

of the groin could be easily felt, and some days later they had increased still more in size, those on the side of the ulcer being the larger.

One month later, that is fifty-six days after the first inoculations, papules were noted upon the thighs, abdomen and back. They were fifteen in number, round, and of the diameter of a ten-cent piece. The peripheral zone was at first red, and later became pigmented; the middle zone was paler, while the center came to be covered with a scaly crust. On scratching, serum was exuded.

The papules endured for a month and then began to heal; but they were still visible some weeks later at the time of the death of the animal, which was caused by the pneumococcus, to which micro-organism the chimpanzee in confinement is peculiarly susceptible.

Metschnikoff and Roux also showed that the syphilitic virus was transmissible from ape to ape without undergoing alteration of quality as measured by the effects produced. Forty-five days after the appearance of the primary lesion in the first animal, a second was inoculated from the first, both from the primary and secondary papular syphilides. Lesions regarded by Fournier as syphilitic developed from both inoculations, and were followed by adenitis.

In a later report, another important experiment on the chimpanzee is described. Eighteen days after the appearance of the primary lesion which was located on the eye-brow, small persistent erosions appeared on the tongue, and three weeks later still other lesions appeared there and on the lower lip. These erosions were regarded as mucous patches. At about the same time, this animal developed a paraplegia lasting more than a month, which it was suggested was of syphilitic origin.

It has also been ascertained by these two observers that the syphilitic virus is easily injured or destroyed by low degrees of heat. Particles of chancres and condylomata suspended in salt solution are rendered inactive upon the chimpanzee after heating for an hour at 51 degrees C. or half an hour at 60 degrees C.

The experiments of Metschnikoff and Roux have been confirmed by those of Lassar and Neisser, and Neisser seems to have discovered an interesting gradation of susceptibility to syphilitic infection in the ape, depending upon the exact position held by different species in the zoological series.

It has also been shown by the studies of Becker and Mayer, and Arnal and Salmon, that the experimental syphilides agree histologically with the corresponding lesions in man.

The discovery of the *spirochæta pallida* in the lesions of syphilis by Schaudinn and Hoffmann announces a very definite advance in our studies of the etiology of the disease, and the evidence seems conclusive