

the left hand firmly into the axilla (palm outward), and to grasp the upper arm so as to allow the minimum of motion. He will thus be able to hold complete control over the site of the operation, and need not be disconcerted or hindered by any twisting or squirming on the part of the infant.

7. The surface tissue must be removed so as to enable the vaccine virus to be deposited there; it is useless and disadvantageous to go deeper. By making a deep wound some of the vaccine is deposited where it will not infect (in the deeper layers), and some is swept away by the hemorrhage which is needlessly caused.

8. It is disadvantageous and unnecessary to cause blood to flow.

These two rules have been partially considered above. Besides the reasons given by Hime, we should consider the one which I have mentioned; namely, fear of sloughs.

9. As animal vaccine is so thick and tenacious, it will not penetrate readily into such minute scratches as suffice for the thinner and more watery human vaccine, therefore a slightly larger raw surface is necessary.

It is hardly necessary for us to consider the matter of human vaccine, since animal virus is so readily attainable. If the operator wet his ivory point, then scrapes the arm gently with the moistened edge, he will find that very small wounds will take up the virus. As the scraping goes on, the virus over the whole point will gradually dissolve. A slight rubbing with the flat surfaces of the ivory will readily transfer the virus to the arm.

10. The best method is to rub off the surface of the skin by frequently passing the edge of the lancet rapidly over it. The spot should be about this size . Do not make clean cuts or incisions.

We have already considered this, except as to the size of the spot. Most operators will find it difficult to make it as small as Hime suggests, without digging in. Make your wound, however, as small as possible.

11. Allow a few minutes for absorption, before the child is dressed.

A sensible and obvious recommendation.

12. Instruct the mother carefully to avoid irritating the pock, breaking it, poulticing, applying wet cloths, etc., and as to keeping the pocks scrupulously clean.

13. As the scab is a natural protector for the raw surface below, the mother should be instructed to take every care to avoid knocking it off.

14. Avoid shields. The dry clean scab is the best protector.

Instructions to the mother are very important. I think the mistake generally made by parents, is that of applying poultices. When the arm is swollen, reddened and tender, some kind neighbor suggests a poultice. The result is, that the scab (the natural protector) is dissolved off, and an open wound ensues. Such a wound is frequently hard to heal, and generally leaves an unsightly scar.

15. Do not be too economical in the quantity of vaccine used.

16. Make at least four insertions well apart.

One point will generally suffice for a complete vaccination.

As for the number of insertions, four would seem to be sufficient. I think that all vaccinators agree with the theory first propounded by Marson, that the amount of protection depends upon the number rather than the size of the vesicles. Four small insertions will not cause as much trouble, either at the time of operation, or afterwards, as one large one, while the amount of protection will be considerably greater. Besides, with four insertions, we are almost sure of having some successful ones.

Hime says nothing about the point of election. I would, therefore, formulate one more rule.

17. Choose the left arm, preferably, for your operation, and make your insertions between the insertion of the deltoid and the point of the shoulder.

By following this, you will have a good surface to work upon, you will place the resulting scars in an inconspicuous place, and, most important of all, you will escape the lymphatics, thus minimizing the chances of axillary abscess.

These rules well observed, would cause fewer and less serious complications in vaccination, and a greater amount of protection afterward. It would be well, also, for every student to familiarize himself with the appearance of the vaccinated arm, from the sixth to the tenth day, and to scrutinize carefully the external changes which occur in the umbilicated vesicle during that period. He would then be little likely, in after years, to accept a mere septic irritation for a successful vaccination.

Yours respectfully,
WILLIAM G. MACDONALD, M.D.,
Physician to Boston Board of Health.

BOGUS TESTIMONIALS: A DISCLAIMER.

THE PAVEMENT,
NOTTINGHAM, September 18, 1896.

MR. EDITOR:—May I ask you to insert in your valuable paper the enclosed letter which I have sent to the *British Medical Journal*? In the interests of the medical profession and public alike, it is necessary that the methods of some advertising chemists should be exposed.

NOTTINGHAM, September 3d.
SIR:—I have just received a book of advertisements of an American nostrum called Sanmetto. To my astonishment, I find my own name appended to a most objectionable testimonial in favor of this drug. I have never used it, and need hardly say that I have never given any testimonial for it. I ask you kindly to publish this disclaimer at once, and to give your advice as to the legal remedy against this abominable proceeding.

I am, etc., W. B. RANSOM.

This very glaring invasion of professional and personal liberty is now under the consideration of the Medical Defence Union.

Probably the pamphlet has been sent out broad-cast in America as in England. Yours faithfully,
W. B. RANSOM, M.D., M.R.C.P.

THE TRAINED NURSE.

BOSTON, September 24, 1896.

MR. EDITOR:—After hearing that Mrs. Astor gave five thousand dollars to a training-school for nurses on condition that she should never have one of them, I have felt that perhaps I was not wrong in finding great lacks in experiences with three in my own family. They were highly recommended, and in many respects most satisfactory. They were "above their business" when it came to the mental requirements of a room. In a private house it is even more difficult than in a hospital to introduce an uneducated servant to the room of a very seriously ill person, and it seems as if the modern nurse needed more and more to be waited upon. Among my friends I have heard dire complaints of her arrogance. She resents the desire of the family of the sick person to have communication with the attending physician except through her. When advised to rest by a care-taking hostess, she prances off to more lectures, and comes home in a nervous state unfit even to take care of herself, and still more opinionated than before in the acquisition of more knowledge. What is to be the outcome?

Sincerely yours,

A DOWN-TRODDEN FRIEND OF THE PATIENT.