inoculated bird to show the disease was chloroformed the day following that on which positive diagnosis of disease was made, symptoms having been observed two days earlier, twenty-eight days after inoculation. When killed, the tremor was pronounced, and the right leg somewhat ataxic. A suspension of the brain of this bird was made in salt solution and inoculated intracranially into each of four birds, and a suspension of cord was likewise inoculated into four birds. None of these had developed the disease at the end of six weeks when they were killed. Autopsies were performed and material for pathological examination saved in all cases.

The second inoculated bird to show the disease developed a tremor twenty-nine days after inoculation and was killed seven days later. A suspension of brain from this bird was inoculated intracranially into each of ten chickens, and a suspension of cord similarly into each of eleven chickens. None of those inoculated with the suspension of spinal cord developed the disease, but of those inoculated with the suspension of brain, one developed a distinct ataxia after twenty-eight days, and a second developed a marked tremor and poor sense of balance but no real ataxia after twenty-nine days.

These birds were chloroformed, one six days after the tremor appeared, the other five days, and a suspension of brain or of cord was inoculated intracranially into each of sixteen birds. One of the birds inoculated with cord suspension from the bird with tremor and no ataxia developed a fine rapid tremor thirty-four days after inoculation. Forty days after inoculation one of those inoculated with cord suspension from the bird showing ataxia and no tremor showed a fine tremor. Further inoculations are being made from the brain and the cord of each of these two chickens.

All the birds developing the disease after inoculation exhibited numerous lesions in both brain and cord. These lesions are typical of the disease and closely resemble the early lesions found in naturally affected birds. The inoculation experiments are being continued.

No method of curing the disorder has been discovered. In rare instances, birds have apparently "outgrown" the disease, but in the majority of cases either the tremor continues unchanged in intensity, or an ataxia develops which becomes progressively more severe until the bird is incapacitated.

The pathology[3] of the disease is not confined to the brain and spinal cord, although the lesions found there are constant in occurrence and type, while those occurring in the viscera vary in size and distribution. The lesions in the brain and spinal cord consist of focal collections of neuroglia cells around capillaries, perivascular infiltrations and degeneration of nerve cells. The neuroglia cells comprising the focal accumulations are chiefly macroglia and oligodendroglia, with an occasional microglia cell. Mitotic figures are frequently seen, indicating the proliferative nature of the lesion. These focal collections of glia cells are found in all parts of the brain and spinal cord, although fewer are found in the cerebellum than elsewhere.

The lesions in the viscera consist of microscopic areas of infiltration with lymphoid cells. These areas are either rounded and sharply circumscribed, or irregular in outline. Many of the cells, especially in the circumscribed areas, resemble lymphoblasts. Mitotic figures are often found, and also many pycnotic nuclei. The pancreas and heart are the organs most severely affected by these infiltrations, but liver, spleen, kidney, testis and other organs are also involved in varying degrees.

Further experiments on production and transmission of the disease are now in progress, and pathological studies are being continued. A complete account of the work will be published at a later date.

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[3] The pathology of the brain and spinal cord has been worked out by Dr. Myrtelle M. Canavan, of the Department of Pathology of the Harvard University Medical School. Dr. E. E. Tyzzer, Dr. S. B. Wolbach and Dr. Stanley Cobb have also examined many of the sections.

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