

Plain instructions for inoculation in the small-pox : by which any person may be enabled to perform the operation, and conduct the patient thorough the distemper.

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L O N D O N :

Printed at the Expence of the AUTHOR, to be given away in America,
M,DCC,LIX.

I N T R O D U C T I O N.

INOCULATION, as I am well assured, would be much more general among the English on the Continent of America, and of course many lives would be saved, if all, who are desirous of being inoculated, could easily be furnished with the means of having it done.

This consideration has engaged me to draw up a few short and plain instructions, by which any person may be enabled to perform the operation in a tolerable manner, and to conduct the patient through the distemper in those places where it is not easy to procure the assistance of physicians and surgeons: and this practice has so greatly the advantage over every other way of communicating the small-pox, that it would be the better to have inoculation performed by any body, or in any manner, than to suffer this disease to come on in the common way, though assisted with all the helps which art can afford.

P L A I N
I N S T R U C T I O N S, &c.

Of the season of the year proper for inoculation.

ALL seasons of the year are equally proper, as far as my experience goes; the bad sorts of small-pox are not more common, or more fatal in hot or cold weather, than when the air is temperate. But as to the mild sorts usually produced by inoculation, the extremes of weather in England are so far from bringing any danger, that they bring little or no inconvenience to the patients. That the hottest weather is not too hot for inoculation is plain from this consideration, that it has been, and is practised with success in the hottest of the English colonies in the West-Indies. There is certainly this advantage attending hot weather, that it allows us to keep the doors or windows of the sick room open, whence arises such a constant renovation and purity of the air, as would, in my opinion, abundantly make amends for all the pretended inconveniencies arising from heat, though they were much greater than have ever yet been supposed. On the other hand, I know of no disadvantages attending winter which will not be sufficiently remedied by fires; and these too will help to make
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the air of the room constantly fresh. If I was to make an objection against any season of the year, (which I do not) it should be against the spring, though this has been usually chosen by inoculators; for it is in spring, more than in any other season, that many chronical and hereditary distempers are more particularly apt to make their appearance, and to be most troublesome.

Of the age, constitutions, &c. of the persons to be inoculated.

CHILDREN are very successfully inoculated at a month or six weeks old; and there is a particular advantage in their undergoing it while they are at the breast, as they make no difficulty of sucking; and the milk is the best food and phyfic which they can take. From the time of their being weaned to the tenth year, every year seems equally proper; only the longer it is deferred, the more danger will there be that the distemper may be caught in the common way. After the first ten years every year is, perhaps, better than the following one; though inoculation may always be practised with great advantages over the other ways of receiving the small-pox at all ages, till we come to an age so advanced, that the consideration of the infection being perhaps less easily propagated among old people, joined with that of his having but little of life to lose, may make an old man not think it worth his while to submit to it.

It would be madness to inoculate one who was already labouring under some other acute (or violent) distemper. But as to sickly constitutions, and chronical or habitual disorders, I know none which heighten the danger of the small-pox by having a particularly malignant influence upon it. Many persons ill of venereal distempers, and others in the last stage of consumptive, scrofulous and dropical disorders, who have accidentally catch'd the small-pox, have been observed to have it in the most favorable manner. No one, therefore, ought to be discouraged from being inoculated merely on account of a weakly constitution, or because he is tainted with some hereditary

hereditary or tedious distempers ; unless they were so slight or so dangerous as to make a probability that he might be cured, or would die before he would be in danger of catching the disease in the common way. For such an one would receive as much benefit from inoculation as the healthiest person ; nor, as far as I have seen, has he reason to fear more danger from it ; care only should be taken to choose that time when he happens to be most free from his habitual complaints.

But though I see no reason to refuse the inoculating of such persons as I have been mentioning, yet there are others on whom no consideration whatever should tempt us to perform it, unless we can suppose an absolute certainty of their catching it in the common way ; the persons I mean are breeding women.

There is a certain time in every month, during which it has been judged improper to inoculate women. This caution I find by experience to be useless ; having known several inoculated at that time without any sort of inconvenience : nor is there any reason for contriving the inoculation so as that the courses shall not happen during the height of the distemper. Let them come when they will, they do no kind of harm, and seem of no consequence, and may be wholly disregarded. They are observed almost always to come on, even out of their regular course, at the eruption of the small-pox, whenever the patient happens to be considerably full of it ; I have talked with physicians who have thought this irregular appearance beneficial, but never heard of any one who had reasons to think it hurtful.

Of the preparation.

CHILDREN under two years of age require no preparation : those who exceed this age, every other night for a fortnight before they are inoculated, should take four or more grains of rhubarb, or equal parts of rhubarb and jalap, so as to occasion one stool extraordinary the next day. If ever they had been used to
drink

drink any thing stronger than water, or very weak small beer, they must at this time be forbidden it; and they should eat meat only every other noon. As to their play and exercise without doors, they may go on just as they used to do.

Such as are grown up, may likewise be sufficiently prepared in a fortnight: during which they may be allowed to make half their dinner every day on meat; puddings, tarts, greens, or roots, must make the other half. They should wholly abstain from all strong liquors, unless habit has made some absolutely necessary; and in this case they must do with as little as they can. Four such gentle purges should be taken in this time, as that each of them should occasion not above four or five motions. Bleeding is unnecessary. All great fatigue, and violent exercise should be forborn, together with all intense thinking, and application to perplexing business.

Of the manner of inoculating.

EVERY one would desire to be inoculated from as healthy a person as he could, though I believe the health of the person, from whom the matter is taken, is of very little consequence: it is of none, whether he has a good or a bad sort, whether he has few or many.

The proper time for taking the matter is just before it would have dried up. In order to take it, any sort of thread must be had ready about the thickness of a common pin. The head of one of the small-pox may be opened with a needle, or pin, and then the thread is to be drawn along this, and other pocks, if it be necessary, till it is thoroughly wetted. The thread thus wetted may be put into a common pill-box, into which the air can easily get, and here it will soon become dry: you may either inoculate with it as soon as ever it is dry (and I advise it not to be used while it is wet) or you may then put it into a close box or vial, (for it will keep without spoiling after it has been dried) and use it some days after. It has been

been known to keep its power of communicating the infection for many months. Half an inch of that part of this thread which had been well soaked in the matter, (and this will be known by its stiffness) must be cut off at the time of use. The person who is to be inoculated, must have the fine edge of a penknife or lancet, drawn along that part of the arm where issues are usually made; and it must go deep enough to make the blood just begin to appear; that is to say, the slightest incision which can be made is sufficient: this small wound should be a little more than half an inch long. In, or rather upon, this, the bit of thread must be put, and a small plaister of what is called the Ladies black sticking plaister, or a plaister of simple diachylon, is all which need be put over it to keep it on.

The inoculation may be performed in both arms for security's sake, least one of the plaisters should happen to come off; though if it were done only in one arm, I believe it would very rarely fail of success. If the person to be inoculated has an issue, the infected thread may be put into that without making any other incision.

Of the management of the patient after inoculation.

AFTER twenty-four hours the plaister and thread may be taken away; and from this time the incision need not be covered with any plaister, or roller, till it begins to inflame and grow sore; when for the ease of the patient it must be defended from the air, and from the rubbing of the cloaths by a bit of what is called in the shops The common plaister. The inconvenience attending its being covered with any plaister or pultis after the first twenty-four hours is this, that these applications continued for four or five days will occasion a redness on the skins of many people, and in some will cause a considerable degree of erysipelatous (or tettery) eruption. At the time therefore when some appearance of the infection may be expected about the incision, it will be a little doubtful where a plaister has been applied, whether the discolouring and inflammation be owing to the expected distemper, or merely to the
 B plaister.

plaister. This will keep the patient and his attendants in an unnecessary suspense; and, if there should happen to be no eruption, their uncertainty would be much more perplexing, and might never be cleared up; whereas if such an inflammation came on four or five days after the incision, when no application had been used to the part, there could be no doubt of its arising from the infected thread; and it seems to be the general opinion in England, that a regular inflammation and suppuration of the little wound, proceeding from the infection of the variolous (or pocky) matter, will alone, without any eruption, fully secure the patient from having the small-pox afterwards. Add to this, that there is not the least use in the applying of any thing to so slight an incision, till it begins to inflame and be fore.

After the plaister is applied, a fresh one may be put on once or twice every day.

If the inoculation should fail of communicating the infection, it may safely be repeated after waiting one month; for if it does not succeed, it does no harm, and the patient is just in the same state with those on whom it had never been attempted.

The inoculated persons may be allowed to go out every day, till the symptoms of the fever begin to come on; the confining of them to their chambers immediately after the inoculation is performed, will have no good effect on their general health, and often a bad one on their spirits, and is not attended, as far as I know, with any advantage. But they must still observe the caution before mentioned, of avoiding all fatigue of body or mind. The diet may be the same as in the preparation; and, if the patient has not a stool every day, one drachm or more of lenitive electuary may be taken to procure one.

About the seventh day from the inoculation the patient generally begins to be heavy and languid, to feel weariness, headach, sickness,
and

and the other forerunners of a fever; with all which he is so much oppressed as to find himself easiest in bed all the time that these symptoms continue, which is usually three days.

During this time barley-water, thin gellies, saige or balm tea, toast and water, thin gruel, milk porridge, or some such liquor is commonly all which can be borne; and there is no occasion to press the patient to take any thing else; but if his stomach would bear it, he might be allowed to eat almost whatever he would choose, meat and broth excepted. Besides the complaints already mentioned, young children, just before the small-pox appears, are apt to fall into convulsions; which seldom fail to occasion some alarm, though they are frequently the forerunners of a favorable sort, and are very rarely attended with any real danger.

Troublesome as these symptoms are, it is not often that remedies are required for any of them, except the vomiting; and this is sometimes so continual, as greatly to weaken the patient both by the fatigue of it, and by its hindering of him from taking any nourishment. When this is the case, it will be found by experience, that in the variolous (or small-pox) fever, as well as in all other fevers, eight or ten grains of ipecacuanha will commonly check, if not entirely stop the vomiting, to the great relief of the patient.

They all vanish of themselves on the third day when the eruption (or breaking-out) begins. After which the patient may either lie a-bed, or sit up, just as his strength and inclination prompt him. He must continue to abstain entirely from all liquors stronger than small beer, and from broth and meat of every kind; but may nourish himself with milk, panada, chocolate, sago, gruels of all sorts, bread, biscuits, puddings, tarts, greens, and roots. It will be right for him to drink frequently of some warm diluting liquors, such as thin milk porridge, whey, milk and water, balm or saige tea, toast and water, or warm water sweetened with preserved tamarinds, or any sort of syrup.

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It is still necessary, that he should have a stool at least every other day, and this may be commodiously procured, if there be occasion, by a clyster of warm water only ; a pint and a half will be sufficient for a grown person, and proportionably less for those who are younger.

As soon as the pocks are dry upon the face, the patient may be purged ; and a gentle purge should be repeated every third day, till he has taken five. If he should have any cough or foreness of eyes, it will be necessary that he should lose some blood. After the first dose of physic he may begin to eat meat, and to take the air.

F I N I S.