WHAT ARE THE MAIN POINTS OF DIFFERENCE BETWEEN THE RASHES OF SMALL-POX AND CHICKEN-POX?

We have pleasure in awarding the prize this week to Miss A. L. Clarkson, City Hospital, Edinburgh.

PRIZE PAPER.

The rashes of smallpox and chicken-pox are, at times, very apt to be mistaken the one for the other, though there are several features of each which are entirely different.

The following points show the difference between the two rashes :---

1. The distribution of the rash; this is the most important point.

2. The difference in the shape and character of the pocks.

3. The way in which the rash appears.

1. The Distribution.—The rash of smallpox is centrifugal in character, while that of chicken-pox tends to be centripetal.

The rash of smallpox increases in density the greater the distance from the centre of the body. It usually appears first on the brow and wrists. The head, face, and scalp are badly affected, as well as the extremities. It is most profuse on the wrists, forearms, and hands; the legs do not suffer so much, but more so than the body. The rash of smallpox shows a strange liking for parts of the body which have been irritated by exposure or by the friction of clothing, such as the waist in women or any part which has been inflamed in any way. Such areas show a much better crop of pocks than protected areas, such as the axilla or flank.

In marked contrast to the above we find that in chicken-pox the trunk is first affected, the rash being most profuse on the back and trunk. The extremities suffer least of all, and the face only slightly.

If, in a severe case, the extremities are affected, the rash does not vary in density from that on other parts.

The chicken-pox lesions have no special preference for exposed, prominent, or irritated parts, and the axilla and flank do not escape as in smallpox.

2. The chicken-pox vesicle is oval shaped, and lies more on the surface of the skin than the smallpox vesicle, which is deeply set in the skin, and is round, firm, and hard—" shotty" to the touch.

The chicken-pox vesicle is thin walled, and collapses readily if pricked.

The smallpox vesicle is stronger, being multilocular, and does not rupture in this way.

The umbilication which is found in smallpox is lacking in chicken-pox, though it might be imitated in the latter if the vesicle is ruptured and scabbed over.

Another point is that the chicken-pox vesicle has usually a sort of puckering round the edges which is wanting in smallpox:

3. In chicken-pox the spots continue to come out in crops for several days, while in smallpox the rash comes out once and for all.

In one area of skin we find chicken-pox lesions at all the different stages at one time—a vesicle side by side with a crust.

In smallpox the opposite is the case.

In a given area of skin we find the macules becoming papules, papules becoming vesicles, &c., all at one and the same time.

The above are the most outstanding differences between the two eruptions, but chief weight should be laid on the distribution.

.HONOURABLE MENTION.

A large number of excellent papers have again been received this week, and we own it was a little difficult to award the prize. The following competitors receive honourable mention :—

Miss J. G. Gilchrist, Miss M. V. Winters, Miss K. Dinsley, Miss Kate Foster, Miss May Watt, Miss F. Jenkins, Miss Gladys Tatham, Miss Anne Simpson, Miss C. McDonald, Miss F. Sheppard, Miss G. E. Hinchcliffe, and Mrs. Calthorpe.

Much valuable information is given in the various papers. Miss G. E. Hinchcliffe says of the appearance of hæmorrhagic and malignant smallpox :----

The most characteristic hæmorrhagic rash occupies the lower half of the abdomen, extends to the thighs in triangular form, frequently appears in the axillæ and adjacent parts of arms and trunk; it consists of small hæmorrhagic spots, which on fading leave yellowish brown stains for a time.

The malignant or purpura variolosa, when a scarlatiniform rash appears within 48 hours, quickly followed by subcutaneous hæmorrhage; mucous membranes are affected; bleeding may occur from the nose, lungs, rectum, kidneys, or uterus. Face is red and puffy, eyes suffused. Cases are mostly fatal.

Of chicken-pox, or varicella, she draws attention to the fact that in varicella gangrenosa some of the vesicles increase in size, from reddish brown or black scales under which the skin sloughs, leaving circular ulcers with cleancut edges. In varicella bullosa, large bullæ are found in addition to the normal vesicles.



