

meningitis, in which disease also cutaneous ecchymoses not unfrequently occur. Indeed, I have the permission of the physician in charge to state that in case 25 on the list the error in diagnosis was made. I remarked to him at the *post mortem* examination upon the similarity of the pathological changes to those in hæmorrhagic variola. The mother, who had nursed the child, a short time subsequently took small-pox, and died.

With true *Purpura hæmorrhagica* —the *Morbus maculosus Werlhoffii*,—this variety of small-pox has many points in common. In both there are cutaneous and mucous hæmorrhages, but in the former the extravasations begin on the lower extremities, the skin is not so hyperæmic, the fever not so high, and there may be œdema about the joints, diarrhœa, and ascites.

Etiology.—From the table subjoined some interesting facts with reference to the general etiology of the disease may be drawn.

It is most common between the ages of 15 and 30. Thus of the cases there were—

Under 10 years, 3 ; between 15 and 20, 4 ; between 20 and 25, 9 ; between 25 and 35, 6 ; between 35 and 45, 3 ; above 50, 1.

Young, vigorous, muscular persons form the majority of the victims, and this remarkable fact was noticed also in the late epidemic in Germany. (Zulzer, Ponfick). Several of my patients were above the average muscular development, most of them belonging to the artizan class. The predisposing causes mentioned by Aikman,* viz., sudden change of residence, debilitating nervous influences, unhealthy dwellings, were not specially observed.

Men appear to be more frequently attacked than women.

With regard to vaccination the table shows that 14 were unvaccinated, while 13 showed marks of a by-gone vaccination. In none was there a history of re-vaccination. That is, the whole of these cases were unprotected, for I hold that we have no right whatever to say that a man is *vaccinated* because he has cicatrices on his arm. The proof that these 13 were not vaccinated lies in the fact that they died of the worst form of small-pox. No properly *vaccinated* person, one in whose tissues the impress of vaccina persists, can, I maintain, take small-pox.

Similarly †Zulzer's cases, 35 in number, all showed scars,

* *Glasgow Medical Journal*, 1871, p. 60.

† Loc. Cit.