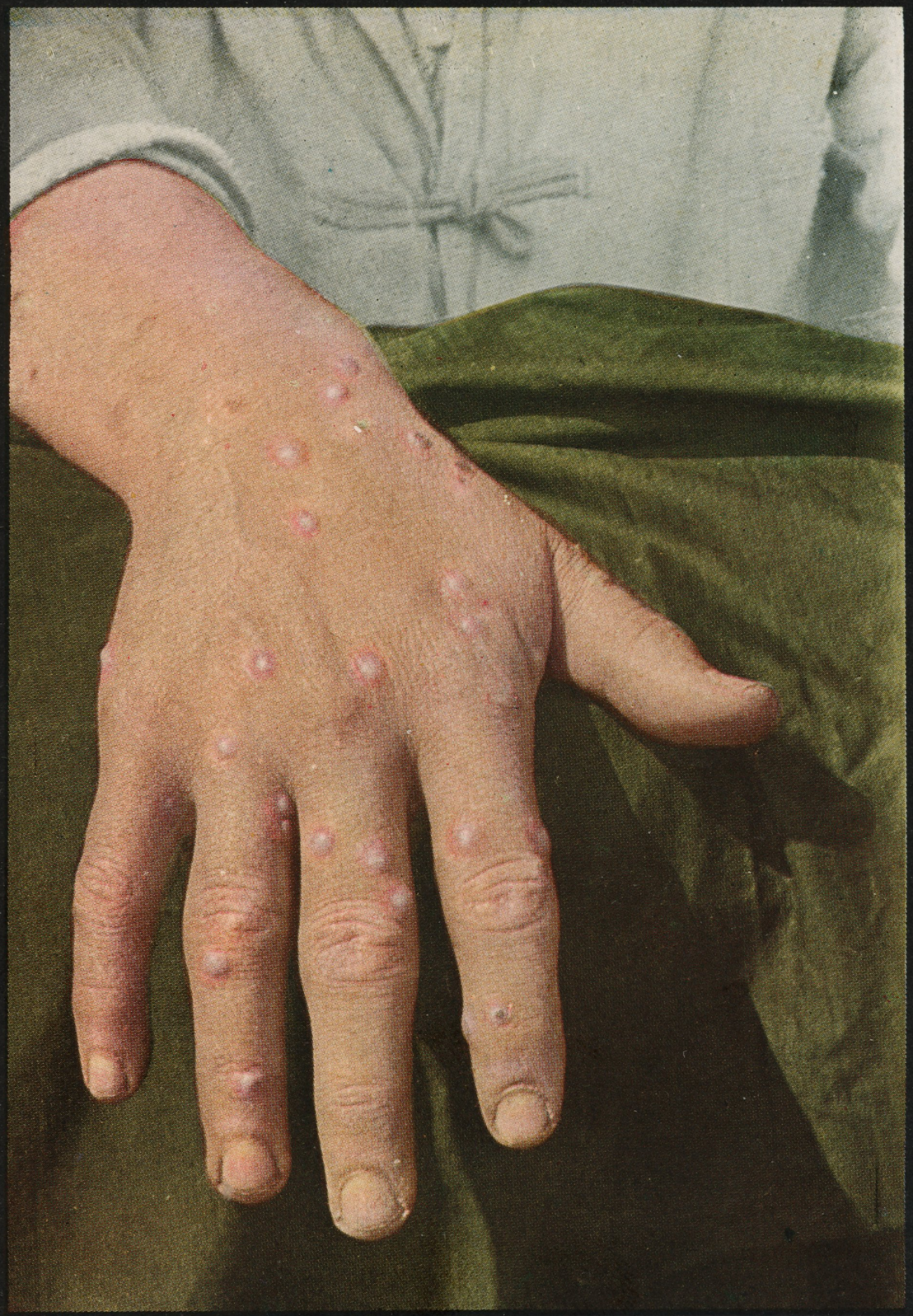

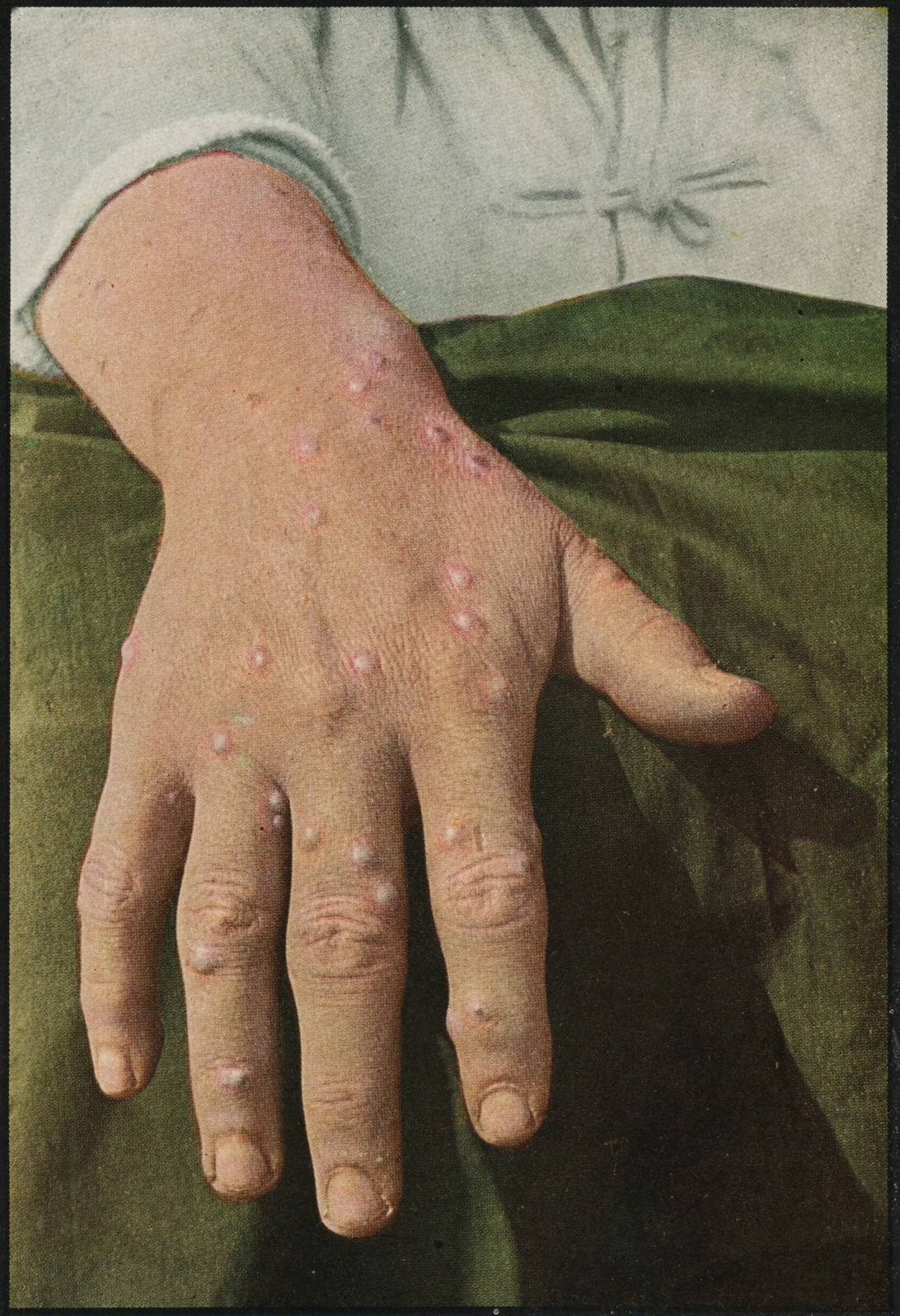

VARIOLA

Variola is a contagious fever whose incubation time is about 14 days to the outcrop of the rash. The invasion begins abruptly with chills, and fever that rises rapidly to 103°—104° F., frontal headache, severe backache, vomiting and, in children, sometimes with delirium or convulsions. During the invasions the patient is usually prostrated, restless, nauseated, constipated, and may perspire profusely. The tongue is coated and there may be excessive salivation. A fetid breath not due to sordes is a bad omen. In from 10—16% of the cases a diffuse or macular, erythematous or purpuric rash appears upon the inner surface of the thighs and on the lower abdomen. Death in toxic cases in this stage is due to heart failure, pulmonary oedema or pneumonia. The characteristic rash appears on the third or fourth day as small shot-like papules upon the forehead and for 24 hours or more continues to develop upon the face, extremities and trunk. As the rash comes out the fever subsides and the patient feels comfortable. In a day or two the papules become globular thick walled vesicles with clear then turbid contents. Many of the vesicles may be umbilicated. A day or two later the vesicles become pustules that ripen for about three days then dry to crusts which fall off about the 18th day. The upper limit for the diameter of a pustule is $\frac{3}{8}$ inch, which is twice that of the papule from which the pustule arises. Maturation takes place first on the face and follows the order of appearance of the lesions. With the onset of pustulation the fever returns to subside gradually with the desiccation of the rash. When death occurs from the suppurative fever it is generally between the 11th and 15th days, and is due as a rule to septic absorption or broncho-pneumonia from affection of the air passages, for lesions develop upon the mucous membranes exposed to the air. One of the most important characteristics of the small-pox eruption is its distribution. The rash develops from above downwards. It is most abundant on the face, usually scanty on the trunk but more profuse on the back than on the front and more on the shoulders and chest than on the loins and abdomen. The rash favors the limbs, the arms next to the face, and is nearly always more abundant toward the distal extremities. It is important to note that the lesions shun the sheltered parts, e.g. the axillae, groins, popliteal spaces, and the shallows, e.g. the orbits, supraclavicular and suprasternal hollows, and seek the exposed parts, ridges and prominences, e.g. the elbows, deltoid regions and outer arms, the extensor surfaces of the forearms and backs of the hands. No matter how much the lesions may be modified the scheme of their distribution remains the same. In the confluent form of variola the lesions on the face, hands and feet are so thickly set that in the pustular stage they fuse and convert the entire skin of the head and extremities into a superficial abscess. In malignant or hemorrhagic small-pox extensive hemorrhages occur into the skin or from the mucous membranes. The cases prove fatal, usually on the 4th, 5th, or 6th day, occasionally even before appearance of the papules. When the bleeding does not develop until the pustular stage the patient may recover. **DIAGNOSIS.** The initial rash may be mistaken for *scarlet fever*, but it very rarely has the extent and never the persistence of the rash of scarlatina, and is not accompanied by glandular enlargement or the "strawberry tongue." The papular stage has been mistaken for *measles*, but in that disease the general condition of the patient, the coryza, conjunctivitis, cough, and the distribution of the rash, its abundance on the trunk and disregard for the contours of the body, should make the differentiation easy. *Varicella* most often leads to error. Its prodromata are less severe. The rash is usually vesicular from the start and as abundant on the trunk as on the face. It avoids the limbs and upon them is more profuse toward the proximal extremities; it is indifferent to shallows and prominences. The lesions are superficial and their outlines often oval or irregular, and the rash is not homogeneous even on one region of the body. Few of the vesicles are umbilicated, though the absence of umbilication counts nothing in the differential diagnosis. **TREATMENT:** There is no specific treatment, except the prophylactic, which demands that every individual should be vaccinated from time to time, and always promptly after exposure.