

Cancer Supplementary Points

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The papers in this section of the BULLETIN have covered the general and the more practical characteristics of cancer, and those who have read them carefully must have gained a fairly comprehensive conception of the disease. The constitutional nature of the disease has been adequately established. The significance of the growth has been clearly demonstrated, and the mechanism of the recovery process described in detail. We have also observed the body's remarkable powers of reconstruction of destroyed tissues that accompanies the absorption of the neoplastic tissue following the removal of the etiological toxin and the acquirement of immunity. Something has also been taught regarding the management of the case under treatment. It has been our purpose to present a common sense practical working knowledge that will help the physician cure his patient. A good deal of ground has been covered, and a brief survey might be advisable before we take up some of the special features of the disease.

Cancer has been regarded by the less progressive division of our profession as a local disease, although there is neither one dot of scientific proof, nor one clinical experience to substantiate the assumption. Even though early surgical removal has in a very few cases apparently postponed death from malignancy, we must remember that some cases take as long as eighteen or twenty years to prove fatal when no treatment whatever is employed. It is also perfectly in accord with the etiology of the disease to expect a few months or years to elapse before a new growth effort will be aroused, or recurrence manifested, for the etiological toxin may have been in the body as long as twenty years before the first growth was found. The rare supposed benefits following local plans of attack, therefore, do not substantiate the theory of a local nature for this disease. The great mass of evidence demonstrating that surgery totals less than three months increase in longevity over the average course of the disease, and that early operation has not reduced the mortality rate one bit, should prove to any observer that the disease does not lend itself to local extirpation or destruction simply because there is something beyond the locality of the growth that determines its presence, and that this something is too general an affection of

the body to be removed by any local procedure.

The preeminence of the local lesion in our modern conception of disease is unfortunate. Little thought is given the initial changes that lead to the production of the lesion. The very first alteration in the normal chemistry that finally progresses to a tissue change is far beyond our present system of observation or disease classification. Yet it is this essential etiological factor that is responsible for the incidence of a cancer growth as well as for its metastasis and the rapidity of recurrent following operation. The stimulus to growth production and the demand for such a phenomenon must have existed prior to the growth, and as we have shown, evidences itself for years in a vast majority of cases by definite toxic symptoms. Is it asking too much of the clinician to have recorded these toxic manifestations? Is it too much to have expected him to note an amelioration of the toxic symptoms in so many cases after the growth has gotten well under way, and therefore to have observed the detoxicating function of the growth? Could he not also have observed in such cases as show no amelioration of these toxic symptoms after the growth has come, certain reasons why the rate of toxin production exceeded the detoxication activities of the growth? We understand that those who like to be looked upon as experts generally refuse any data that reflects upon their stupidity and obstinacy. The profession right now throughout the extent of this continent is confirming our observations on the constitutional nature of cancer, the manifestations of the etiological toxin, and the immature inadequate attempted function of the growth. The time has come for those "experts" who would not become passe to wake up and try to catch up with the procession.

Nor is it sufficient to make the simple admission that a cancer growth is a protective response directed against a definite toxin and not yet matured in this period of our evolution. It must also be admitted that the employment of local measures as surgery, X-ray and radium in the established case is neither scientific nor desirable. For the terrible results of such measures are well enough known, yes, even to the extent that the public revolts against their use, and only those who are uninformed and those who are easily deceived per-

mit themselves to submit to them. The silence of the tomb cries out to overwhelm the propaganda of the American Society for the Control of Cancer. Such propaganda ridicules our profession as it injures the public we should honestly serve. It is not necessary to recite the case histories of those unfortunates that were promised everything from surgery, X-ray, radium, gold and lead, and who were brought to us in depleted vitality, fatally toxic, and with the whole disease process very greatly stimulated. The failure of destructive measures again proves the constitutionality of the disease, and demonstrates that the etiologic factor is the matter of first importance, and that it is unscientific to attempt to cure the disease by combating one of its local manifestations. We must remove the cause, and so correct the body chemistry that the etiologic factor can no longer exist in that patient. Then the growth will be disposed of by normal physiological processes, and a true cure is established. We have demonstrated how to do this.

The diagnosis of cancer deserves lengthy consideration and we will devote a special paper to this subject. But we must mention here that no disease is masked with so many diagnostic alibies as cancer. Nevertheless, no disease is so clear cut, unmistakable, and so correctly diagnosable as the established cancer case. No disease presents so definite a history, such definite physical findings, and symptoms, nor so characteristic a clinical picture as this disease when well established. The extremely early case, which is rarely seen, may require a histological study of the growth, but do not be deceived into the notion that the pathologist can make the diagnosis for you by the microscope. The most reliable pathologists tell us that they can not do this. He may guess at it with the aid of the clinical history, and the description of the gross physical findings, but if the early growth has been removed he must await the future turn of events, the advent of recurrence, metastases and the like, to give a true diagnosis. Let me quote from this country's most reliable authority, Dr. MacCallum, Professor of Pathology at Johns Hopkins Medical School.

"The malignant character of the tumor is evident in the infiltrating, destructive manner of its growth when it is well established, but in the beginning it may be difficult to recognize this. Nevertheless, unless the tumor is extirpated it soon reveals its true nature, and even if it is removed at operation, the tendency to recur in the same place from traces of the tissue left behind is associated with other evidence of its malignancy. Above all, the appearance of colonies of the same tissue elsewhere in the body leaves no room for doubt. It appears, then, that in order to decide upon the nature of a connective-tissue tumor which, as far as its microscopical morphology is concerned, might

be a benign fibroma or a malignant sarcoma, it is necessary to know the history of the growth and its gross relations to adjacent tissues. Even then it may be impossible to be completely sure until recurrence or metastases have appeared. It is at this point that the greatest uncertainty may exist, but ordinarily, as will be explained, the morphology of the tumors has become sufficiently well known in connection with the history of their growth to allow one to foretell the progress of the growth and decide upon its nature."

What MacCallum has said of the connective tissue growths often holds for the epithelial growths. The great difficulty that the microscopist must face, is the lack of absolute criteria for differentiating a cancer cell from a normal or adenomatous cell. Sometimes the variation may be great but not always is this so, and the cancer cell and the normal cell are too often non-differentiable. The pathologist is too prone to pose as positive authority in matters of tumor diagnosis, and the surgeon too often can not look through a microscope intelligently, and therefore stupidly succumbs to the claims of the pathologist.

It must be remembered that so far as the physical findings are concerned the criteria as to malignancy are, infiltration, metastasis, and recurrence after attempted removal. Infiltration gives gross evidence of its existence about as early as it does microscopically. Metastasis gives evidence of itself first to the clinician, and only to the pathologist after another piece of tissue is removed. Likewise recurrence is first observed by the clinician or the patient, and then no pathologist is needed. So whether infiltration is observed grossly or microscopically the diagnosis is established. Any growth that attaches itself to surrounding tissues and becomes a part of the surrounding tissue to any degree is malignant. Any growth that gives rise to new growths, before or after removal is also malignant. Any growth accompanied or preceded by certain toxic changes and cachexia is malignant, and no pathologist is required to make an adequate true diagnosis. Moreover a good clinician can give the microscopic characteristics of the growth exactly from the gross manifestations. This is a fact that has been amply proven. Let us not divorce common sense from diagnosis, if we would be efficient.

We wish to emphasize one fact here, and that is that it makes little difference what the cellular classification of the malignant growth may be, the fact that it is malignant points to the existence of the etiologic toxin, and therefore simplifies the choice of treatment. There is but one practical thing to do for the patient—get rid of the etiologic factor—better still, make use of the etiologic toxin by converting it into its antitoxin, make the patient immune to the disease by con-

verting the cause into the cure. Nature is wonderfully efficient, and this is her way of working. We have imitated her successfully and that is why our treatment is successful in the hands of the profession generally. We care not what tactics organized medicine, or rather organized surgery, under the spokespersonship of Mr. Fishbein may do to prevent the acceptance of our treatment. It is not a matter of stupidity or inability to appreciate one of the greatest beauties of nature, her means of combating disease and accomplishing something of tremendous importance to the future welfare of the race. It is a matter of short sighted sordidity, a common spirit of selfishness that unites the surgical group, with a few notable exceptions, into a resolve to oppose anything that they believe will interfere with their commercialization of the cancer victim. The treatment of cancer rightfully belongs to the family doctor. He is coming into his own, and half the surgical business will shortly be curtailed. The family doctor can make the diagnosis correctly and can manage the treatment efficiently.

Success in the use of the treatment depends upon a correct understanding of, first, the nature of cancer; second, the mode of activity of the antitoxin; third, upon the ability to differentiate reactions from the symptoms of the disease, and fourth, upon an appreciation of nature's mechanism of absorption of the growth, and of the healing process. There is no particular mystery associated with any of these affairs, although they are not customary subjects of concern or appreciation by the surgeon.

Any case that can be cured by any number of doses of the antitoxin can be cured by one single dose, and in the well managed case one dose should prove sufficient. We are very anxious that those who use the treatment employ one dose and give plenty of time for it to act, instead of trying to rush the case to recovery by forcing treatment. Attempting to force treatment may overtax the whole recovery process and defeat it entirely or delay it greatly. Only where the second or third dose is given in correct synchrony can recovery be rushed, and a good deal of experience is needed to be successful in the attempt. By taking all the time that is needed for one dose to accomplish the cure, and by correctly preparing the patient for treatment, and maintaining this state of correct metabolism for recovery, there should be a high percentage of recoveries in even the well advanced cases, on but one dose of the antitoxin.

The correct preparation of the patient is therefore a matter of first importance. I am giving a brief outline. The object of the preparation is to

clean out the bowel of old adherent toxic material, and at the same time to correct any metabolic deficiency that might exist. A simple routine has proven itself efficient. We give apple and pear juice, or either one, in such quantities as the patient wishes to take, and the juices obtained by cooking the marrow end of the beef bone, that has been trimmed free of meat and the bone well chopped up and boiled in water for several hours to extract the tissue salts. Vegetables may be cooked in this juice, and the juice strained off and taken in as large an amount as the patient desires. Thus nothing solid is taken into the digestive tract, and the bowel is able to contract and squeeze material from the periphery of its sacculations and pockets to the center of the lumen. This material is thus made accessible to the action of the enema. Two enemas are given each day, and more may be given, to wash the bowel clean. It takes about five days or a week to clean the bowel.

Apple and pear juice are prepared fresh each day, by grinding the raw fruit through a meat grinder, adding a little water and squeezing the juice out through a cloth. This juice contains the needed vitamins, malic and isomalic acid, and other valuable constituents that increase the rate of oxydation in the body. Citrus fruits depress oxydations and should not be used. The bone vegetable soup juice contains the valuable tissue salts in the best state of combination for assimilation. This juice will bring about a normal calcium balance much quicker than any other preparation, and is far better than any artificial product on the market. We have discontinued the use of colloidal calcium or other substitutes, for this natural preparation. The artificial preparations may do harm if used too long, while the natural preparation arouses a distaste on the part of the patient as soon as he has enough to properly alkalize him. He can discontinue its use at that time, and later by testing the saliva with Litmus, ascertain when to resume its use. Or he can take the soup once or several times a week throughout the course of treatment according to his taste—a safe guide.

After the antitoxin has been given, the diet should consist of the solid raw or cooked foods outlined below. This selection is made after much experience, and is designed to include the non-injurious materials and omit those that interfere with recovery chemistry.

CLASSIFIED DIET WHAT TO EAT

Fruits

Apples
Bananas
Dates

Fresh huckleberries
Fresh raspberries
Fresh blueberries

Muskmelon
Fresh blackberries

Grains and Cereals

Bran
Barley
Cornmeal
Cracked wheat
Oatmeal

Soups

Barley
Bean
Celery
Corn
Cream

Pears
Watermelon

Pettyjohn
Rice (unpolished)
Rolled oats
Shredded wheat
Whole wheat

Fruit
Pea (new)
Rice (unpolished)
Thick soup
Vegetable

NOTE—Do not use any spices, tomatoes, meat stock or cubes in making soup but use the trimmed bones. Must not use any canned soup.

Vegetables

Brussels sprouts
Cabbage
Cauliflower
Kale
Kolrabi
Lentils
Butter beans
Carrots
Celery (raw or stewed)
Corn (new)
Cucumbers
Lettuce
Onions (for flavoring)
Turnips (white)

Turnip tops
Beet tops
Radishes
Swiss chard
Peas (new)
Potatoes, baked, boiled or
mashed (sparingly)
Pumpkins
Shelled new beans
Squash
String beans
Sweet potatoes (baked or
boiled)

Dairy Foods

Butter

Sweet cream

Bread

Bran
Bran muffins
Biscuit (whole wheat)
Corn bread
Graham bread

Graham wafers
Rye bread
Whole wheat bread
Whole wheat wafers
Whole wheat (toasted)

Beverages

Apple juice (made fresh)
Cambric tea (hot water,
milk and very little sugar)
Cream, one-half water

Pear juice (made fresh)
Postum
Water, all you can drink

Desserts

Whole wheat bread pudding
Rice pudding (unpolished
rice)

Ice cream (plain, made
with milk, sugar; no
flavoring)
Whole wheat plain cake

MUST NOT EAT
while under treatment**Fruits**

Raisins
Cherries
Cranberries
Currants
Gooseberries
Grapefruit
Grapes
Loganberries
Figs
Pineapple

Prunes
Lemons
Limes
Oranges
Peaches
Plums
Quinces
Rhubarb
Strawberries
Tangerines

Vegetables

Artichokes

Rhubarb

Egg plant
Parsnips
Parsley
Pepper grass
Peppers

Cereals

Cornflakes
Hominy
Grits
Cream of wheat
Farina
Macaroni
Noodles

Salsify
Sauerkraut
Spinach
Tomatoes
Water cress

Dairy Foods

Buttermilk
Cheese (any kind)
Malted milk

Sour milk
Sour cream
Sweet milk

Must not eat meats or fish.

Desserts

Chocolate ice cream
Chocolate pudding
Egg custard
Fruit ice cream
Fruit ices
Gelatine
Junket
Jams

Jellies
Nut ice cream
Prune whip with gelatine
Preserves
Sherbets
Spanish cream
Vanilla ice cream

Candies

No candies, chewing gum, nuts, fruit or chocolate, etc.

Condiments

Bottle sauces
Catsup
Ginger
Horse radish

Mustard
Pepper
Spices
Vinegar

Beverages

Alcohol
Beer
Champagne
Cordials
Coffee
Cocoa
Carbonated water
Chocolate

Grape juice
Ginger ale
Lemonade
Mineral waters
Spirits
Tea
Wine

Tobacco

Cigars
Cigarettes
Chewing tobacco

Cubebs
Smoking tobacco
Snuff

Medicines

Must not use any home remedies as:

Aromatic spirits of ammonia
Aspirin
Cold tar products
Cathartics
Castor oil
Cold creams
Cough syrups
Sleeping medicine
Pain killers
Hair tonics
Alcohol rubs

Witch hazel
Fever mixtures
Hypodermic injections
Iodine
Glycerine
Glycerine suppositories
Patent medicines
Salicylates
Vaseline
Etc., etc.

It would not be amiss to supplement the previous discussions on the reactions of the recovery process with a brief discussion of the reflexes that accompany the healing and replacement of destroyed tis-

sues. We have several times mentioned and illustrated the febrile reactions and grippiness of the detoxication and immunity mechanisms, and those that accompany the absorption of the growths. Very little was said regarding the vicero-motor and vicero-sensory reflexes that should be correctly interpreted in order to judge the patient's status from the recovery viewpoint.

In cases where extensive abdominal growths are being absorbed considerable readjustments are taking place, pressure on certain nerves is being relieved, and new sets of impulses are again reaching the cord. Moreover with the ingrowth of vascular tissue that serves the absorption of the digested cancer cells, nerve filaments are developed that increase the reflexes associated with the part. Thus the somatic, sensory and motor nerves are reflexly stimulated until healing has become completed, and accordingly, hyperaesthesias, hyperalgesias, and muscle spasms are maintained during this period. Thus where healing is going on below the umbilicus, a muscle spasm may hold sway in the abdominal wall below the ribs on the right or left side, and the lower ribs may be very painful and hypersensitive for a period—in fact until healing is completed. The spastic muscle may be located right over the part affected.

Visceral reflexes intended to splint the part to promote healing are very usual, and the sphincters go into spasm while the musculature of the viscus relaxes. Thus meteorism is common in abdominal cases during the healing period. This condition is successfully combated by use of the enema or colon tube, but violent measures are to be avoided. In the healing of the uterus, anal and bladder reflexes of the same order may come about. First there may be sphincter spasm and later a relaxation of the sphincter, before normal function returns. These altered reflexes may not be convenient but they are not harmful, and last only over a short period.

Bleeding is liable to occur with the recovery. It may happen during the digestion of the cancer cells, when plugs of these cells that have destroyed and sealed a part of a vessel wall, undergo digestion and leave a hole in the vessel. Pressure and ice are the remedies. Drugs and hemostatic agents should never be used, with the possible exception of Methylyne Blue solution locally, which will cause rapid blood coagulation. Bleeding may also occur in mild form during the period of absorption and vascularization of the growth, that is about the fourth to sixth week period. It may also occur during the period of retraction of the vascular tissue, generally the ninth and twelfth weeks. It is never serious in my experience, and the ice bag, and quiet

is all that I have ever recommended.

Examination of patients should be so conducted that undue pressure and manipulation is avoided. There is no necessity to destroy the delicate blood vessels that grow into the growth to accomplish the removal of the digestion products of the cancer cells. Destruction of these vessels delays the recovery and may result in unhandy complications. One can learn as much about the changes going on in the growth by very slight and circumspect palpation. Nothing is more disgusting than to observe a clumsy untrained finger study of a growth. One must decide what characteristics are to be sought in the growth regarding movability, elasticity, extent, and lobulation or nodulation, and then use the least possible force in making the palpation. It is surprising what easy handling will give the characteristics to an intelligent observer. The patient will appreciate your care, for most likely she has been through the hands of a number of ruffians or "butcher" examiners who she knows did her definite harm. Recovery takes place better if it is not disturbed by traumatism. What we want are the best results.

While the growth is undergoing absorption, there usually is loss of appetite. The patient may take practically no food and still gain rapidly in strength, and blood quantity and quality. This is because cancer tissue has a very high nutritive value for the species concerned. Human cancer tissue has perhaps seven to ten times the nutritive value of any other form of animal food for the human, and this is simply because of the amino acid selection represented in the growth. There may be nausea or even vomiting for a short period during the absorption of the growth, particularly if the absorption goes on rapidly. The circumstance can be compared with the sickness following the ingestion of too much meat.

In cases where the growth has been rendered toxic to a high degree through X-ray or radium exposure, its absorption may result in a fatal poisoning of the patient. That is why we do not recommend our treatment in radiated cases.

If it should nevertheless be decided that a radiated case must be treated, it is best to wait as long as possible, over three months and if possible longer than six months following the exposure, before giving the antitoxin. In the meantime the rate of increase in the cancer activity can be controlled to a large extent by proper diet. The detoxication regime outlined above should be followed for a few days, and then the patient is required to follow the recommended list printed above until the time for treatment has arrived.

Who has ever seen a case of cancer cured by X-ray or radium? I have asked hundreds of sur-

geons, internists and general practitioners, and not one can point to a case. A few honest radiologists make the same admission. There are so many X-ray and radium exploiters distributed throughout the country, and advertised by the American Society for the Control of Cancer, who boast large numbers of cures. They are quacks, and disgrace the whole profession.

Cancer grows and spreads more rapidly after radiation. The final suffering is terrible and we all know it. There is no excuse or warrant for its use, yet our large institutions lose no opportunity to expose the patient to this bitter fate. Whether it is lack of responsibility, plain, mean, inconsiderate stupidity, or the malicious intent to ruin the case in order to cut his chances for recovery under our treatment we do not know. However, we do not expect this situation to exist very long, judging from the rapid growth of our Foundation.

Another unscientific measure imported from abroad which is killing many cancer victims, and which promises to survive only a brief period is the lead treatment. Only eight days ago a young man was brought to us from New York on a stretcher, thoroughly poisoned with colloidal lead, kept groggy on morphine to suppress the terrible pains of lead poisoning. So low was his vitality that he was not expected to reach Detroit alive, and I doubted that he could survive for many hours after his arrival. His systolic blood pressure ranged about seventy. This victim of "science" had a testis removed about two months previously, and was informed that he was cured of a teratoma, which the microscope proved the trouble to be. Within two months his lungs were found to be involved by secondary growths. He was then soaked with X-ray four times under lengthy exposures reaching as long as one hour and forty minutes. This brilliant procedure

was performed by the great Dr. Francis Carter Wood, who talks so much for X-ray and the American Society for the Control of Cancer. Other renowned "Experts" aided in directing "treatment," but the liver started to enlarge, and the masses in the abdomen kept on enlarging just as though they never heard of X-ray. Then lead was tried, and when the patient was nearly poisoned to death and the growths still showed no intention to behave, and in fact kept rapidly growing, the family was told the truth, for indeed the funeral was not far away. The wife was honestly told by Dr. Lambert, she reports, that they were not only unsuccessful in their attempts, but that they had started a fatal process in the patient that they could not stop or control.

So he was brought to us to see what we could do, and with a little more knowledge of chemistry than the New York "experts" possessed, we have already eliminated a large part of the lead that promised soon to prove fatal. The patient has also received his single dose of the antitoxin, and now sits up to read his paper. The large cancer masses that distended the upper half of the abdomen have already receded about one-fourth, which is the normal recovery rate.

One difficulty yet looms up ominously—the X-rayed masses must prove toxic when undergoing absorption, perhaps in a way that cannot be successfully combated and the adrenal glands have also been injured by the X-ray. Whatever the outcome proves to be, we will report on his case in detail in the future.

This case is cited only to emphasize one fact—the principle of destructive therapy has proven itself a failure.

We must follow Nature's efficient example—convert the cause into the cure—the toxin into its antitoxin.

Scientific Basis for the Treatment

1. Malignancy is a constitutional disease comprising several factors:

a. A facultative anaerobic germ, whose favorite habitat is the large intestine, and anaerobic recesses such as occluded tonsular crypts.

b. A toxin produced by this germ which, after absorption and circulation throughout the body for a period of time, injures the body chemistry so as to lower the vital resistance to the activity of this toxin and the germ that produces it. This situation is recognized as the specific factor alluded to by various observers, and enters into the hereditary predisposition.

c. An injured tissue in any part of the body, where the supply and utilization of oxygen are diminished, and a comparative anaerobic state results, permitting the germ and its toxin to carry on their chemistry and infect the injured tissue.

d. A protective effort on the part of the infected cells toward immunity which, instead of attaining adequacy, terminates in a state of symbiosis between the affected cells and the germ, resulting in a reproduction of cells of abnormal chemistry and structure, at a rate dependent upon the activity of the germ in the elaboration of its specific toxin.

II. Toxins are chemical substances of such molecular structure that they represent molecular counterparts to substances existing normally in, and essential to, the structure of the normal body cell. The toxin molecule and the cell structural element are different molecular phases of homologous molecular bodies.

III. Toxins behave as photochemic ferments, and inductively influence the molecular counterpart in the cell to a rearrangement of

its groupings, so that it assumes the toxin type of molecular arrangement. The normal cell chemistry is thus impaired—disease results.

IV. Antitoxins are altered toxins, the toxin phase of structure having been changed to the phase normal to the cell structural counterpart, by cell activity and at the expense of cell energy.

V. Antitoxins also behave as photochemic ferments, and induce change in phase in toxin molecules, causing them to take the phase of molecular arrangement, normal to the cell structural counterpart. Antitoxins, therefore, perpetuate the change started by the cell in the conversion of toxin to antitoxin.

VI. The Koch Synthetic Antitoxin is constructed to possess high inductive capacity, by virtue of which it converts the cancer toxin molecule to the phase of structure, normal to the body cell. It, therefore, successfully accomplishes (what the cancer cell unsuccessfully attempts to do) the conversion of the etiologic toxin to antitoxin, and produces immunity to the germ. The Synthetic Antitoxin has no action on the body and is harmless.

VII. With the destruction of the toxin, the stimulus to cancer cell growth is withdrawn, and the cancer tissue then represents a useless, excessive tissue, and is disposed of by autolytic processes. The cells undergo digestion into the same elements from which they were built up, and are returned to the blood to nourish the body.

VIII. Correct dietary restriction and colonic cleansing are, therefore, important measures in the care of the case under treatment, and will be dealt with in the studies offered in our Bulletins.

History of the Development of the Treatment

1911-1912. Studies on the function of the Parathyroid Glands: isolation of several guanidine poisons from the urines of parathyroidectomized animals in toxic quantities, and their identification as the cause of parathyroid tetany; concluding that the parathyroid glands form a protective mechanism against toxins containing a guanidine grouping.

1913-1918. Studies on the isolation, identification, and synthesis of the toxin that causes

cancer: on the chemical nature of antitoxins, and the synthesis of a cancer antitoxin.

1918-1923. Clinical observations and improvement in the antitoxin treatment.

1923-1926. Period of collaborative observation by physicians in the United States and Canada, demonstrating the practicability, absolute harmlessness, and curative value of the treatment.

February, 1926. Organization and Endowment of the Koch Cancer Foundation to carry on educational and extension work.