

the appearance of the areola, or at all events within a very few hours of its commencement. No greater mistake can be made than that of taking it later, and when the areola is fully complete. The protest which Jenner felt it necessary to make against this practice in the earlier days of vaccination has been repeated by every vaccinator of authority since his time. No doubt the lymph flows more freely at this late period, and may be got in greater abundance, and no doubt also (as is alleged by those who defend this practice) such lymph very often takes; but, in the first place, it does not take *with anything like the same certainty* as earlier and more active lymph, and in the second place, it is more apt to be followed by erysipelatous and spurious results. I repeat, that judicious *choice* of lymph—the taking it only from suitable subjects, from the primest vesicles, at the proper time—is a cardinal point in good vaccination. And I will venture to say that just in proportion as the rules here laid down—rules sanctioned by all the best authorities—are adhered to, so will success be attained, and irregularities in the course of the vaccinations performed be avoided.

*Collection of the Lymph.*—A child and a vesicle fit for the purpose having been selected, the vaccinator, in order to collect the lymph, proceeds to open the vesicle by a number of minute punctures, which must be made on its surface, and not round the base. The object of many punctures is to open the various cells of the vesicle in which the lymph is contained, and the reason for making these on the surface and not round the base is to obtain the lymph free from any admixture of blood. If by accident any blood be drawn, this must be allowed to coagulate, and then be carefully removed before taking the lymph; for it is a rule never to be deviated from, that the vaccination must be with vaccine lymph, *and with lymph only*. When the cells of the vesicle are freely opened, the lymph soon exudes and lies on the surface; and thus lying, it may be taken on the point of a lancet, or in any other way that is desired, for use. On no account must there be any pressure or squeezing of the vesicle with the lancet, or otherwise, to make the lymph exude; and when lymph ceases to stand spontaneously on the surface of a vesicle, that vesicle must be considered no longer useable for lymph supply. Very generally, however, when the lymph which has first exuded has been taken, and the surface of the vesicle left apparently dry, if the operator wait a minute or two he will find there has been a fresh exudation of good usable lymph; and when he does not find, he may often induce this in a way quite unobjectionable by wiping very gently the surface of the vesicle with a soft wet linen cloth, thereby removing or dissolving the inspissated lymph which clogs the punctures."