LIVER AND CANCER

A NEW CANCER THEORY

BY

KASPER BLOND, M.D., F.I.C.S.

WITH A FOREWORD BY

E. STANLEY LEE, M.S., F.R.C.S.

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PREFACE TO THE SECOND EDITION

In the first edition I tried to establish my new cancer theory and to prove that cancer is the end-result of a chronic nutritional disorder.

In an additional 170 pages I try now to prove that the indoctrination of the present medical profession in the dogmas that cancer is a local disease, that 'early operation' can cure cancer, that certain morphological structures (biopsy) are the basic evidence of an existing cancer, that animal experiments can solve the problem, that X rays or radium can cure cancer, are misleading and prevent the solution of the problem.

These dogmas have been accepted by the profession as 'terms of reference', and scientists who do not accept them are punished by the medical censorship with silence.

The building of new surgical theatres, the provision of new modern X-ray and radium equipment, the production of new vaccines have cost billions of pounds, in spite of which cancer mortality in all civilized countries is constantly on the increase. All the accepted cancer dogmas are based on Virchow's 'cellular pathology', which curiously enough is collapsing even in the country of its origin—Germany.

Cancer is a nutritional disease and can be prevented only by control of food production, food conservation, and food distribution. Surgeons, statisticians, pathologists, and radiologists cannot and will never solve the social problem of correct nutrition.

January, 1960. K. B.

PREFACE TO THE FIRST EDITION

For thirty years I have been studying the problem of the origin of cancer as a surgeon, an experimenter, and as a scientist. The cancer problem bristles with contradictions; there is hardly one observation, fact, or theory which has not been contradicted by some other observation, fact, or theory. The fundamentals of any science are logic and causality, but in cancer science they are scarcely applied. Adherents of the hereditary theory of cancer advocate 'early operation' but do not explain how *disseminated* embryonic cells, responsible for cancer, can be influenced by a local operation. The assumption that genes and viruses will be cured by operation is another of these contradictions. Cancer research, up to the present time, has been based on structural theories, and other theories have been dismissed or ignored. A scientist may admit that cancer is not an infectious disease while at the same time he advocates immunogenic treatment of cancer. An adherent of Virchow's cellular pathology may consider cancer a localized organ disease and yet at the same time will seriously believe that cancer may be caused by an unbalance in the equilibrium of hormones. In spite of this belief which contradicts Virchow's concept, he may nevertheless recommend mastectomy as treatment for cancer of the breast. Statisticians frequently argue whether cancer mortality is on the increase or decrease. Some surgeons who believe in the increase of cancer mortality try to convince us that the cure of cancer by operation is constantly increasing and have claimed, for instance, 40 per cent success in cases of cancer of the breast. They do

not even attempt to explain how it happens that in the same country cancer mortality can remain about constant while at the same time the results from operation are constantly improving.

In his book *Cancer in Man*, published in 1952 in the United States of America, Peller has reviewed the world literature on cancer. He has studied the problem for thirty years as a physician, statistician, epidemiologist, practitioner, and public health officer. With a rare gift he criticizes the existing theories, applying logic and causality in reviewing current theories. He has considered all the puzzles and contradictions and tried to explain them. He fails, nevertheless, although he is sometimes near the solution. Peller is as thoroughly dominated by Virchow's cellular theories as the experimenters and scientists whom he criticizes. Starting from an absolute conception, that a morphological structure arising in different organs is caused by some ' cancerogenic agent ' irritating this particular organ, he comes to erroneous conclusions and interpretations, and a wrong curative solution. I shall try in an unorthodox way to solve the cancer problem by a universal theory.

I shall select the facts and shall try to solve all the paradoxes and the contradictions by application of this general theory based on my ideas published in *The Liver* and in many other papers (1921 to 1950).

Peller writes in his preface : "*Cancer in Man* is an invitation : use logic, critical abilities in reading the book, test it to see how soundly the incipient structure is built and, if the foundation stands the test of solidity, take over where I have had to leave it ; correct, limit, or expand wherever the necessity

arises and help to finish it. But be fair to me as well as to those who hold other ideas and use other methods." I am accepting Peller's invitation and I promise to fulfil his wishes. I shall quote Peller's ideas with unusual frequency, I shall be fair and try to finish what Peller has started. I have only one hope: to find one scientist who is prepared to follow my example in dealing with my own concept as I am dealing with Peller's.

London,
June, 1954. K. B.

FOREWORD

By E. Stanley Lee, M.S., F.R.C.S.

To our generation the nature of cancer is just as tantalizingly obscure and mysterious as was the nature of pus to our medical forebears a hundred years ago. Medical thinking of that day was so hidebound by the humoral theories of disease that, though all the means of discovery were at hand, it took the genius of Pasteur and of Lister to break free and open up the new world of bacteriology and virology.

Now, perhaps, history is repeating itself. So many diseases proved to be microbic in origin that our minds have again become enslaved and cannot freely range in other directions. Cellular pathology, too, has cast its strong spell around us. It may be, as the author of this book maintains, that in our fascinated watching of the cancer cell we forget to view the body as a whole. Thus we fail to recognize that some disordered metabolism, outside of the affected cell and organ, may be the common factor underlying all malignant tumours, enabling the abnormal cancer cell to compete with and eventually outgrow its neighbours.

Kasper Blond, always an original thinker and a rebel against blind orthodoxy, has for years been interested in the liver and portal system. In his previous books, *Hæmorrhoids and Their Treatment* and *The Liver: Porta Malorum*, he has suggested that relatively minor disorders of the portal system could be the cause of many gastro-intestinal and other diseases. He has worked out this unifying idea in great detail and

accuses contemporary medicine of being content to apply separate labels to many local lesions without seeking to discern a common underlying pathology.

Now, in this present book, Blond brings his same thesis to bear on the problem of malignant disease. His marshalling of facts in the light of this new conception is impressive and intensely interesting. The reader may be fascinated, stimulated, or irritated, but cannot remain indifferent. The author, for his part, asks nothing more than a critical reading, convinced that at the very least he will have opened new avenues of thought, and perhaps have stirred some others to continue where he has left off.

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THE LIVER AND CANCER

CHAPTER I

THE LAW OF CANCER DISTRIBUTION

THE idea that cancer is a hereditary disease and that its manifestations are subject to Mendelian laws has found many adherents. R. Remak (1854), Paget (1853), and many others propagated the hereditary theory. The leading exponents of this view, however, were Cohnheim (1877) and N. Ribbert (1904). According to these authors diffusely scattered embryonic cells give origin to cancer. This view is based on histological findings in teratomata of the ovaries and testicles, branchiogenic cancers, so-called congenital displacement of hypernephromata in the liver, etc. So far nobody has been able to explain why these misplaced cells or malformations should undergo a malignant change into cancer after lying dormant for so many decades after birth. Nobody knows what factors cause the malignant transformation.

The idea that some particular gene is necessary to make an individual the victim of cancer has many adherents among geneticists. But J. B. S. Haldane (1933) characterized this idea as " ludicrous ". Nevertheless, some clinicians, pathologists, and surgeons accept the theory of heredity, based on laboratory experiments. Experimental cancer research has produced evidence that chemical and physical agents—X rays, radium, aniline dyes—are amongst the causes of cancer. These experiments are based on Virchow's irritation theory. These cancers produced by external agents are, however, preventable.

We can protect individuals against occupational cancers, X ray, radium, paraffin, tar, aniline, and traumatic cancers—for

instance, the Kashmir skin and the betel-nut cancer. Geneticists have so far not maintained that radiologists or mule spinners have inherited a special gene for their professional cancer. These cutaneous cancers are environmental and not hereditary diseases.

What about the spontaneous cancers of internal organs? Can surgeons accept the hereditary origin of these spontaneous cancers? If they do, then the question arises: How can an operation influence either genes or destiny? Could it make any difference whether such a cancer is operated on six months 'earlier' or later?

There is, of course, strict indication for operation upon some cancers whether we believe in their hereditary origin or not. Danger of hæmorrhage or perforation, of œsophageal or intestinal obstruction, provide strict indications for surgery. To accept the hereditary theory, especially that of Cohnheim or Ribbert, and to urge 'early operation' on internal organs is definitely a contradiction.

If we study the official death-rates of cancer according to organs and sexes, say in 1947 and 1948, we find—following Peller (1952)—that 186,660 males and 185,392 females died of cancer in the United States. Comparing these figures with statistics for previous years, we come to the conclusion that within a certain period and within a given country the standardized mortality-rate of cancer does not change, but remains about constant. In spite of great differences in the organ distribution, according to Peller's tables, the mortality of males and females remains constant at the rate of 129 males and 127 females (per 100,000 persons). About 80 per cent of the adult male population of the United States who died of malignant diseases, succumbed to cancer of the œsophagus, stomach, rectum, pancreas, liver, and the biliary system.

These cancers are distributed over organs of the gastro-intestinal tract and originate in organs draining into the portal vein. An analysis of Peller's statistical data for females shows that although their total death-rate more or less equals that of the males, a shift in the organ distribution of cancers has taken place characterized by a high incidence of cancer of the uterus and the breast.

In my earlier book* and in a paper published in 1942 I have tried to prove that the uterus from the menarche till the climacteric has to be considered a digestive organ. With the nidation of the fertilized ovum in the uterine mucosa the development of an organ, the placenta, is produced which becomes the nutritional source of the fœtus. The waste products of the latter are passed into the maternal blood by way of the placenta. The placenta constitutes liver, lung, and gastro-intestinal tract of the fœtus.

One of the first signs of pregnancy is the dusky discoloration of the vagina, the labia majora, and the mons veneris. This is due to venous dilatation, indicating that some circulatory changes are taking place in the uterus and in the genital organs even during the first two weeks of pregnancy.

With the development of the placenta, hepatopetal inversion of the venous blood-flow from the uterus comes into operation. The liver is the mother's metabolic detoxicating organ. It is generally accepted that the uterus drains its venous blood into the inferior caval vein. Is it not probable that during pregnancy the uterine venous drainage is modified in such a way that metabolic products from the uterus and the fœtus enter the liver directly via the portal system?

In the fœtus, changes in the direction of the blood-stream occur ante- and post-partum; they also occur both physiologically and pathologically in the genital organs of adult males and females. I have dealt with this problem in detail (1932–50). Nobody can deny that during gestation the uterus is functioning as a metabolic organ *sensu strictiori*, providing nutrition and oxygen to the fœtus and removing its waste products. If this be accepted as factual we must come to the conclusion that not 80 per cent but 90 per cent of all cancers in the adult population originate in metabolic organs.

According to Peller† 15 to 20 per cent of all malignancies in children (including leukæmias) occur in the brain, 7 to 9 per cent in the kidneys and adrenals, 31·6 per cent are sarcomata, 42 per cent leukæmias. Liver and bile-ducts account for

* *The Liver.* Bristol: John Wright & Sons Ltd.

† If no author is quoted, the statistical data are taken from Peller's book, *Cancer of Man* (1952). New York: Int. University Press.

1·3 per cent only. In other words: *more than 90 per cent of all malignancies in childhood originate outside the metabolic organs.*

Blood circulation in the fœtus is different from that of adults. Lung, liver, bile-ducts, pancreas, and intestines have no physiological function ante-partum. Although the umbilical vein is a branch of the portal vein, its blood, usually free of toxic products, does not require detoxication by the liver. There is a shunt, the venous duct of Arantius, through which the purified fœtal blood enters the vena cava and thus the general circulation.

After birth, the function of the placenta ceases and the maternal organism no longer provides nutrition and oxygen to the infant by way of the uterus; this is taken over by the breasts.* In the infant, digestion sets in and metabolic products and even intestinal toxins enter its portal circulation and the liver. The liver of the infant has now to assimilate and detoxicate foreign material. The venous by-pass must be obliterated to prevent not yet detoxicated metabolites from entering the general circulation.

This post-partum obliteration of the venous duct of Arantius may be considered as evidence for the fact that the entrance of undetoxicated metabolic products into the general circulation must be prevented. It is only reasonable to expect that a similar mechanism is also secured for the maternal organism. A change of the maternal blood-flow in hepatopetal direction actually does occur at the beginning of pregnancy. We can provide further evidence that such a change of direction of the blood-stream from the caval to the portal system does take place.

Boyd (1947) in his *Textbook of Pathology*, describing hepatic findings in eclampsia, states as follows: "The necrosis (of the liver) is peripheral in type, being most marked around the portal vein. . . . *Syncytial masses from the placenta may be present in this area*" [our italics]. In what other way may such syncytial masses of the placenta reach the liver except via porto-caval anastomoses in a hepatopetal direction?

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* I am dealing with cancer of the breast in a special chapter.

There are many other facts which provide evidence for pre-existing porto-caval shunts coming into operation in portal hypertension. The so-called Krukenberg tumour of the ovaries has been and still is a riddle to clinicians and pathologists. This tumour is a gastric cancer which produces secondaries in the ovaries. Many indefensible theories have been advanced in the past to explain how cancer cells from the stomach could be carried into the ovaries, by-passing other organs. The truth is that they are carried via porto-caval shunts into the ovaries as a result of the inversion of the portal blood-stream, a well-known symptom known as caput Medusæ in cirrhosis of the liver, in piles, and in varicose veins of the legs (Blond, 1932 b).

What is the correct interpretation of this peculiar distribution of malignancies in adults and children?

If cancer is due to diffusely scattered embryonic cells, why this peculiar cancer distribution? Disseminated cells can be carried to and deposited in different organs by the blood-stream, but why are they in 90 per cent of adults deposited in organs drained by the portal vein—in other words, in the organs of the intestinal tract—this is a riddle which the theory of Cohnheim cannot explain.

The peculiar distribution of malignancies in childhood, so entirely different from the distribution of neoplasms in adults, could only be explained, if embryonic cells were deposited in the brain, the muscles, kidneys, hæmopoietic organs, lymphatic glands, etc., during fœtal life via the aorta. This represents another riddle. Are we dealing with embryonic cells derived from the embryo, or with cells coming from the placenta or any other maternal organ, carried into the aorta via umbilical vein, venous duct of Arantius, right heart, foramen ovale, arterial duct of Botallus? Or are we dealing with something quite different from cells? Before answering these questions, we have to consider some other puzzling peculiarities of cancer distribution. Cancer of the uterus and the breast is very rare in girls before the menarche. These organs are not yet functioning, and function involves a greater supply of blood. According to Peller 50 per cent of all female cancers originate in the reproductive organs. We have to solve another puzzle.

If we are dealing with diffusely scattered embryonic cells, why do uterine and mammary carcinomas not occur before the first menstruation? During the child-bearing age the incidence of uterine cancer increases. The death-rate of cancer of the female genital organs increases progressively with the number of pregnancies. After the menopause, *a phase of life which again is characterized by circulatory changes*, the incidence of uterine cancer decreases and cancer of other organs (e.g., biliary system) and cancer of the breast increase.

After the menopause obliteration of porto-caval shunts permanently cuts off the uterus from the portal circulation. Against the physiological inversion of the portal blood-flow during pregnancy, one could raise the following objections: Why is the uterus not drained via the portal system if this is important for its metabolic function during the child-bearing period? The answer is that this intermittent drainage of the uterus into the portal system is of importance only as long as the uterus has to perform nutritional functions, but not before puberty and not after the menopause.

The economy of the hepatopetal drainage of organs is of great significance. The intestinal tract and the organs participating in metabolism drain into the liver with two exceptions: the œsophagus and the lowest part of the rectum belong to the caval system because they merely represent passages for food or its waste products, and because they do not participate in the absorption and digestion of food.

Of nulliparous women with genital cancer, 44 per cent had cancer of the cervix, and 56 per cent cancers of other parts of the reproductive system. Of women with one pregnancy, 68 per cent had cervical cancer, and 32 per cent cancers affecting other parts of the reproductive organs. The incidence of cervical cancer increases progressively to the number of pregnancies, and in women with 8 to 20 pregnancies there are 84 per cent cervical cancers and 16 per cent cancers of the corpus. "In total cancer incidence nullæ gravidæ were neither better nor worse off than women with one pregnancy." This riddle can be explained by vascular changes during pregnancy. The cervix is the most rigid part of the uterus before the first pregnancy. One of the first and most reliable signs of pregnancy