Fuchsberg & Fuchsberg, New York City, Jacob D. Fuchsberg, Richard E. Shandell, New York City, of counsel, for plaintiffs.

Costello, Ward, Tirabasso & Shea, New York City, Joseph M. Costello, New York City, David C. Dethmers, Detroit, Mich., of counsel, for defendant.

Tenney, District Judge.

This product liability case, which was tried to this Court without a jury, involves the ethical drug Quadrigen, made by defendant Parke Davis & Co., and administered to the infant plaintiff herein. Quadrigen contains four antigens: diphtheria toxoid, tetanus toxoid, pertussis (whooping cough) vaccine and poliomyelitis vaccine. The action has been brought on behalf of the infant plaintiff by his father, and by the father individually, charging negligence in various respects and breach of an express and implied warranty. There is no dispute that the injuries suffered by the infant plaintiff are catastrophic.

The plaintiff, Eric Tinnerholm, was born on August 30, 1959, in Huntington Station, Long Island, New York. He was the third child born to his parents, the plaintiff Carl F. Tinnerholm and Mrs. Tinnerholm, the other two children then being five and four years of age. His birth was normal, as was his mother's pregnancy, and at the end of the first and second months of his life he was taken to the family physician, Dr. Gerald Feinberg, for routine check-ups. The infant was apparently a big, healthy boy who ate and slept well and was active and alert.

Some time between 11:00 A.M. and noon on Saturday, November 28, 1959, Mrs.

Tinnerholm, by prearrangement, took Eric to Dr. Feinberg's office for his first immunization injection. She was informed that this immunization was not the usual 3-in-1 that her other children had received, but that it was a 4-in-1 which added poliomyelitis vaccine to the antigens with which she was already familiar. Eric suffered no immediate side-effects following the injection and continued in apparent good health through that Saturday and Sunday. On Monday he appeared extremely quiet and seemed to look toward the wall most of the day, although the parents apparently thought nothing of this at that time. On Tuesday morning, December 1, 1959, at about 4:00 A.M., the child was found tangled up in his bedclothes and whimpering, but on being picked up and patted he quieted down and presumably went back to sleep. There was no indication of temperature at that time. However, some time later, between 6:30 and 7:00 A.M., the child was found by his mother huddled under the covers, lethargic and bathed in perspiration. His temperature at that time was 108°, he was very white, his lips were blue, and he was limp. While Mrs. Tinnerholm gave the child an alcohol bath, Dr. Feinberg was summoned by the boy's father.

When the doctor arrived around 7:30 A.M. he confirmed the 108° temperature which was shortly reduced to 106° by the alcohol bath. The doctor's examination further disclosed a small amount of emesis and some coughing. The remainder of the examination was negative.

Eric was admitted to Huntington Hospital at 8:45 A.M. where he was again examined by Dr. Feinberg, who found the child's neck supple, an absence of masses, and a negative Brudzinski.² Dr. Feinberg's original diagnosis was fever of unknown origin. Eric remained in Huntington Hospital until December 18th. during which period he was cared for by two pediatricians, Doctors Gordon and Kagan, and also examined by a neurologist, Dr. Sengstaken. Dr. Kagan examined the boy on the day of his admission to the hospital and found him to be pale, hyperpneic,3 the eyes dull and apathetic, with focal seizures and twitching of the right side. There was a dullness and loss of landmarks in the ears and some redness at the back of the throat. On the basis of his examination, Dr. Kagan believed that the boy had either a bacterial infection of the bloodstream (sepsis) or meningitis. However, subsequent laboratory testing ruled out both the sepsis and meningitis, for a spinal culture revealed clear fluid with only three cells, a normal finding, indicating the absence of infection. There was, however, an elevated protein content of 10 milligrams percent, indicating some abnormality attacking the brain. A repeat lumbar puncture ten days after admission again showed an absence of cells and a protein content of 56 milligrams percent, lower than the previous 100 milligrams percent, but still above normal. During this first hospitalization Eric developed recurrent seizures, and on the fifth day a flaccid paresis or paralysis of the right arm and leg was noted and which per-

¹ An antigen is a substance which causes antibodies to be produced by the organism

An antigen is a substance which causes antibodies to be produced by the organism into which it is injected.

A Brudzinski is a neurological test which includes the forward flexion of the neck or the head on the neck, which, if done without resistance and without pain, indicates there is no meningeal irritation.

Abnormally rapid breathing.