CHAPTER VII

ANTERIOR POLIOMYELITIS[1]

The group of cases offered here illustrate the two well recognized types of host cell virus integration, the lytic and the symbiotic types. The third type, which we have to assume on the basis of clinical data, receives no contribution from the cases to be discussed here as it receives from the cases of virus infections in animals we have to report. This is because the "Polio" cases given below were never vaccinated against "Polio." Nor were any serological tests reported showing a response to some "Polio" virus. They are instructive in other directions however, and have been proven factually uncontradictable in the United States Federal Court. They show that in the acute lytic and symbiotic types of integration the virus can be separated from the host cell leaving the latter normal as to functional ability, and the virus is no longer found, or at least is harmless. Moreover, in the long standing symbiotic types of integration, after years of extensive paralysis and muscle atrophy and even developmental failure, 90% of the defects have been restored to normal even after twenty years of complete invalidism. These cases therefore are of intense professional and public interest under ordinary sociological circumstances.

In the first place viruses are recognized because of the diseases they produce, and because they fall in the filterable category. To produce disease they must draw energy off from the host cell's vital processes, and the energy stored in vital host cell structures during their synthesis. Such energy must have a place to go to be withdrawn. That is, there must be an appropriate synthetic process into which the energy can pass and be used for its activation. To do this there must be a full set of structural units to enter a viral synthesis. Incomplete structural material cannot engage in the synthesis and so no host

[1]To save space here other virus diseases in man will be discussed in the complete text. Paralytic diseases in animals as distemper and rabies will be given in the section on animal infections.

cell energy is withdrawn, and no disease is produced. We have concluded that since real immunity to viral infection as in measles, chicken pox and the like is dependent on overcoming an active infection and is quite permanent, that the defeated virus is present in the host cell in a form that is incomplete and cannot vegetate until all the structural units are present for complete virus synthesis. Hence the basis for a third type of virus host cell integration that confers immunity is conceivable, as the part present occupies the position a complete pathogenic virus would take if it were open. This point could take much more discussion.

The third type of integration is a theory assumed by the writer to account for a vaccination accident that occurred during the first year of his practice. There were rumors of a mild small pox scare in Detroit, and two people in apparently good health applied for protection. The same vaccine was given to both within the same half hour. One showed a mild vaccination reaction, and the other came down with rapidly fatal Small Pox. No one else showed the disease in this way at the time. The writer could only assume that something in the patient, added to what was in the vaccine, together formed a rapidly fatal virus. One assumed that since the vaccine tested out "innocent" in the other patient, obviously the victim was carrying the part that made the innocent vaccine fatal—the patient carried the dangerous part even though it was not injurious alone. But also it appeared that viruses were made up of units, like a deck of cards that could shuffle out parts which could contribute or receive fatal units from another virus, and since at the time the cases of small pox were all mild and few in number, we assumed finally that the patient carried a mild infection that did not amount to anything alone, but which received fatal units from the vaccine that permitted the assembly of a complete set as constituted the parent fatal type. This is still our opinion. This case then could represent type III integration. In fact the victim was already protected by the incomplete virus he carried integrated with his tissues. This is our answer to the fatal effects of the two polio vaccines. Broken down products of virus of appropriate structure could diffuse into

host cells carrying type III integration, and build up a fatal breed.

The type of ligation with the host cell would be the same that happened in the fatal infection. The same position is occupied and this would according to our hypothesis be via an azomethine bond or a free radical double bond addition. But since the vanquished part is unable to vegetate it causes no symptoms except a hindrance to the oxidation so as to possibly cause easy fatigue, loss of energy, and the taking on of fat. Then when vaccination comes along, be it Swine-Pest, Aftosa, cinemosa, or some other type, an apparently healthy animal or herd will come down with a violent fatal infection. Farmers, having had this experience, refuse to have their animals vaccinated. However the logical plan would seem to be to make serological tests and if any show positive to not give a vaccine against that breed.

Of course vaccines of the Salk and Fleury types can carry live active fatal viruses because of failure of members present to lose units belonging to parent fatal types, these on reassembly to form the progeny even in the egg embryo culture, shuffle out as fatal forms. There is also the protection against formaldehyde addition by condensation with aldehydes that should have been split off before exposure to the formaldehyde. This could be done at a pH of 3 or 4. But this is not practiced. However such protective aldehyde groups do split off in the patient when the tissues get too acid from exercise, and acid diet, to liberate the fatal forms with active integrating amine groups. Thus, we believe, it is important to the public health that in preparing these vaccines, these protective aldehyde groups be first removed before the virus is treated with formaldehyde to inactivate the virus. Here we have indication that vaccine and killer viruses do not make the same atomic union with host cells. The true disease virus joins via its amines group in the way described. The vaccine has no free amine group if it is a well prepared Salk, or more properly, Cumming type. For Dr. Cumming developed the formaldehyde method of inactivating viruses. Since the killed virus vaccine has no amine group to form the azomethine bond, its union with the host tissues is different; and that accounts for the brief period of protection they afford,

if they in fact afford any at all. It is probably mostly superficial, while the live virus makes a real integration.

One must take present statistics on Polio infection with a grain of salt, since they are so contradictory Commerce seems to have polluted statistics. An error is possible however, since most people show positive reaction to one or other Polio virus, and when such persons take down with flu or an intestinal intoxication, the serological test is interpreted as meaning the sickness in non-paralytic Anterior Poliomyelitis. Thus the vaccine statistics have an ally to any way commerce wishes to interpret them. Our cases are not Polio unless paralysis is firmly established. No one can call a case polio on any other basis.

RECOVERY FROM CHRONIC SYMBIOTIC TYPE PARALYSIS AND ATROPHY ESTABLISHED THREE YEARS**

Treated in collaboration with
Dr. Julian Baldor

Function Suppression as in Diagram V, (b) Symbiotic Type

Myrna R., age 10, presented an atrophy of three years' standing with complete paralysis of the left leg from the waist to the toes. The leg was too weak and atrophied to wear a brace. There was also a contracture of one toe of the paralyzed foot. The calf measured four inches (10 cm.) The rest of the body was normal. She had been at Warm Springs Foundation in Georgia but they decided they could not help her and sent her home without improvement.

The oxidation catalysts were injected February 11, 1944. Following this treatment there were two reactions with pain spreading from the head, down the back to involve the left leg.

These came the third and sixth weeks. Following each, there was noticeable improvement. The muscles began to regenerate and motion began to be restored. By the end of the twelfth week she could walk with the leg very well and play with other children. The muscle reconstruction was practically complete, for one could not tell by observation which was the affected leg. She later took up toe dancing. The third and sixth week reactions are characteristic of recovery from chronic infection.

The history in this case showed a sudden overwhelming infection with instantaneous full paralysis of the whole leg. This is characteristic of the symbiotic type of infection, and is born out by the recovery reactions that came the third and sixth weeks. The following case showed the same characteristics.

Therefore where the paralysis is sudden and complete in the affected area, one may suspect the symbiotic type of integration and also a hope of securing improvement years after the acute stage has passed.

RECOVERY FROM CHRONIC POLIOMYELITIS WITH PARALYSIS AND ATROPHY ESTABLISHED OVER TWENTY YEARS* **

Treated in collaboration with
Dr. Wendell Hendricks.

Suppressed Function as in Diagram V, (b) Symbiotic Type

Mrs. V. N., age 23, was first observed April 5, 1943. She was carried into the office by her husband as she was not able to walk because of poliomyelitis since the age of one and one-half years. All efforts were made with braces, casts, operations to fix the joints and shorten tendons, but to no avail. Both legs were atrophied and paralyzed completely, from the waist to the toes. The right leg was 4 cms. shorter than the left. The circumference of the calf of the right leg was 4 inches (10 cm.). The left leg was slightly better, but useless. She could not stand without help. She also suffered with migraine headaches. On April 7, the oxidation catalyst was given and by June 8, that is

in about nine weeks, there was motion and visible development of muscles in the right leg. She could also stand by herself without help.

On August 13, 1943, she had a reaction of chills, fever, and headache. Following this reaction complete control of both legs developed steadily. There was much muscle restoration. She walked about unaided without crutches or braces. The improvement continued in all respects. She could do her housework and adopted a baby. On June 12, 1944, she had another reaction with pain in her right foot and thigh and some fever. The migraine still persisted so another injection of the catalysts was given on June 23, and again November 14, 1944. At that time the migraine was still present at times; however, the right leg grew so as to be only one-half inch shorter than the left. The circumference of the calf of the right leg was then 10 inches, or 25 cm., and the left calf, 11½ inches, or 28 cm. She was able to run up and down stairs and walk about or drive her automobile like any other person. She clerks in a store, is on her feet all day and requires no aid whatever. The migraine disappeared in 1944, and her health seems fully restored. This case illustrates the principles of our working hypothesis throughout.

The recovery reactions noted in this case are similar to those observed during the recovery from cancer and tuberculosis and others with seriously damaged tissues. In this case they took place where the state of paralyzing symbiosis was established over twenty years.

ADVANCED BULBAR POLIOMYELITIS WITH RESPIRATORY PARALYSIS*

Treated in collaboration with
D. H. Arnott, M. D.

Diagrams V, (a) Lytic Type

John K., a boy of 16, was in the acute stage of Landry's ascending type of paralysis. It started in the right leg and within a week involved the other leg, the arms, torso, neck, swallowing muscles, and respiratory muscles; and oculomotor nerves were paralyzed on the right side also and he was unconscious

when he was first seen at a cottage near Port Huron, Michigan, during the polio epidemic in August, 1934. He was cyanotic and appeared to be dead except for a faint heart beat. There were no respiratory excursions nor signs of breathing that could be distinguished. The abdomen was blown up. The abdominal muscles were relaxed in a flaccid paralysis. Later we learned that the bowel and urinary bladder were also paralyzed. The catalysts were given and within a few minutes there was some respiratory movement, the flaccid abdominal muscles contracted some and the cyanosis started to leave. Within twelve hours he could move his arms and respiration was well established. The neck and eye and swallowing paralysis had left and speech returned. The left leg showed improvement also and some of the back muscles demonstrated a return of tonicity. So far as we could learn the pathogenesis was reversed in the order in which it developed. Two accidental matters intercepted a fine recovery. The cook brought him a hot cup of tea the next morning. **Within an hour a reversal of the recovery set in** with great rapidity, and it took several days for him to regain his status before the tea was taken. After a week of improvement he was taken in an ambulance some eighty miles. The trip was too much for him, for after being removed from the ambulance he had a general convulsion in which all of his muscles took part. This showed that the nerve cells had regained their function. Yet it proved disastrous, for they seemed to be burned out and the relapse took twelve weeks for function to return to the affected muscles. Satisfactory restoration of muscle development and control required about two years. He is well now except for some 30 per cent atrophy of his right transversalis muscle, and the quadraceps extensor of the right leg shows a 50 per cent atrophy. This does not impede walking, but it weakens his ability to climb stairs.

It is evident from this case that the recovery results will be determined by the care received, as well as by the length of time the disease is established. It also shows that the oxidation catalysis reverses the disease process immediately but that the recovery process can be upset by being thrown out of balance by physical and chemical means. Yet once it has started

it will reassert itself and partly at least overcome the impeding factor. Thus the recovery process behaves like a chain reaction.

One observes the dominance of the lytic type of integration of the virus with the host cell here in the steady spread of the disease, in the face of the exhaustion of Nissl substance consequent to exposure and intense effort fighting a storm on Lake Huron in a small sail boat. The nerve cells were all open to infection directly and as fast as virus was produced it found a host in each successive layer of motor nerve cells. Here the culture predominated over the virus production and each cell took a minimum of infective agent, in contrast to the symbiotic type where the infected cells were each flooded with an abundance of virus all at once, and the hydrolytic as well as the oxidative glycolysis systems were excluded from material energy production.

ACUTE BULBAR POLIOMYELITIS

Treated in collaboration with
Julian Baldor, M. D.

Diagram V, (a) and V, (b)
Lytic and Symbiotic Types

Patient: Sandra F., age 9 years, female, student, admitted September 19, 1951, 7:30 P. M.

Exposure: Brother seven years old, died of acute bulbar poliomyelitis proven by autopsy (two days before), September 17, 1951, State Board of Health Certificate No. 3920. He presented the same symptomatology as Sandra, and died shortly after reaching the state in which Sandra was when she received the treatment by the oxidation catalysts.

Personal History: Measles, Chicken Pox, at five years of age.

Present ailment: Temperature 102° F. for the past four days, with nausea, severe occipital headaches, and extreme difficulty in breathing. She was required to raise her shoulders at each attempt to breathe, to get some chest motion. This suggests a diaphragmatic paralysis was present as well as the intercostal muscle paralysis. Abdominal excursions not palpable.

Physical Examination: Both patelar reflexes were practically abolished, although extremely weak motion was still elicitable. B. P. 100/75. Because of the respiratory failure, no further time was given to the physical examination, and the carbonyl catalysts were injected immediately in a dilution of one to a trillion, of water, two cubic centimeters by volume, into the gluteal muscles.

Progress: Twelve hours later a reaction occurred in a negative phase with more intensive headaches and nausea. The temperature remained the same. There was no change in leg function, voluntary or reflex.

Seventy-two hours later she went into a semi-coma which lasted three days. In this period the temperature and respiration became normal, and she emerged from the stupor with normal cerebral functions also. However, there was paralysis of the muscles of the back and of the left arm and both legs, which cleared up within one week, except that some weakness remained in the legs and left arm. This difficulty became nearly well within three months so that a slight drag in the left leg remained, which did not hinder her walking without the aid of braces, etc. Speech, vision, hearing, and alertness tests, showed 100 percent recovery. **Memory** and other cerebral functions were found to be normal.

During the past two years the weakness of the left leg has not changed very much for the better but persists as a slight incoordination, according to Dr. Baldor.

Remarks: A residual, very slight atrophy and corresponding slight flaccid paralysis of the right rectus anterior with very slight atrophy in muscles of left hand are still retained in spite of a third dose given in July, 1952. This shows that the injury is spinal and more or less permanent. In checking accounts in this case, the full cerebral recovery plus the timely cure of the respiratory paralysis without the use of an "iron lung", and the retention of the minor spinal injury in such a virulent case of bulbar paralysis, speak well for the method of treatment. Had the patient had time for a thorough intestinal lavage and

the elimination of interfering drugs like aspirin, even the spinal injury may have been avoided.

POLIO WITH PARALYSIS**

Treated in collaboration with
Dr. George Franklin Smith

Diagram V, (a) Lytic Type

This case is given since differentiation between anterior poliomyelitis and encephalitis is not always easy in babies without waiting for the symptoms to develop further defects. The treatment was given to avoid further injury and possible death, and the recovery shows that the choice was good practice no matter which diagnosis was applicable. The fact that the paralysis became flaccid without voluntary motion or reflexes point to anterior poliomyelitis of the most dangerous type, where integration with the nerve cell functional material was well established, and sequelae would be expected to be extensive had not the treatment been given as early as possible.

Robert L. was eight months of age when affected with this paralysis.

When Dr. Smith first saw Robert L., the baby was having mild convulsions, that is his eyes were twitching and maybe some little part of the muscles of the face were also twitching mildly. He was limp and he had been vomiting just before Dr. Smith arrived. His temperature was 99°. His mother told Dr. Smith that he had been having convulsions one right after another, that he would draw his right hand up to his shoulder.

Dr. Smith recognized the case as being that of Infantile Paralysis. The following day there was paralysis of the right arm and leg. He continued to have the convulsions. His foot began to draw, and his eye turned toward the side of his head so that you could not see the iris. It was two days before the carbonyl catalysts could be given. At that time there was complete paralysis of the right side of the body. He was perfectly limp. There was no motion or reflexes in either the right arm or leg.

Dr. Smith gave him two thirds of one treatment (1½ cc).

The following day there was some improvement, and the improvement continued until the child was perfectly well. There was no muscle impairment as a sequel.

SUBACUTE POLIO WITH PARALYSIS*

Treated in collaboration with
Michael R . . ., M. D.

Diagram V, (a) Lytic Type

The I. child, age 10, came to the office on September 10, 1941. The patient complained that for three days he had a headache and pain in the legs. His pulse was 90, temperature 98.6°, and the urine examination showed no pathology. The next day the symptoms of Infantile Paralysis were more evident; the Kernig sign was positive, he had a tenderness along the spine, he had neck stiffness, he could not lift his legs and the fingers of his hand were so weak that he could not turn on the radio. He had to lift himself with the elbows.

The Health Commissioner was called in the next day and he confirmed the diagnosis of Infantile Paralysis.

The Benzoquinone arrived on September 13th and it was injected intramuscularly. The next morning the patient said that he felt some better, but his symptoms were about the same. A second injection was given on September 14th. About two days later he had less pain, he could bend his legs better and he had less neck stiffness. By September 20th, he had less lameness and he felt well.

On September 22nd, his temperature was 99.4°, and a third injection was given. Two days later the adductors, that is the muscles that bring the legs together, were less lame. He could bring his legs together. On October 8th his temperature was normal and from that day on he did not have any more symptoms. The Health Commissioner was called on October 15th and he was shown how the boy could walk through the room. He had no more symptoms. In 1943 he was active playing basketball and football.

ACUTE ANTERIOR POLIOMYELITIS WITH PARALYSIS* **

Treated in collaboration with
Dr. Wendell Hendricks

Diagram V, (b) Symbiotic Type

The following case is typical of many we have treated and illustrates the early reversal of the disease process following the administration of the oxidation initiatores.

Loman A., age 10 years, came down with the prodromal symptoms of headache, pains in his back and legs, stiffness of the neck and back muscles, vomiting, and fever of 104 degrees on February 3, 1944. The condition did not abate but became steadily worse through the night and the next morning. Our examination found the symptoms mentioned and flaccid paralysis of both legs from the waist to the toes. There were no knee jerks, or other reflexes to be induced in the legs or feet. The spinal fluid was taken and found to be 4 cms. on the manometer. We waited one-half hour so as to give plenty time to see if the withdrawal of the few cc. of spinal fluid would alter the symptoms. He continued to get worse, the fever mounted to 104½ degrees and his pains increased. The pulse was 128. We then gave the oxidation catalysts. Recovery started to make itself evident within two hours in a reduction of pain and headache and the vomiting ceased. Seven hours after the injection he could move his legs. His neck was limber and his temperature normal. He ate a light supper. The next morning he got up and walked to the bathroom unaided. His recovery was complete in a day or so and no sign of return has been observed. However, during the third week following the treatment he had a reaction of chills and fever that lasted three hours, after which he felt very well. There was no development of atrophy whatsoever. The third week reaction is of interest. It showed that a destructive or symbiotic integration was established.

The rapid establishment of widespread paralysis indicates the symbiotic type, but as the back muscles were becoming involved a lytic type extension was also probable.

POLIOMYELITIS* **

Acute Polio with Extensive Progressing Paralysis
The Case of Walter N.

Diagram V, (a) Lytic Type

This child was two and a half years old when carried into our office September 19, 1931. Both legs were paralyzed from the waist down and there was foot drop. He had fever and suffered pain. No reflexes could be elicited from the legs. The paralysis was of the flaccid type and progressing. The spine was rigid. He had been vomiting. One dose of the carbonyls was given subcutaneously. He was held by his father about an hour longer, while being observed; then he slid off his father's lap and stood on the floor, making a few steps, but was quickly raised from the floor and prevented from further action. The paralysis had existed from eighteen to twenty-four hours previous to the treatment, so the release was rapid. The testimony of the mother has been paraphrased and is given for your consideration.

"I took my son, Walter, to Dr. Koch when he was two and one-half years old. He had been playing the night before but during the night he did not sleep, and cried; and when he got up he could not walk. I did not take his temperature, but felt his forehead and thought that he had a temperature. His leg was still sore, so the next day we took him to Dr. Koch's office. My husband had to carry him because he could not stand.

"Dr. Koch gave him an injection in the leg. We were in the office about an hour and soon after he had the shot, he wanted to get off my husband's lap on to the floor. He could stand a little, but we carried him to the car and kept him in bed that day. The next day he was up and playing. That was the summer of 1931 or 1932."

This may have been a simple Nissl neutralization case. Yet the speed of the recovery shows that the reagent accomplished the cure, as well as the prevention of sequelae.

However the steady progress of the paralysis with one leg paralysed only when the mother noticed it first, and two legs

paralysed when my examination was made, would indicate a steady progressive infection where the virus was not produced in overwhelming amounts all at once.

What percentage of cases of atrophy and paralysis are to be found that are still more or less curable cannot be answered now. A sweeping test should be made and then the benefits can be calculated, and a guess can be made as to the percentage of the remaining victims that can be restored from invalidism to practically normal activity. Instead of opportunity, obstruction has steadily been confronted, and largely because the surgeon looks upon the sequelae to anterior poliomyelitis infection as coming within his province of service. The surgeon tries to create some mechanical advantage to aid the use of braces or other special equipment, or to immobilize joints and change the limb into some sort of a peg. Such an attempt as this should only be tried as the final attempt to adapt the victim to his environment. However, in the case of acute poliomyelitis or where the chronic symbiotic form is found, would it not be better for the patient to receive the benefit of a constructive form of treatment that has proven its value, than to disregard this therapy at the expense of the unfortunate patient? Where possible, the acute and chronic infection should be removed by treatment and then let nature be given the opportunity to restore herself to as near normal as possible. Nature is so constructive that she can do this and she should be given the preference over the attempts of the surgeon. For after all, is not the future health of the patient of primary concern?

Influenza, Measles, Mumps, Chicken Pox, etc.

Diseases that are self limiting and have no fatality record of note have been denied attention in this investigation except as was necessary to classify the viruses with respect to the type of reagent to which they responded best. It is found that Measles does ideally on the quinone structure, often having recovered practically, that is for the most part in twelve hours after one dose. Mumps has done well on the serial system of carbonyl groups, as has Influenza. The reactions in the latter show an aggravation of all pains and secretions in six hours or

so with marked improvement in 12 hours. The watery secretions cease in that time and the pus germ complications are absent. No heavy green or yellow pus is found except in cases where influenza complicated a bad bronchitis or bronchiectasis, which had to undergo a "housecleaning" to recover also. In our completed text these matters will receive due attention.

CHAPTER VIII

TUBERCULOSIS

Tuberculosis is assuming more importance every day since the recent antibiotics have become so widely used and bred so many surviving mutants of such high malignancy. Indeed experts have had to return to the old surgical procedures they had discarded in the hope that the new antibiotics would prove sufficient.

The ability of a germ to destroy or assimilate a toxin and even use it to an advantage as a food, does more than simply emphasize its power towards survival. The antibiotics used in practice are amine compounds, and in the hydrazide drugs the amine group's toxicity is raised to the highest pitch. Yet the germ is able to conquer it when it gets a good chance. This recalls that the virus pathogenicity is a function of an amine group in our opinion, and the possibility of a surviving assimilation of a virus and symbiosis therewith is a perfect possibility. The finding of a virus in the tubercle bacillus by Dr. Oswaldo Cruz and Dr. Fontes decades ago is a serious matter. Since the loss of pathogenicity of the Tubercle bacillus follows the action of appropriate carbonyl groups, as does the loss of pathogenicity of the most malignant of viruses, the decision has to be settled if or not the pathogenicity of the tubercle bacillus is due to Oswaldo Cruz's virus.

PULMONARY AND BONE TUBERCULOSIS

The cases presented in this section were used either in the Federal Court trials or before the Federal Trade Commission. The documentation of some of these cases consist of the hospital records from the Herman Kiefer Hospital and the Detroit Tuberculosis Sanitarium. Most of the patients had the best of sanitarium care possible and yet they steadily deteriorated until they were considered hopeless by the authorities. They were given our treatment with curative results. Prolonged bed rest