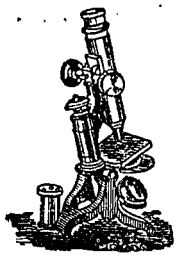
Medical Matters.

PATHOLOGY AND TREATMENT OF SMALL-POX.



Dr. Nelson Brayton, writing on the above in the *Journal of the American Medical Association*, says:—The pathology of small-pox comprises at least three distinct considerations: First, the conditions arising from the poisonous influences of the variolous contagion itself; second, those arising from the maturation stage; and third, the incidental complications and sequelæ. Dr. Osler's five distinct varieties of the disease, arranged as follows, now form the generally recognised classification:—*Variola hæmorrhagica*: (*a*) Purpura variolosa (black small-pox); (*b*) variola hæmorrhagica pustulosa. *Variola vera*: (*a*) variola confluens; (*b*) variola discreta; (*c*) varioloid. But little is known of purpura variolosa, which is the rarest of all forms of small-pox, and in itself essentially and always fatal; the patient dies before the appearance of the eruption, and a *post-mortem* reveals abundant blood extravasations into serous membranes and loose connective tissue of the body; into the muscles, the joints, and bone-marrow. These, in conjunction with the well-known external manifestations, namely, petechiæ of the skin and conjunctival ecchymoses, are the main pathologic conditions. The main lesion seems to be a tendency to blood extravasation; whether or no its etiology is that of blood dissolution, of "acute infectious diseases," or of the "bacterial coagulation thrombosis" of lenna, is as yet unproved. Variola pustulosa hæmorrhagica distinguishes itself from purpura variolosa in that an eruption always develops to a greater or less degree; elevation of a macule to the papule always occurs; and hæmorrhage may occur into the lesion at any time in the cycle of its existence. Internal lesions present themselves always in the respiratory tract. The intensity of the poisonous element of the contagion of variola may cause death with the early hæmorrhage into the macule as early as the fourth day, or the individual may perish later of complication or sequelæ.

Variola confluens presents the classical clinical picture of small-pox: on the eighth, ninth, or tenth day the pustules may run together, producing great blebs, and the individual falls into a state of profound septicæmia from absorption of poisonous toxins elaborated in the countless pustules. Coincidentally, bacteria develop in the blood and the patient dies from profound sepsis, and often in delirium. Extensive pharyngeal, laryngeal, nasal, and bronchial lesions are always present in severe cases of variola confluens of special symptoms. Those which concern the eye are of prime importance, and they may be either extrinsic or intrinsic: (1) Symptoms in which the external parts of the eye are the seat of pustules; (2) where the eye or eyeball is itself involved. Those which appear on the cornea, however, have a distinct pathology, and appear most frequently in albuminuric patients.

The Treatment of Small-pox divides itself naturally into—(1) The prophylactic treatment; (2) the treatment of the disease itself; (3) that of its complications and sequelæ. Prophylactic treatment consists of vaccination, isolation, and disinfection. That of the disease itself will in purpura variolosa be chiefly concerned with the relief of the pain in the back; for this, morphia hypodermically in large dosage should be employed; the only theoretical treatment that might seem to be of service in this condition would be the abstraction of the blood in large quantity and the intravenous infusion of saline solution. The other forms may have the prodromal symptoms treated in the usual manner; the use of opiates and laxatives, with baths for the fever and delirium, is to be encouraged. In cases of marked epistaxis or hæmorrhage recourse should be had to large doses of opium. As soon as the eruption appears, the patient should be at once given hot baths at intervals of every three or four hours, and continued as long as they do not enervate the patient; they promote diaphoresis and promote kidney action, and have a quieting influence on the nervous condition of the patient. As the pustules form, they should either be removed or their contents evacuated, and then the patient be given an antiseptic bath of either carbolic acid, bichloride of mercury, or boric acid. The emollient treatment which may be employed between the baths may consist of such simple remedies as a mild carbolic vaselin and the use of a dusting powder. To a great extent the prevention of scarring and pitting is entirely beyond the power of the physician; whatever remedies are of service in this regard must be those which possess the power of keratolisation; chief among these is salicylic acid in a 3 or 4 per cent. ointment form. Continuous application

previous page next page