

origin, as exemplified by the occurrence of cerebral palsy in children in connection with scarlet fever, measles, whooping cough, etc. In cases where the palsy is due to a hæmorrhage, it is almost certain to be of a traumatic origin, either at birth or later on in life.

In the case to which I have already referred, as published in the *American Journal of Obstetrics and Diseases of Women and Children*, the lesion was evidently caused at birth, and was of the nature of a meningeal hæmorrhage, involving the leg centres. In another case, which I had under treatment some years ago, the child, three years of age, fell from the table. There was subsequently developed a typical case of spastic hemiplegia, involving the arm more than the leg. No doubt, in this case, there was a meningeal hæmorrhage. In the case which I exhibit here to-night, it seems to me that the diagnosis is that of a thrombosis, involving the veins and longitudinal sinus, so as to affect the motor areas on both hemispheres.

The later pathological anatomy found in these cases varies a good deal. They can, however, be grouped under two heads: (1) atrophic sclerosis, and (2) parencephalus. Embolism or thrombosis of a fair-sized artery could give rise to necrotic changes in the brain, and, later on, to cystic degeneration or parencephalia. In like manner, a blood clot by its pressure would arrest the development of cerebral convulsions, and after the clot had disappeared, would leave a cavity. Sclerosis and atrophy would arise from embolisms, thrombi or hæmorrhages, where these produced inflammations and irritative changes. But all the exact primary conditions of atrophic sclerosis have not yet been fully determined.

The case which I present to-night took ill on the 22nd August, 1893. For three or four days he complained of headache and loss of appetite, with slight fever. My attention was directed more to the possible existence of typhoid fever than anything else. On making a visit to another patient in the house, I was informed that the boy had been complaining of spasms in his left arm. On examining it I found it to be spastically paralyzed. Next day the left leg was also spastic. The day following the patient was unconscious; the four extremities paralyzed and spastic; the neck quite rigid; the eyes strabismic, and marked trismus. I noticed an angry-looking sore on his heel, which I was informed was due to a burn. While I was attending him first, and while he was conscious he was quite positive that he had not been hurt.

I suspected that some infection had entered the system and had given rise to tetanus. The temperature was 105° F. The wound was cleansed and properly dressed. The patient suffered very much from tetanic spasms of the muscles, though not from actual convulsions. An ice bag was applied to the head, and the body sponged with tepid to cold water. A bromide and chloral mixture was ordered for the spasms; but hypodermic injections of morphia acted much better. The patient was in a condition of perfect unconsciousness for one month.

I have already stated that I regarded this case as one of veno-sinus thrombosis. There was no history of injury to lead one to suspect meningeal hæmorrhage. The heart was perfectly normal, so that it was not likely that there had been an embolism. Thrombosis occurs in connection with scarlet fever, whooping cough and other conditions, where there is some infection in the system, but not such an infection as necessarily leads to suppuration. It is quite possible that some infection had entered the system from the burn above mentioned, and yet not such as to produce an abscess, but such as to give rise to a thrombus, as in scarlatina cases. On this point, however, I am not dogmatic.