### Dr. Koch's Publications

- Publications 1912-1939
- Publications 1940-1949

The Basic Chemistry of Our Diet,1940 Relation of Focal Infection to Cancer and Allergy in Causation and Recovery, 1941

A Brief History of the Koch Synthetic Antitoxins, 1941

Chemistry's Victory Over Disease, 1941

Principles of the Koch Therapy Introduced in 1918, 1941

An Efficient Single Dose Treatment for Diabetes on a Full Carbohydrate Diet Without Insulin, 1941

Clinical Demonstration... That Determine Immunity to Disease,1942

Publications 1950-1967

# RELATION OF FOCAL INFECTION TO CANCER AND ALLERGY IN CAUSATION AND RECOVERY

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The evidence at hand now makes it very if difficult to classify neoplastic disease as anything else than an allergic hyperactivity of the cell productive mechanism. Herein the surgeon finds both comfort and challenge: comfort since the group of cells that have undergone change are at first a localized island. The challenge is the more serious, however, since the source of the poison that has excited the allergic response is practically always some distant focus of chronic infection that is neither recognized nor accessible to successful surgical attack.

The best surgical meaning of a recovery from cancer, then, can only be that one area of allergic response has been more or less fully removed and that the cure will last only until another group of cells is excited into uncontrolled reproductive activity. Therefore, so long as the focus of infection that broadcasts its allergenic poisons is in existence, a real cure for cancer is out of the question, no matter how much mutilation is attempted. It is, therefore, the duty of surgical procedure to search out the guilty focus and remove it as early as, or even before, the malignant is touched.

This holds good for the treatment of all allergic diseases. The causative focus of intoxication must be rooted out and eliminated. But we must go deeper than that. We must remove the lack of resistance that permits and supports focal infection and this is the most important procedure that can and must be accomplished to secure a real cure. Indeed it is well established right now that this is the only method that brings true success whether or not surgery is employed at all. It is the purpose of this paper to show that a recovery from any allergy, including cancer secured by restoring the natural immunity by boosting the oxidation catalysis is truly complete since it wipes out the primary focus of residual infection as well.

In the course of a true recovery from cancer of the breast for instance, it is our experience to observe a reversal of the disease progress in which the recovery changes take place in reverse order to the sequence in which these changes came. Thus the first pathological change to disappear is the latest neoplastic metastasis, then the rest of the neoplasms. Last of all; after all malignant tissue is digested and absorbed, there occurs a rather sharp congestion and small round cell infiltration of the old focus of infection that was responsible for the trouble. This focus is, in breast cases, usually the tonsil on the same side as the diseased breast. The inflammatory reaction may require three and a half days, seven days, or ten and a half days to accomplish its working of cleansing out this old focus of infection. Thereafter, a new epoch of health greets the patient; fur the immunity of such high degree as is now possessed, successfully burns up other poisons that would ordinarily hamper the metabolism and body functions. Real health is

enjoyed for the first time since the focus of residual infection was established. Yes, we can go back further than that, for real health was first lost when the natural immunity mechanism sank low enough to permit an invading germ to take hold and retreat to a position where it defied all efforts at dislodgment and from which it constantly poisoned the blood. The same experience is recorded in other allergic affairs and, since the course of recovery follows the reverse sequence to the development of the disease and the last event is the clearing out of an old focal infection, we conclude that this focus of systemic poisoning was the first change and a primary causative factor in the pathogenesis.

The natural immunity we speak of, like all other natural cell functions, has its basis in the most primary of all chemical processes, namely the oxidation mechanism; and where this fails, not only deficient energy liberation functional purposes but the power to burn toxic germ products and also certain food elements is lost and in consequence allergy and infections are able to take place.

The same events are observed in the recovery from other allergies. A severe case of psoriasis becomes clear of all lesions in a few months after treatment and then an acute inflammation of an area long infected, as for instance the mastoid cells of one side, quickly sets in for a few hours or days and quickly disappears.

I will briefly describe the mechanism of allergy production for in it we see the key to successful therapeutic attack and also the solution of a most important physiological process, the catalysis of aerobic oxidations in the normal cell. In the first place, all allergenic poisons are anaerobic in their chemistry, that is the produce energy changes without using oxygen and besides this they serve as negative catalysts to the normal oxidation processes. They do this by virtue of their free valencies between carbon atoms and between C and O, and C and N, for these valencies are set up in large clumsy molecules that activate oxygen but partially and just sufficiently to produce stable peroxides that tend to induce polymerization of the similar free valencies in the medium where they are dissolved and thus a negative oxidation catalysis is exercised.

The production of allergy depends also upon the same free valencies; for they have fluorescent properties whereby they mediate an energy transfer from the ordinary exothermic reaction going on in the cell, that has absorbed them, to that chemical system which possesses a range of energy absorption of similar wave length to that of the emission range of the fluorescent substance, thus serving as an. energy acceptor.

Energy transferred this way to any physiological mechanism passes into the chemical processes of the acceptor functional element and forces its function beyond physiological control. Thus when the contractile elements of the cells of a tissue are affected, spasms as of asthma take place. When the secreting elements are affected, hypersecretion as of hay lever results. When the reproduction elements of cells are so affected they uncontrollably are forced to undergo cell division as in neoplasia. More over when the conductile elements of a system of neurones associated in some concept are likewise affected, fixed ideas of insanity or neurotic reflexes, and contractions are brought about.

The very fact that such pathogenic, fluorescent molecules are able to exist in the body and escape destruction by oxidation is sure proof that the oxidation catalysis is faltering and needs a boost.

The proper therapeutic procedure is therefore, very self-evident. What we must do is simply saturate with oxygen those free valencies that are causing the threefold mischief.

We do this by employing a positive catalyst carrying the same active groups as the poison itself. And this procedure has proven eminently successful. The molecular structures we use conform to the rule of chemical structure we have formulated many years ago. Thus to depend upon the activities of ethylene and carbonyl groups arranged according, to the chemical basis of immunity may be stated, as three rules:

First, that amino groups are not present in the carbon chains possessing the carbonyl group.

Second, that the carbonyl group forms a part of an ethylene linkage.

Third, as an alternative, that it be joined to a carbon atom united with hydroxyl which can be removed to yield an ethylene linkage shared by the carbonyl group. Most efficiently these rules are fulfilled in the following structures.

The molecules O=C=C=O H2 C=C=O O=C=C=C=O

are proven most useful in the order given here. The first, Glyoxylide, and the third, Malonide, are oxidation products of the fourth, 1:4 Benzoquinone. These, plus the ketene, conform to the rules of structure that give immunogenic properties, that I have outlined above. They have given us good, service for many years.

The clinical management of all allergy uses including cancer is conducted along the same lines. The diet should be vegetarian to avoid production of toxic amines and imides by bacterial activity in the colon. The diet should be rich in vitamins and essential minerals. Substances with quinone and terpene structures should be avoided; therefore, citrus fruits, coffee, tea, chocolate, and perfumes, also tobacco and alcohol and spices are not to be used.

The system should be cleared of focal infection surgically wherever feasible before treatment is given in order to simplify the recovery program. However, the immunity generated by the treatment has shown its ability to clean out these foci spontaneously and thus to establish a complete recovery.

The cases here presented illustrate the sequence of the recovery changes in reverse order to their production in the pathogenesis. The last major reaction is the mopping up and routing of the focus of infection standing in casual relation to the allergic response made.

A typical history of malignancy in which focal infection played its etiological role is exemplified by the following case.

#### Mrs. C. A., age 50.

Past History-She had been well all her life except for frequent tonsillitis. The tonsils were imbedded and frequently acutely infected in the winter months and occasionally off and on throughout the year. They were removed in 1913 and thereafter the throat was badly inflamed for over a week with loss of voice for three weeks.

Three years before the tonsils were removed several small lumps appeared on the arms. They were diagnosed to be lipomata, but the later history identified them ass neurofibromata for they spread in great numbers over the body and limbs with typical characteristics.

In 1915, two years after the tonsils were removed, a lump appeared in the right breast. It was removed, and two years later another lump came in the same breast. It was, promptly removed, but recurrence was well established in December 1939, when I first examined her:

Early in 1939, because of abdominal distress, an exploratory operation was made and an adenocarcinoma of the fundus uteri was found. It had spread widely through the abdomen and several metastases were observed in the liver. A biopsy was made which revealed the high grade of its malignancy which, of course, we confirmed by the subsequent history of wide spread metastases, the hemolysis, and the large dimensions of the tumefaction which in size exceeded the volume of a man's head and were firmly fixed in the abdomen. She had received some x-ray treatments which had no beneficial effect, but rather stimulated the growth and therefore, discontinued and the patient given up as hopeless.

Physical Findings-The general appearance of the patient was good except that hemolysis, was intense and the tissues water-logged and fatty. There was some

cyanosis and dyspnoea and easy fatigue. Many small neurofibromata covered the body, arms, and legs, ranging in size from that of a pea to a lima bean. The right breast showed malignant infiltration in moderate amount. The abdomen bulged especially on the right side because of enlargement by the growth.

Palpitation showed two-thirds of the abdomen well involved with the tumefaction.

The neck and throat region showed nothing extraordinary except slight induration of the right tonsilar fossa.

Recovery Process--One injection of two cc. of our Ketenones was given in the upper arm and steady recovery followed. Negative phases showed up regularly every three weeks and after each such reaction recovery hurried along more quickly. First of all the color improved and she felt "more natural."

The masses in the abdomen were digested and absorbed most quickly so that by the tenth week nothing definite could be felt by careful moderate pressure. By the twelfth week the right breast was clear and during the twelfth week a sudden and severe sore throat set in first on the right side spreading to the left and disappearing, completely in seven days. This twelfth week reaction gave a fever of 102 degrees for a few hours and general achiness for a week. Thereafter, her recovery was hastened and one could observe slight improvement in the neurofibromata.

Every third week thereafter showed some reaction, achiness principally, but the more prominent reactions came at twelve week intervals Even the sixtieth week gave a little achiness and some headache from which she had suffered considerably in early life. By the sixtieth week most of the neurofibromata had been absorbed and her health was excellent. Thorough examination of the abdomen and breast revealed normalcy only and no pathology whatsoever. The throat region is also free from induration. She has gained nearly thirty pounds in weight.

It will be noted that after the malignant cells had been absorbed, very promptly during, the first twelfth week reaction, an acute inflammation of the region of an old infection took place This was the tonsilar area and was more severe on the right side where some induration existed and where no doubt the old infection, that caused' her frequent tonsillitis, was still imprisoned.

The congestion and small cell infiltration that accomplished the cleaning up of this focus and restored normalcy, removing both infection and scar tissue, took place after the malignant cells were disposed of and so it followed the reverse sequence of the pathogenesis, like the clearing up of the breast and the abdomen. This is our universal experience and we, therefore, conclude that the focal infection is the first step in the pathogenesis, except one, namely the loss of protective oxidations which permitted the infection to invade and localize.

By therapeutically wiping out this first departure from the normal, that is by restoring an immunizing oxidation catalysis, the basis for the disease is removed and normalcy returns pressing the disease back through the door where it entered and out from the system. This is the rule of true recovery, the first to come is the last to go and the last to come is the first to go.

I will give another case of a structural allergy, psoriasis, that exemplifies the same principles.

## Miss N., age 32.

History taken April 2,1926.

Family History--Negative to cancer, brother has psoriasis.

Past History-Tonsillitis one and one-half years ago (March, 1925), and an antrum infection at the same time.

Pregrowth Symptoms - Tachycardia on changing position from sitting to standing posture, constipation all her life.

Present Illness-The psoriasis started one month after tonsillitis in April 1925, at a spot, on the left thigh about the size of a dime when first noticed. In a week, it

had grown to the size of a quarter piece, and at the same time another spot was found on the left side of the abdomen. Then in rapid succession spots developed on the left forearm and below the left knee and on the right arm and leg. They each grew to about the size of a half-dollar. The various known treat treatments were used without benefit. Her condition remained stationary until March 1926, when a sudden flare-up occurred and the lesions rapidly spread all over the body including the scalp. The face and hands were somewhat spared but the lesions became confluent over the rest of the body. She took a series of ultra-violet treatments twice a week for a month that burned so intensely that the suffering became unbearable, and without improvement. Body weight, 98 pounds.

Treatment-One .cc. of Glyoxylide was given April 5,1926.

Results-No reaction followed for a week when chills for three night and mornings occurred. Temperature was not taken. Appetite improved felt better and started gaining weight, lesions started to improve during the second week, itching and burning grew less, and entirely disappeared by the fourteenth week. During the twelfth week, as in cancer cases, there was a fever and general achiness, and for about three hours, very intense pain in the left side of head through the left temporal bone and mastoid region. The muscles of the back and left side of the neck were spastic for about a day. The left tonsilar region was intensely inflamed. This condition eased away in about two days. During the last six weeks of the reaction period, she gained 11 pounds in body weight and after the twelfth week reaction; her gain was more rapid until her weight reached 121 pounds. She is in the best health she ever enjoyed and no trace of the lesions are observable. Luxuriant ingrowth of hair had taken place and the skin is perfectly healthy.

Functional allergies follow the same course in pathogenesis and recovery too.

#### Mr. P., age 60.

Past History--Asthma quite steadily for the last twenty years came following very intensive work and much sustained fatigue. He had been subject to colds all his life and the right antrum was frequently in trouble and had to be drained. Every winter brought several severe colds with nearly continuous sinusitis. Ten years ago all the teeth were extracted because of pyorrhea, and apical infection. After the asthma appeared the colds were less troublesome but there was greater physical deterioration. The exciting cause for the asthma was most everything that can arouse allergic response, even the smell of the grease when donuts were cooked.

Treatment- Two c.c. of 1:4 Benzoquinone solution was given in February 1936.

Results- Recovery was rapid, for in twelve hours there was definite improvement. This improvement went on steadily for six months during which he was symptom free except for the ninth, twelfth, eighteenth, and twenty-first weeks when slight attacks were had. After the twenty-fourth week, which was marked by a terrific sinusitis and aching of the jaws, recovery was complete. Thus here too, the infection focus was the first to come and the last to be cleared out. Other cases can be studied in the report reproducing the *Proceedings* of the Cancer Commission appointed by the government of the Province of Ontario, Canada, regarding the Koch treatment.\* It presents a wealth of clinical data in cases of fully proven hopeless cancer that recovered under this treatment.

\*(A copy is available on this web site)

These few histories, like many others, show that ordinary surgical removal of the infected focus is not sufficient to rid the body of the infection since the area becomes invaded with scar tissue that imprisons the germ but does not eliminate it. Therefore, the surgeon has the additional responsibility of removing the scar remaining as a constant offender, but there is no proof that further scar will not form to entrap the germs set free by the surgical manipulations and repeat the mischief.

It is much more logical to correct the fundamental chemistry which is at fault and bring up the immunity to that pitch that disease germs and their poisons are no longer able to survive, and thus bring the patient back to real health.

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