Chapter 2

VIRUS AND CANCER CELLS

Cancer cells and viruses are both parasites; that is they have to depend upon sources of energy and material that belong to other usages to conduct their characteristic activities. The virus cannot produce the energy it needs for its vital processes, so it gives signs of life only so long as it is integrated with a living source of energy and food which it diverts to its own ends. The cell it preys upon, the Host Cell, is killed thereby. The cancer cell is not able to perform the functions it was created to do for itself or any of the other cells of the body to which it belongs and is responsible. It has lost its capacity to conduct oxidations, and also the mechanisms that use the energy of oxidation for useful work. Instead, a low-grade process, wasteful fermentation, is used to produce energy. This energy is transferred to the mitotic mechanism, where it forces cell division, as it has no functional mechanism to use it, where its production is normally controlled by the demand for the function. The mitotic mechanism thus becomes parasitic upon the rest of the cell and the body as a whole.

Viruses may cause normal cells to go neoplastic; maybe all cancers require them. Several hundred synthetic substances are known to cause cancer. It has not yet been decided if or not viruses play a part here, too, but many cancerologists think so. It will be seen how the synthetic carcinogen may prepare the way for the virus to integrate with the mitotic mechanism and complete the neoplastic change.

The institution of parasitism within a cell, be it viral or neoplastic, is a complex affair that depends upon a disposing cause besides the particular virtues of the pathogen to show its specific action. Of these anoxia or hypoxia is a leading factor. With plenty of oxygen available as normal structure determines, there would be no pathology if the oxidation catalysis were adequate, and logically enough, it happens that an adequate oxidation catalysis prevents oxygen deficiency in any tissue. This fact will become apparent as we go along. So the key to the correction will be seen to be the restoration or provision of an adequate oxidation catalysis. The initiating act in the oxidation process, namely, dehydrogenation is a main subject of this book. Then there is the subject

of the environmental factors that have contributed to the block in the oxidation catalysis. These are discussed also in the hope that a good working picture of the matter is at hand.

NATURE OF VIRUSES

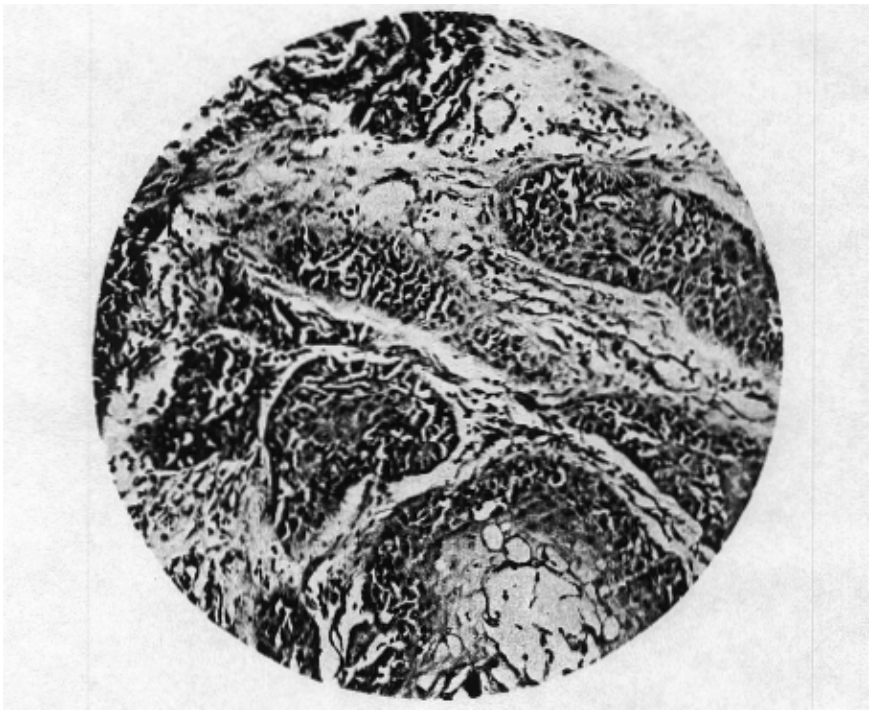
The electronic microscope and bacteriophage studies have yielded rich information on this score. Their sizes vary from 8 millimicra, the size of a protein molecule, to 175 millimicra, the size of the smallest bacteria. Each type has its own shape and these vary from rod to spherule in form. The essential structure is a protein capsule within which lies a nucleoprotein mass.

They are specifically cytotropic obligative parasites and always pathogenic. The protein capsule has specific antigenic powers that yield specific immunological responses, and serological reactions. The latter, for example, serve the differential diagnosis of non-paralytic Polio from La Grippe and other viral infections. This is the part that is convertible into a vaccine used to excite immunological reactions in the patient. There is no immunological response to the nucleoprotein part though this is the part that causes the pathology. The protein capsule protects the inner part and carries it to the cell where it attaches to its outer surface and injects the nucleoprotein content into its victim. An acquired immunity inactivates the capsule and prevents the attachment to and hence the penetration of the host cell. As soon as the material is injected, it breaks up into a myriad of similar units of nucleoprotein as by a de-polymerization process, and each particle unites chemically with a nucleoprotein particle of the host cell, and thus integrates or becomes one with it as by a co-polymerization act. The host cell particles with which they integrate are the "grana" that perform the vital functions of the cell and produce the necessary energy thereto by oxidation. As the virus shunts this energy into itself and uses it with host cell material for its vegetation, the host cell grana break down and are used up to form the viral colony, which is soon a mass of provirus ready to mature and break forth from the dead host cell as infectious parasites.

It is the consensus among experts that once the nucleoprotein of the virus has penetrated, integration with the host cell is complete within a minute

and a half and no amount of vaccine, antitoxin, or other serological effort can separate the virus and rescue the host cell. It is doomed. *On the other* hand, we will show how the bondings we Postulate as forming the integration actually invite oxidative cleavage in a way that leaves the host cell in good functional status. At the same time, the virus is no longer in existence. In this process, the energy taken from the host cell to serve viral vegetation is returned to it to support its reconstruction, while the virus undergoes a stepwise oxidation. This explanation is based on the repeatedly observed fact in the cure of rabies, that when the Reagent is given to promote the oxidative destruction of the virus, in an animal that has only maybe 12 to 24 hours to live, a period of 72 to 84 hours are required for the paralyzed victim to be free of paralysis and the affected nerves to be functioning normally. We have proved this restoration not only in terminal rabies, but also in paralytic dog distemper, paralytic hog cholera, and paralytic Anterior Poliomyelitis. The same chemical corrective measure was used in all and fit the pathology in all. This is taken to mean that the state of integration of the host cell and the virus presents the same atomic bondings in all instances. The same corrective attack was employed in the sensory nerve atrophies with loss of function and in neoplastic disease with success, so it is concluded, that the state of integration of the host cell and the pathogen is of the same order in all, and a Least Common Denominator in pathogenesis and its correction has been established in a broad field.

Though the atomic bondings that constitute the integrations are of the same order, the states of integration vary.



A. —Squamous cell carcinoma of the neck biopsy before Treatment. (150X)
PLATE I

Thus in "Polio" an acute lytic type causes the death of the host cell in hours or days as a rule, while a prolonged symbiotic type may cause extensive paralysis and atrophy that invalids the patient for many years or until death. And yet the host cell is not dead, but as its energy producing mechanism is paralyzed by the integration with the virus, it cannot function any more than a dead cell and the results appear the same. We have found by trial, however, that such cases can be freed of their offending virus and the host nerve cell returns to normal in function and so the atrophied muscles again get impulses to contract and rebuild themselves. Cases that were extensively paralyzed and atrophied for three years have required three months to be restored to 95% or more of normal in function and muscle reconstruction, while a case extensively paralyzed and atrophied for over twenty years has required two years to be restored to 95% of normal, functionally and structurally. Since nerve

cells do not reproduce, the cleavage of the integration is proven by these tests.

Since the lytic type of infection only takes days or only hours to kill the host cell, the quicker the patient is treated the better the chance to have living cells freed from their viruses, and get complete recoveries. The case records illustrate these situations.

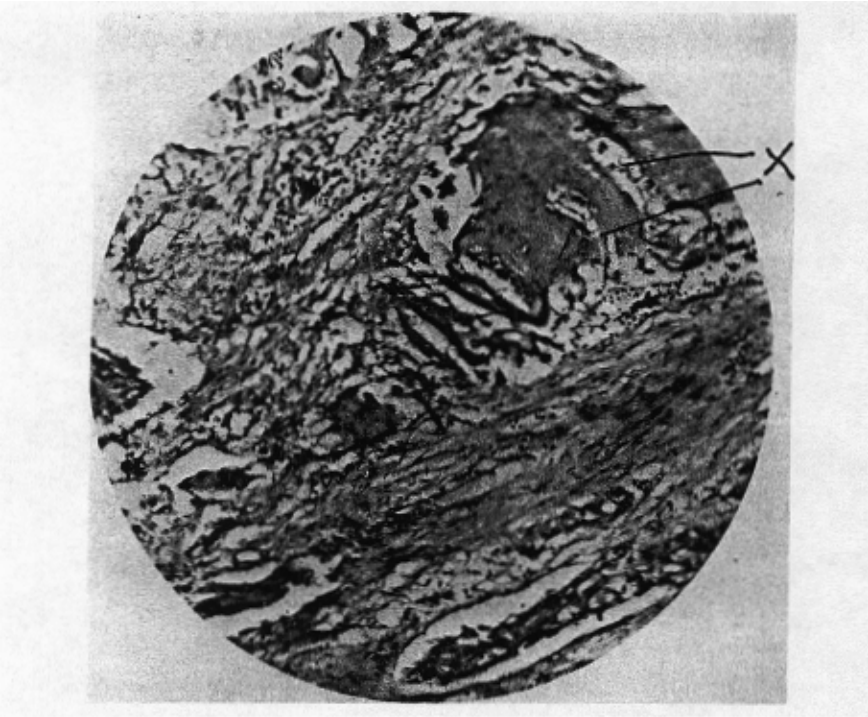


PLATE I
B. — Taken from the same tumor several weeks after Treatment, showing the calcified coagulated hyalinized debris, into which angioblastic tissue is growing with an area of liquification preceding each in-growing bud of angioblastic tissue.

In neoplasia, the integration of the virus or synthetic pathogen or bacterial toxin with the host cell is originally with the functional grana energy producing mechanism, until the latter is destroyed in building up the virus and nuclear material integrated with it and undergoing mitosis. This is the only mechanism left to accept energy produced by an uncontrolled

process of fermentation, and so neoplasia is the expected result. The details will be discussed later, where it will be seen that the Carbonyl groups that institute energy production and storage as ATP, and creatine phosphoric acid, are like those that mediate the transfer of this energy to the working mechanism and both are paralyzed by condensation with firmly binding amines, of virus or other carcinogens. The virus bound in the atrophic muscle of "Polio" we picture as similarly integrated. The integrations may exist long periods before actual destruction of the paralyzed functional mechanism is accomplished and, during this period, liberation of the cell from the pathogen can restore it to normal. For a period the pathogenesis is reversible therefore in viral infections and the same holds for cancer. This situation is exemplified in the microphotographs (A) and (B). (B) shows the destruction of the cancer cell after the pathogen is removed and the cell residues can function no longer. They then undergo calcification and digestion like a blood clot. **Plate I** (*Medical Record of New York*, Koch, October 30, 1920).

VACCINE PROBLEMS

From what was stated so far it is seen that vaccines for a specific virus do not immunize against the nucleoprotein that is the actual pathogen, especially after it has penetrated and integrated with the host cell, so to talk about curing cancer with vaccines or immune sera is a waste of time. Even the prevention of viral infection by vaccines is meeting the strongest statistical opposition since large-scale smallpox and Salk vaccinations have been recorded. In line with what is known about vaccine structure, statistics appear logical when they show that paralytic "Polio" is increased both in incidence and fatality by use of the vaccine. One may compare various regions of different climatic conditions for the data. In all of these the Salk Vaccine was enthusiastically applied, in greater number each year, and the incidence increase was tremendous each year, whereas, if the vaccine were effective there should have been at least a little statistical improvement. In Montreal, generally cool, they reported on August 27, 1959, 521 cases with 27 deaths, just while the "Polio" season was getting well under way, as compared with less than one hundred in 1958. In Ottawa, generally cool, 455 cases with 41 deaths were reported on August 22, 1959, as compared with 64 cases with 7 deaths in 1958. In all of Canada, even before the epidemic started to decline, there were 7

times more paralytic cases in 1959 than in 1958, with a greater death rate. In Detroit, much warmer, where vaccination was thorough, the number of cases in 1958 was 697, against 226 in 1957. In the District of Columbia, still warmer, the Health Department reported 7 times as many cases in 1958 as in 1957. In New Jersey, in 1958, the Health Department reported twice as great an incidence as in 1957. The United States Public Health Service reported an increase of 15½% of paralytic cases in 1958 over those in 1957 (49% against 33.5%). In Hawaii (tropical) there were 65 victims including 32 paralytic cases in 1958; half of these paralyzed cases (16) had received three Salk shots, in an island where 60% had been vaccinated. In 1957 only 25 and 8/10ths % were paralytic instead of 49 and 9/l0ths% in 1958. If the vaccine were effective there should have been a 60% decrease in the incidence in the whole island of the paralytic infections, instead of an increase of nearly 100%.

Nationwide statistics issued January 4, 1960, by the United States Public Health Service, show that for the year 1959, up to December 26th (51 weeks), the increase in the incidence of Polio rose 85% over that of the same period of 1958. There were 8,531 cases listed for 1959, of which 5,661 were paralytic, as compared to 5,987 in 1958, of which 3,090 were paralytic. We just showed the great increase in 1958 over the incidence of the total and the paralytic cases of 1957. Where compulsory vaccination was practiced as in North Carolina and Tennessee, Bealle's investigations report a 400% increase in paralytic and non-paralytic Polio during 1959 over 1958. So it seems that the more vaccine that is used the more the actual infection that comes about. The statistical analysis teaches much about the nature of the virus.

Of course, this is comprehensible when one considers that the virus breaks up into its component units on penetrating the host cell, as if by a de-polymerization process, and it grows by acquiring new units to add to each, as by a co-polymerization process. Some investigators compare the viral structure to a deck of cards. The complete deck or complete virus with all its units is the parent pathogenic killer type. The vaccines may be regarded as incomplete decks, with not all the units required to make up the full killer type. Now, if a person carried vaccine units of, let us say, half or less than the killer type requires and another vaccination or infection by a crippled non-fatal virus comes along that presents the units missing in

the protective infection or vaccination of a previous period either one of which alone can not produce the disease, the units all added up could constitute the complete killer type, and it has been shown that they are "shuffled" in at random to make up the full virus, vaccination may add to the incidence of serious or fatal infection, and the more the vaccination the more the chance for building fatal viruses.

This happened in the writer's early practice (1920). Two cases were vaccinated against smallpox from the same vaccine lot. One had no effect. The other came down with a rapidly fatal smallpox. There was no epidemic at hand in Detroit at the time, so it was concluded that the fatal case's inoculation carried units required by a previous silent infection to make it fatal.

SMALLPOX

Statistics on vaccination against Smallpox in the Philippines when the United States took over are instructive. Reports run thus: In 1918, the Army forced the vaccination of 3,285,376 natives when no epidemic was brewing, only the sporadic cases of the usual mild nature. Of the vaccinated persons, 47,369 came down with smallpox, and of these 16,477 died. In 1919 the experiment was doubled. 7,670,252 natives were vaccinated. Of these 65,180 cases came down with Smallpox, and 44,408 died. One sees here that the fatality rate increased in the twice-vaccinated cases. In the first experiment, one-third died, and in the second, two-thirds of the infected ones died. This speaks for the retention of viral units from the previous vaccinations, and indicates that, in the vaccine the shuffling in of units varies in different specimens of vaccine. It should be stated also that every epidemic of viral disease treated by the writer followed vaccination within a few months, when protection should have been had instead of an epidemic. This was so in Brazil, in Aftosa, Cinemosa, Hog Cholera and Rabies, and in Cuba in Hog Cholera.

The question arises then as to how one accounts for the decrease in the incidence of Smallpox, since vaccination was instituted. The question is not easy to settle, since the hygienic improvements in sewage disposal has wiped out the means of spread of intestine carried viral infections. In the great Smallpox days, excreta were thrown out of the window into the

streets, and then the outhouse was invented with its flies, etc. Today modern sewage is an obvious advantage, and soap and water are available even for washing the fingers of cooks and waiters in restaurants, and inspections by Public Health Officers help greatly in keeping down the spread of infection. It must be recalled that viruses integrate with bacteria and when these form spores, the integrated virus shares the protection of the spore against sterilization by chemicals and heat. They can thus survive for many months or years with full virulence. The intestinal tract is known to be a favorable habitat for such integrated viruses, so the hygienic measures of today would wipe out small-pox anyway without the benefit of vaccination, if there is any when carried on commercially. The present-day kitchen garbage disposal sink apparatus has cut down the incidence of the house fly so much that its universal adoption should become the greatest health booster of the century. In the writer's experience, vaccination is a laboratory success when the technique is correct all the way through. Commercially the statistics do not look so favorable when other variables are encountered.