

Medical Matters.

TREATMENT OF SMALL-POX IN RED LIGHT AND IN THE DARK.

Dr. C. H. Würtzen, of Copenhagen, writes in part on the above subject in the *British Medical Journal*:

Finsen in his pioneering works from 1893 lays down his method for the treatment of small-pox by exclusion of the chemical rays of daylight, and in January and February, 1894, a slight small-pox epidemic gave Feilberg the opportunity of using it in my country. The method has later been used in the Oresunds-hospital on every occasion.

As is known, one tries to carry through the method generally by arranging a red room. This is done either by covering all windows with several layers of red stuff (bookbinder-shirting, flannel, blankets, and the like), or by furnishing the windows with red glass or by combining both proceedings. If the stuff is closely woven, the layers not too few, and if the hangings fit closely to all sides, all demands will be fulfilled; but in this case little light passes, and in consequence the room will be rather dark. The strongly subdued light is, however, more often a comfort to the patients at the beginning of the illness.

Still better, one might advance another step by carrying on treatment in the dark. This idea is far from being new. From 1867 and 1871 we have reports on cases of small-pox treated in the dark (Black, Waters, Barlow). Finsen based his opinion of the special inflammatory qualities of the chemical rays in variola on the fact that the most numerous and the deepest scars are generally found on the face and hands—that is, on the parts most accessible to light—and treatment in the dark only differs from treatment in red light by the fact that all other rays are excluded as well as the chemical. No objection can be made against treatment in the dark based on the idea that there is any positive advantage in the use of red light, either in its influence on the eruption or on the general condition.

Finsen pointed out that some people seem to have an aversion to red light, and added: "I wish, moreover, to draw attention to the fact that now when the method (that is, the red light) has everywhere stood the test, it ought to be the doctor's first duty, as soon as he has diagnosed small-pox, to see that the windows of the sick room are covered, and that there is a light. Seeing that the treatment may be so easily arranged, it is really indefensible to expose the patients to daylight until

they can be exposed to red light in the hospital. This indication, which specially concerns the early time, can be prolonged during the whole period, that is, until the vesicles dry up, etc., and it may be taken for granted that patients who have had a severe attack, and especially those whose eyes are affected, will not feel this treatment as particularly rigorous."

It may not be out of place to draw attention to certain conditions which must always be present if the treatment is not to disappoint expectations.

In the first place, the arrangements ought not to be limited to the sick room, but account should be taken also of the adjoining rooms, passages, etc., so that no great quantity of injurious daylight should be thrown on the patient in opening the door of the sick room. All sources of artificial light must be covered with red lamp-glasses, such as photographers use, and when doctors and nurses in their rounds think it necessary to use ordinary light, it ought only to come from a stearine candle, of which the flame contains so few chemical rays that no harm is done if used only for a short time. It therefore follows as a matter of course that even for a short time, and in order to see the exanthem better, daylight ought not to be admitted freely.

Finally, there is the question as to how the red light affects the patients—apart from their illness—and the staff generally. Nothing is known of its remote effects, but the reaction to it seems to be somewhat different. Some do not seem to be appreciably influenced, while others find it rather unpleasant in the long run, and some get an absolute aversion to it. It often produces a feeling of heaviness and headache, and it is always found exhausting and tiring for reading. Naturally the red light produces a strong sensitiveness in the retina to ordinary daylight. This hypersensitiveness is very troublesome and confusing to the nurses, who of course are obliged to go backwards and forwards between the red room and the daylight. To mitigate these drawbacks—and in a red room the light on bright days is very intense—coloured spectacles may be used with advantage. Green and blue glass each in their own way considerably modify the light and produce different shades, of which some will prefer one, others another; and with smoked glasses a chiaroscuro is obtained, which gives great relief. Contrary to what might be expected, neither the blue, the green, nor the smoked glass, provided they are not very dark, cause any considerable weakening of the light in a red room.

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