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# ACUPUNCTURE THE BEST METHOD OF VACCINATION AGAINST SMALLPOX

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ACUPUNCTURE is the method of vaccination which bids fair to do away with the old scarifying, scraping or scratching methods so familiar to our forefathers. These punctures are one one-thousandth of an inch deep and would not go through an ordinary visiting card. The extreme tip of an ordinary sewing needle, carefully sterilized, is used. Not a shred of the epidermis is removed. So slight is the pain that in several instances, the operation was complete before the patients knew it had even begun.

If the vaccination does not take, nothing happens at all. If, however, the person has been successfully vaccinated before, or has had smallpox, the punctured surface will redden, swell slightly and become slightly itchy for a day or two immediately following puncture. This is the anaphylactic reaction. In most cases where the vaccination takes, the puncture spot will show nothing for four or five days, then redden, swell, and a single smooth pearly "button" arises about the size of a large green pea. In ten days or so this will shrink and become a dark dry "button" and in about ten days more, the "button" will gently separate leaving a small round scar. Ordinary areolæ develop, and some tenderness of the axillary glands occurs.

Recently over sixty students of the Western University Medical Faculty were vaccinated by this method. No one who had been previously vaccinated or had had smallpox took at all; but all these showed the anaphylactic reaction described above. Everyone

who had not been vaccinated before took. Three of these took in one spot each, one in two spots, and one in three. There was not a bad arm amongst them nor an hour of work lost nor a lost meal. Amongst more than sixty students less than one small drop of blood all told was shed. This method therefore gave 100 per cent. of success in all the possible directions and not a failure of any description from any standpoint.

In two cases of students who showed the anaphylactic reaction although they had never been previously successfully vaccinated and had never had smallpox so far as they knew, careful investigation through their mothers of the alleged attack of chicken-pox which both of them had had showed that in the one case it certainly was smallpox and in the other it very probably was. It is not uncommon for mild smallpox to be mistaken for chicken-pox and some persons fail to take vaccination simply because they have had smallpox, although they thought it was chicken-pox.

Acupuncture vaccination is done as follows: The arm is washed with soap and water, then with alcohol, and finally with ether. A small drop of vaccine is deposited on the clean surface. The vaccinator's hand is closed upon the arm from behind so as to draw the skin tight in front, and the sewing-needle point, held slantingly nearly parallel with the skin, is pressed against the skin through the drop of vaccine. Then it is that one one-thousandth of an inch of the point sticks through the upper layer of the skin, carrying the vaccine with it. The needle is instantly withdrawn and another puncture exactly like the first is made close beside it, until six punctures are made in the space of one-sixteenth of a square inch or less. The whole process of puncture takes perhaps fifteen seconds. At once with a bit of sterile gauze, the surface vaccine is removed, and the sleeve drawn down. Total time from rolling up the sleeve to rolling it down again, five minutes, most of which is occupied in washing the arm before making the punctures.

As a rule it is best to make three sets of punctures, one at each of the angles of an equilateral triangle having sides two inches long. Three scars are better than one and sometimes one set of punctures fails to take or even two; while out of three at least one "button" usually develops if the patient is susceptible to vaccine at all.

As in all vaccination by any method, neither the vaccinator or the vaccinatee should talk during the process lest the mouth spray should be carried in with the vaccine. In the puncture method the danger of infection from this source is, as from every

other source, infinitesmal, for two reasons; first because there is no blood drawn and blood in a vaccination wound is the great inviter of infection; second, because no epidermis is removed as in the old method, and the epidermis is the natural protection of the body against infection. At the same time, there is no danger of tetanus because the puncture is less than one one-thousandth of an inch deep.

A strip of sterile gauze may be pinned or sewed to the inside of the undershirt so that it lies just over the punctures. No other dressing should be used under any circumstances whatever; no shield, no absorbent cotton, no bandage, no adhesive plaster. "Leave it alone!" Don't wash it, don't scratch it, don't do anything to it. After the vaccinator has made the punctures nature will do all the rest that is required.

Vaccination by the puncture method is perfectly harmless. If the patient is already protected, he will not take; if he is not protected then the only thing is to become protected. The arm is punctured; if protection is needed, protection will develop; if it is not needed, nothing happens, except the anaphylactic reaction which is the proof that protection is not needed.

This method was first suggested to the writer by Dr. J. H. Kinyoun, of Washington, D.C., a number of years ago. It has been used with great success in Minnesota and in London, Canada.