

*General Observations*

In smallpox the worst systemic disturbance and suffering are often found during the prodromes, and improvement, if only temporary, follows closely on the appearance of the eruption. Severe prodromes may be followed by either mild or severe eruption; mild prodromes, usually by mild eruption. The extent of the eruption on the face is a fair index of the general severity of the attack. In chicken-pox the practical absence of prodromes means that the first appreciable systemic disturbance, if there be any at all, begins with the eruption and continues for a few days thereafter.

In smallpox itching during the early stages of the eruption is not usually a marked symptom; nor does scratching injure the lesions much, on account of their deep-seated and tough-walled character. In chicken-pox itching is highly characteristic, and since the relatively superficial and thin-walled lesions are very fragile, they are easily destroyed, not alone by scratching, but by every form of contact. This feature is in itself of very strong diagnostic import.

In smallpox the thick walls of the pustule permit comparatively little evaporation; the pustule, in shrinking, sinks into the skin, and a hard, opaque, brown, very tenacious scab is often formed. This is especially true of the lesions of the extremities, particularly of the palms and soles. In chicken-pox the vesicle, if not wiped off or collapsed early, shrinks by evaporation to a brittle, but still somewhat elevated cap, very easily broken off or dislodged. In mild and abortive smallpox and in varioloid similar caps are at times found on the *body*.

*General Differential Diagnosis of Smallpox\**

During the invasive stage, and before the appearance of the prodromal rashes, the diagnosis must be made from other infectious diseases having an acute onset, i.e., measles, scarlatina, typhus, influenza, etc. Diagnosis at this stage depends primarily upon the presence of an epidemic, and the history of exposure within the appropriate incubation period. In the case of the diseases indicated below, the following points should also be considered:

SCARLATINA. With rash absent or "missed." Condition of tongue, cervical lymph-glands, tonsils, nose discharges, injection

\*Modified from A. E. Thomas, "Public Health," Vol. xx.