informed me that they are the larvæ of some dipterous insect, of that kind which, like the *Musca domestica*, has but one corneous mandible; but that partly from the injured state of those left with him, and partly from the strong resemblance of allied species of the muscides, it would be difficult for him to state for certain whether they were the larvæ of the *Musca domestica*, or those of the *Musca meridiana*.

It will be evident to my readers, that the truth of this case rests altogether upon the evidence of two patients. Both assert that the vessel was previously empty and clean, and one, that the larvæ came from him per urethram; but it is the proper part of caution to doubt such testimony, and to inquire if they have had the time or place for practising a deception.

In the first instance it may be stated that the night nurses of this hospital, previously to giving up duty at six in the morning, always remove and cleanse the respective vessels of each patient, returning them again, after having submitted them to the requisite mundatory processes; that these operations are performed in a small antechamber or closet at the top of the ward in which the man F—— lay, and that this little room is wholly devoted to these purposes, and is always duly cleaned after such acts. I find, however, on inquiry, that these nurses sometimes content themselves by placing the vessels just within the doors of the wards, instead of bringing them back to the bedside of each patient; and it appears to have been put in practice on the morning of this occurrence, for the man who went at the desire of F——, distinctly averred that he did not go out of the room; but found the vessel amongst a number of others arranged along the floor at the top of the ward. In the second place, it may be noticed that its occurring so early in the morning, before patients are allowed to go out, or friends to come in, make it certain that the larvæ could not have been obtained without the precincts of the building; and it will be difficult for those who are acquainted with the uniformly clean condition of this Infirmary, to imagine that there was any opportunity for their acquisition within it. Moreover, the fact of their living for so long a time in the urine of this man, is also in favour of the idea that they were gradually developed in, and consequently habituated to, at least the vicinity of such a medium.

It is undoubtedly true that the proper nidus for larvæ of the *Musca domestica* is some kind of decomposing flesh meat, and that for those of the *Musca meridiana* is cow dung; yet, in the language of Cuvier, some others of this genus "live in excrements, dunghills, and unctuous earth; some eat cheese, some others inhabit the bodies of caterpillars and different larvæ, which they gnaw and consume; among those which feed on vegetable substances, some live in leaves, which they sap internally, others live in galls, mushrooms, seeds of plants and fruits;" showing clearly that the range of media inhabited by larvæ of this genus is very extensive; and from the known variety of circumstances in which larvæ of the same species have been found, their development in the urinary tract of man cannot be looked upon as impossible, and the probability of such an event will have been already indicated by the preceding history of this case.

It does not appear, after a tolerably diligent search amongst standard works, reviews, and periodicals, that there are any authenticated accounts on record of similar cases, save a few related in the "Ephemerides of Natural Curiosities;" but there are very many instances of parenchymatous and lavatory Entozoa found in situations of the human body just as extraordinary—in the brain, bloodvessels, liver, gall-bladder, ovary, muscle, eye, bronchial glands, abscesses; nay, the *Strongylus gigas* occurs in the pelvis of the kidney; and even in the bladder itself, the *Diplosoma*, *Spiroptera*, and *Dactylus*, have been already detected and described. To my mind, there is an equal difficulty in accounting for the presence of these Entozoa as for the larvæ of a dipterous insect; and it must