## SMALL-POX — VARIOLA.

The small-pox is a contagious, eruptive fever, caused by the reception into the blood of a specific poison. There are four stages to the disease. The first, which is called the period of incubation, usually lasts about twelve days. It varies, however, running from six to twenty days, during which time there are no symptoms of indisposition. Then the disease commences with lassitude, headache, pain in the back, vomiting, and shivering, followed by fever, which is called the primary fever.

This constitutes the second stage. About the third day of the fever, an eruption makes its appearance, first on the face, then on the neck and wrists, next on the body, and lastly on the lower extremities. It is generally two or three days extending over the entire body. Occasionally the eruption appears first on the extremities, but this is the exception. Sometimes the mucous membrane of the mouth and throat is covered with the pustules.

The eruption first appears as minute red points which gradually enlarge for about five days, at the end of which time they are in the form of a hemisphere, resembling a split pea in size and shape. Some of them, however, are larger, while

others are smaller. About the third day after the eruption appears, the face becomes very much swollen and the patient is delirious. The pimples now begin to contain a clear, watery fluid which assumes something of a milky appearance in about two days, and which, by the eighth day of the eruption, becomes converted into yellow pus. As the pimples enlarge, they are called pustules—from the pus they finally contain. Each pustule is surrounded by a highly inflamed red margin about the tenth or the eighth of an inch wide.

At the end of the third stage, or about eight days after the eruption appears, the pustules break and the pus dries, forming crusts, or scabs, which fall off in four or five days more. The last period constitutes the fourth stage. A secondary fever sets in about the time the scabs begin to form, the primary fever having subsided about the time the pimples began to fill with water. The secondary fever usually subsides by the time the scabs fall off.

When small-pox manifests itself as above described, it is said to be of the distinct variety, each pustule being by itself. If the patient's blood is very gross at the time he is taken with this disease, all the symptoms will be much aggravated as the disease is much more severe, the fever is more violent, the eruption comes out earlier, the pimples on the face and on parts of the body run together, forming

large blisters containing a brown, watery fluid, while those on the body are pale, having no red margin, and no yellow pus forms in them. When the pustules break, large brown or black scabs are formed. The tongue, roof of mouth, inside of nose and throat become covered with small pustules. The throat is very sore, and there is difficulty in swallowing and in breathing. The fever does not fully disappear when the eruption comes out. In this case, the disease is called Confluent Smallpox. The second variety is generally fatal under drug treatment.

The contagion of small-pox may be communicated at any time after the fever sets in until the scabs fall off, and by the dead body as well as by the living.

**Treatment.**—As soon as it is known that a person has been exposed to small-pox he should commence treatment, and adopt a hygienic diet. See Diet for the Sick. He should be careful not to overdo, and should take a tepid bath, either the sitzbath or the dripping-sheet, every alternate day, and he should keep his mind perfectly calm. The bowels must be kept free with enemas, if necessary, and; if the weather is suitable, he should be much in the open air. As soon as he begins to feel symptoms of fever, he should take a sweat-bath either the hot sitz, hotair, or vapor-bath. As soon as the sweat starts, he should wash off with cool water and wipe dry, and then retire to bed. There should be no carpet on the floor, nor curtains to the bed nor to the windows, and the room must be kept well ventilated by opening the windows. A draft should not strike the patient, however. Light and fresh air are very important in this disease. Without them the patient must die.

When the hot stage arrives, the patient should be frequently bathed in cool water, and a cold, wet cloth should be kept on his head. His feet must be kept warm. If his bowels are constipated—as they generally are—move them once a day with a tepid enema. As long as the preternatural heat keeps up, sponge the body with cool water, or apply cool cloths, renewing them frequently. Keep the room cold at all times. Let the patient drink freely of cool water or lemonade. After the pustules begin to dry up and the secondary fever sets in, bathe the patient with tepid water once a day and sponge the surface occasionally. After the pustules make their appearance, it will be necessary to give the patient nourishing food in small quantities three or four times in the day, if he desires it so often, but caution must be used, however, lest the patient should overeat. He should have gruel or porridge made of corn, wheat, or oatmeal, with a little milk or cream. Toasted bread, baked apples, or food similar to the above is admissible.

Carbolic acid should be sprinkled in the room daily. Cleanliness must be observed to insure recovery. To prevent the face from pitting, bathe it several times a day with sweet oil or glycerine, and admit the sunlight into the room freely; but do not let the direct rays strike the patient's face, as it would cause pain in the eyes. When the pustules on the face break, flour or powdered starch should be sprinkled over it to exclude the air and thereby prevent pitting. With drug treatment about one in three or five die, and sometimes as many as three in eight, while with the hygienic treatment not more than one in ten or fifteen. In my practice under the hygienic system I have lost but one in eleven.

**Preventive Measures.**—Do not burn the clothes, but bury them in dry earth. The earth will absorb the poison, but fire will not destroy all of it. Disinfect the room by chlorine gas or by the free use of carbolic acid and a free circulation of air. Those who live strictly hygienically will be far less liable to this disease than those who live otherwise; and if they have it, it will not prove as severe as under other circumstances. Small pox usually occurs but once.

## Variola Virus



The Hygienic Family Physician: A Complete Guide for the Preservation of Health, and the Treatment of the Sick without Medicine, pg. 275-280 by M. G. Kellogg