

Prevention of Iatrogenic Cervical Cancer*

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Abstract

Cervical carcinogenesis consists of natural occurring spontaneous cellular processes which may lead to self-organized dissipative structures of cervical cancers what was first explained in 1977 after several years of my biochemical, biophysical, hormonal and clinical studies. That was possible thanks to monograph "Biochemie der Tumoren" written in 1942 by Nobel Prize winner H. von Euler with my master Prof. B. Skarzynski. Today I express my gratitude to Nobelist Harald zur Hausen and his team for they discovered the nuclide sequences of HPV in genomes of cervical cancer cells which opened the possibility to describe the causal role of information in formula of reality. Vaccines built from the protein capsid of HPV have proved only the pathogenic information about the virus because of its lack of DNAs. All the theories of carcinogenesis have properly described this event from methodologically different point of view. The point is that one should understand the thermodynamic rules underlying each of these approaches. Neoplasms are self-organized from the cells of the patient, who did not provide the necessary conditions for cellular metabolism as defined in the moment of appearance of its zygote. In light of medical thermodynamics all oncogenic factors can divide into sufficient or necessary to events for creating a dissipathogenic cellular status. Cervical cancer is a tumor associated with the human papillomavirus as only its pathogenic dissipathogenic factors, but the genome of cervical carcinoma cells maybe the original source of many types of HPV from the peeled off cancer cells of the uterine cervix. Many things are known to increase the risk of carcinogenesis which as a natural process is an alternative of cellular or social death. Neoplasm cell is an effect of carcinogenesis, but not a causal point at which it begins its existence.

Keywords

Cervical Cancer, Cancer Cell, HPV

1. Introduction

Cancer disease does not exist without neoplastic cells and therefore the answer to the question why there appears

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a cancer cell in a multi-cell organism simultaneously is the explanation of the mystery cause of cancer. Carcinogenesis as each natural phenomenon consists of simultaneity occurring cellular processes which may lead to self-organized cervical structures, their fluctuations, instabilities, and even evolutionary systems, among them including cervical uterine cancers. The etiology of cancer as to be self-organized dissipative structure was first explained in 1977 after several years of my biochemical, biophysical, neurohormonal and clinical studies [1]-[4]. That was possible thanks to inspiration of my scientific master Prof. B. Skarżyński, who with Nobel Prize winner Hans von Euler had published monograph “Biochemie der Tumoren” (1942) in Stuttgart during World War II [5]. Now I express my gratitude to also Nobel winner Harald zur Hausen and his team not only for discovering the nucleotide sequences of human papilloma viruses (HPVs) in genomes of cervical cancer cells, but first of all for the clinical possibility of approval the causal role of information in my formula $E \overset{i}{\rightleftharpoons} mc^2$ of reality governed by natural laws [6].

Modern medicine needs a new concept of etiology, because any illness has not only a cause or set of causes based on the physical human condition and environment, but also includes personal and collective evolutionary informational processes. Along with the theoretical and practical progress of evidence based on medicine we also need the same philosophy and ethics as the all-embracing essential property of a living subject to complete recovery of the individual persons with such chronic diseases as cancers, cardiovascular and lung diseases, diabetes, etc., being the leading causes of death and disability worldwide. These most serious diseases have been conquering not only by finding cures, but by prevention that is also the most important way to decrease the growing number of cancer diseases.

Cancer is simply a word that covers a number of different diseases which have one thermodynamic cause, that is informative dissipathogenic state of cellular metabolism at which carcinogenesis begins its course or existence [2] [7]-[12]. They first start as a new self-organized, unrepeatable and self-controlled dissipative cell. There can even be different types of cancer cells within the same tissue or organ, however, they divide exclusively in the body of their origin forming tumors within surrounding tissue and/or may also spread to more distant part of host organism through the lymphatic system or bloodstream. From the medical point of view many things are known to increase the risk of carcinogenesis which as a natural process is an alternative of cellular or even informational social death. The secret of cancer cell lies not in pathogenic mechanisms, which are common for growth and differentiation of all cells, but in its natural informative cause, which bears a causal relation to its object. It is a very strong denotative relationship between the word symbol that conveys a specific encoded interpretation, and a real concept whose meaning the interpreting attempts to decode. Information is not only an interpreted communication to the one decoding specific type of sign (an object, quality, event, or entity) whose presence or occurrence indicates the probable presence or occurrence of something real. So, the relation of information is twofold in regard to human audience and to the think about which the person intends to persuade the audience. Similarly a stable, massless and without electric charge photon exhibits wave-particle duality as an elementary particle (the quantum) of light and all other forms of electromagnetic radiation, and as the carrier for the electromagnetic force what allows long distance interactions. The quanta of light have an independent existence, and then the photon was accepted as a necessary consequence of physical laws at every point in space-time quantum field theory. Also qubit as the smallest unit of information can be moved from one elementary particle to another by means of quantum teleportation [6] [13] [14].

Normal cells can be transformed by a variety of agents, such as chemicals, RNA or DNA viruses, radiation, and by transfer of DNA from tumor cells. In some cases introduction of a single nucleotide gene is sufficient for transformation, and this gene may produce only a single protein which can be very similar, or even identical, to normal cell components, but in transformed cells they are present in larger amounts. Neoplastic cells may show poorly regulated growth either by synthesizing this protein more rapidly or degrading it less rapidly, under conditions the limit normal cells' growth. Therefore its accumulation is highly sensitive to factors that affect both processes. Cancer pattern is sharply demarcated from no-infected cells, because the transformed cells can grow under some conditions that block the growth of no transformed cells. Therefore, the dysplastic and cancer cells of the uterine cervix epithelium have a marked reduction of surface and mass with distinctly greater nuclei as compared with morphologically normal cells [15]-[17]. It was confirmed by quantification of cellullar thioproteins as a criterion for proliferative activity for all cells as well as clinical evaluation of cysteine proteases (oxytocinases, caspases) [18] [19]. The living cell is a form of intercellular transmission of life through separation into future cells or decomposition into elementary particles of universal life. Similarly, each human co-creates

different parts of human social life, beginning with the family and ending with tribes and nations, in which he himself acts as a social cell regardless of his position in the society or nation. Each of the mentioned forms is part of the three-form material-information-energy reality, in which information is not dissociable from mass and energy, determining their relationship as an information field. In accordance with the purely informational laws of nature every cause-and-effect occurrence (structure or process) already in its cause contains information according to the formula $E \xrightleftharpoons{i} mc^2$ as a planned effect, which must occur following the universe's original informational rules.

Information about the carcinogenesis and cancers has to be correctly understood by the informed layman as well as by scientists. It should be of special interest to physicians, health-care givers and laymen, who want to know about the latest knowledge concerning the true cause of all cancers and their prevention, diagnosis and modern therapy. It will surely inform and entertaining anyone who cares about ethics in medicine or the funding of medical research, including through referencing to the original scientific and popular literature. Human cancers are closely linked to certain behaviors, for example, smoking and/or alcoholism are the biggest preventable causes of death and disease and also a vital aspect of cancer prevention, but a natural delivery is more important [1] [20] [21].

2. Human Life

The most important value for a human being is life, which is transmitted by two gametes originating from each of parents and it begins at the moment of conception, but the fetal maturity to independent life can be reached only in mother's womb. The molecular biology has differentiated embryonic somatic cells and gametes from the others, what enabled their direct examination by nuclear magnetic resonance imaging and spectroscopy including also the possibility to distinguish cancer from pre-cancerous lesions or benign tumors [22]-[27]. Physiologically, the life of an individual cell ends with its division into two cells of the same genetic type or is a result of dematerialization of its matter into energy needed for formation of biological structures, e.g. blood or placenta. This phenomenon is already observed in embryo cells before their implantation in the uterus. Also the composition of blood is determined not only by the place of the creation of the serum and blood cells in the bone marrow, but also by the endothelium cells of capillary and lymphatic vessels, which control and informational regulate blood and its circulation in the whole body. Quickly maturing cells of the immune system adapt their metabolism to the destruction the antigens, which induce their appearance. The continuous production of enormous number of new bone marrow cells (4.10 daily) is most susceptible to a change of their genome, which is usually lethal, but sometimes may result in autonomous cloning in the form of leukemia.

During pregnancy the evaluation of enzymes and hormone levels in maternal blood serves to successfully prevent the early miscarriages and preterm deliveries by intramuscularly administration of adrenocorticotropic hormone [28]-[31]. Fifty years ago the treatment of mothers with neurohormonal insufficiency has eliminated the fetal mortality, which had reached before the treatment even 80%. In such women miscarriages, hemorrhages, infections and premature births are result of the damage of neurosecreting cells, what later manifests through a complete lack or a significant shortening of lactation, disturbance of menstruation up to its complete disappearance in 16% of cases, infertility, frequent recurring inflammation, as well as the loss of hair, obesity, neurosis, and especially precancerous cells of uterine cervix with simultaneous neoangiogenesis [32]-[35].

During birth and rapidly thereafter microbes from the mother and the surrounding environment colonize the infant's gut. The microbes that "seed" the intestine of newborns during either cesarean or vaginal deliveries may lead to changes in long term colonization and subsequent altering of immune development taking into account that the gastrointestinal tract of a normal fetus is sterile. The bacteria stimulate the lymphoid tissue with the gut mucosa to produce antibodies to pathogens, because during vaginal delivery the contact with the maternal vaginal and intestinal flora is an important source for the start of the infant's colonization. Humans coexist with a complement of prokaryotic symbionts that confer a variety of physiologic benefits, especially in the gastrointestinal tract where gut epithelia as a "super-organ" have a surface of 300 - 400 squared meters [36] [37]. The colonization of the gastrointestinal tract and vagina by the Lactobacillus bacteria strengthens the effectiveness of the neurohormonal and immunological system of a person. Symbiotic bacteria and cells of one's own immune system (lymphocytes, leukocytes, dendrites, macrophages, etc.) not only recognize the antigens of microbes against which they create immunological antibodies. Trials have demonstrated a rapid fall in the indicators of inflammatory states in vaginal smears and an improvement in the overall well-being of patients after adminis-

tering the vaccine produced on the basis of symbiotic bacteria [2] [38]-[41].

Infants born by cesarean section are lacking specific group of bacteria found in infants delivered vaginally, even if they were breastfed, what can have potentially lifelong effects on the child's health. They are at increased risk of asthma, obesity, diabetes and cancer as man ages. Now, according to report of the third National U.S. Survey of Women's Childbearing experiences that gave birth in 2011-12, current cesarean section rate was of over 30% despite evidence that a rate of 5% to 10% would be optimal. Based on outcomes from thousands non-medical indicated caesarean deliveries, such childbirths carry significant risk none only for the baby, but also are related to appearance of cervical cancer of mother. This cancer was diagnosed in 528,000 people with 266,000 deaths worldwide in 2012. Approximately 1.67 million women undergo this procedure every year in USA, but some caesarean deliveries are performed simply due to maternal request, what may incur several risks for the child: neonatal depression, fetal injury during delivery, increased likelihood of respiratory distress, and breastfeeding complications or autoimmune diseases. The recognition of cancer as "Caesar of all diseases" has gained new importance when the biography of cervical cancer, originally known as mothers' cancer and/or premature sexual intercourse cancer, was linked with the termination of pregnancy via cesarean section performed without obstetric indications [14] [42]-[47].

In 1974 Harald zur Hausen was unconvinced by the prevailing and popular belief that the herpes simplex virus cause cervical cancer, however between 1980-1982 his team has isolated first two human papilloma viruses (HPV DNAs) from genital warts and laryngeal papilloma as being causative factors also of cervical cancer [48]-[51]. H.U. Bernard *et al.* has used genetic genealogy to study the evolutionary history of HPV and concluded: "Homo sapiens was never without HPVs, and consequently never without warts and cervical cancers...The papillomaviruses could be the oldest, largest, and most diverse viral family on the planet" [52]. Beyond regulation by the HPV oncogene transcription there is evidence that the viral life cycle as well as HPV dependent tumor progression are rather determined by epigenetic mechanisms such as e.g. DNA methylation or even iatrogenic cesarean section [53]-[55]. Some HPV types are the primary necessary, but not sufficient carcinogenic factors of cervical, ano-genital and oral sites. HPV, as the oldest virus to afflict humankind, still causes warts today more often than any time in its history. Virus infects about 20 million and only 10,000 women are diagnosed with cervical cancer annually. HPV and chlamydia infections, number of sex partners, the pill, alcoholism or smoking double risk of cervical cancer, while weakened immune and neurohormonal systems increases the risk after five years. There is also evidence to say that threatened pregnancy is linked with risk of cervical cancer. Women who have had 3 or more children have double risk of squamous cell cervical cancer as well as pregnancy before the age of 17 or over 25 among genetics-ethnic group with poorest social existence and chemical hazards at work [8]-[11] [56]-[59].

3. Cellular and Social Life

The goal of the fusion of two generative cells into zygote as a unique single cell is the creation of a new being to uphold the species, but the development of the first neoplastic cell only extends the cellular form of life without the possibility of autonomous existence. Life itself is the highest value since the cellular system in an unfavorable environment can, and sometimes even must, change its genetic identity, provided that the improvement in its own metabolism leads to increased chaos by higher dissipation of matter and energy in its environment. This new form (neoplasm) gains new and also unique genetic identity, since such a cell may form a new clone only in a similarly unique organism, in which it had developed. The unique genome of the subsequent cells is recognized as such and attacked by biophysical, biochemical, and by immunological mechanisms. However, carcinogenesis cannot be eliminated, but illnesses which are caused by neoplastic cells can and should be treated, as they can be healed more often by directly fighting the pathogenic factors and indirectly strengthening the whole organism not only through neurohormonal therapy or immunopotentialisation with vaccines, but also using responsible information. Unfortunately, for diverse personal reasons, information is too often used to agitate for harmful ideas, which starts a new type of diseases (informatonoses) whose causes are baneful antihuman socially tragic advertisements, actions or activities (BASTAs) [6] [13]. Its other characteristic is direct participation of individual motivation in man's actions and behaviour, always directly depending on the state of the socio-economic environment, which is human social life. The main cause of this disease is disruption of the relationship between how man should live and act in accordance with the values he recognises and how he actually lives. This disease affects not only individual people but mostly relationships and social groups, from mar-

riages and families to states and totalitarian systems, because any informational cause is an aim or principle which a group of persons supports or is fighting for. For example most of the obstetricians tread equally all so-called “at term” fetuses, which on their view signifies 4 - 5 weeks and therefore they try terminate every pregnancy after statistically chosen 294 days, although almost all such fetuses may be still developing. Accordingly to the quickness of maturation some fetuses are already mature at 37. post menstrual weeks while the other ones have to mature until 43 weeks and the modern prediction enables prognosis on which of the six labor weeks the delivery has to occur according to individual term, determined by the fetal developmental age instead of calendar duration of pregnancy [43]-[45] [60]. Owing to ultrasonography gynecologist identify 4% - 5% of ill or damaged fetuses, but at the same time, due to lack of discrimination of fetuses according to the fast, regular or slow rate of growth, labors are induced or pregnancies terminated by cesarean sections just because they continue 287 or 294 days. For the fetuses which were to be delivered in 38 or 39 weeks as fast-maturing ones, it is 3 - 4 weeks too late whereas for those that are not yet fully mature until 43 weeks, it is too early [33]-[35] [42].

4. Conclusions

J.G. Schenker, president of International Academy of Human Reproduction, summarized our scientific contribution regarding the etiology of cancer and some new clinical approaches in clinical practice, saying e.g.: “Low level of maternal blood adrenocorticotrophic hormone (ACTH) and insufficient increase of induced by hypothalamic hormones oxytocinases were indication to ACTH-depot therapy (0.5 mg/week), which has to be more often recommended into clinical prevention of fetal morbidity, treatment of premature delivery, and elimination of the newborn’s mortality caused by the neuro-hormonal gestoses. Preterm birth is a major cause of neonatal mortality, responsible for 28% of neonatal death over all.

One of the most important contributions to perinatology was the development of a new score for postnatal clinical assessment of fetal maturity in newborn infants, which did not take into account weight and calendar fetal age, but referred directly to fetal maturity in the range of only 6 - 12 points. This publication encouraged the obstetricians performing birth-date prediction, which was possible with an accuracy of 3 - 4 days instead of weeks in order to prevent iatrogenic prematurity caused unnecessary induction of labor because of false post-date. The necessity needs for reformulation of the published ultra-sonography standards, so as to render them clinically useful in regard of the fetuses of various gestational maturation rates. In relation to cancer, Rudi Klimek introduced new concept regarding the etiology of cancer and its natural course with special attention to cancer of the reproductive track. At present, medical practice is based on evidence based medicine. Hopefully this interesting concept will be proven as it occurred with the Copernicans revolution—the heliocentric hypothesis”.

Clearly, we are still at the early stages of understanding the full complexity of functional elements encoded not only in the DNAs, but also in the so-called “dark matter” RNAs which transcribe the information from human genome to disease-associated protein of many complex diseases, of course including also cancers [1] [3] [61]-[66]. Now, the extraction of DNA from the cell’s nucleus has not only a diagnostic and prognostic meaning, but also shows the possibility of the virus’s origin, while the definition of the gene is broader than its chemical nucleoid sequence [67]-[70]. Therefore, the time is right to bring together the matter, energy and information of carcinogenesis into one reality $E \overset{i}{\rightleftharpoons} mc^2$ to psychoneurocybernetic conquest of cancers according to general, not only medical knowledge and based upon multi years own experiences in conservative, surgical, thermo- and radio-therapy of neoplasms. The physicians have evidence that ACTH-depot therapy, oxytocinase monitoring of pregnancy and ultrasonography prognosis of expected birth date with accuracy of ± 3 days instead weeks are at least three main medical interventions to reduce the rate of miscarriages, preterm births and in consequence of cervical cancers. It means that it should not only use progesterone therapy, cervical cerclage to prevent cigarette smoking, judicious use of fertility treatment or additional education to women related to hygiene and nutrition for treatments of cervical intraepithelial neoplasia is also necessary [52] [71]-[76].

Cancer cells are signals on the last human way to die and therefore man should try to treat the carcinogenesis instead to cure only the cancer diseases, because first cancer cell is foreboding of insufficiency of organism self-control to exist. In treating neoplasms doctors use scalpels, lasers, radioactive radiation and even poisons as effective tools, part of which is also language, made up of words, which are understandable by patients. The word itself is enough when treating an informatonosis, but it’s not only a necessary factor in medical prevention and prophylaxis. In oncology, apart from information, a special place is taken by heredity and the upbringing of a person, who, due to his free will, lives according to his own auto teleological scale of values and rules of social

life. In this view, self-organizing dissipative neoplastic structures appear as the basic regulator of not only the existence and development of a person, it also guarantees the continuous development of the Homo sapiens species through selective elimination of individuals least suited to the environment. As people get older their cells start to “slow down” or become less effective and unable to mount as quick and/or strong any response as a younger person.

Until the creation of the concept of generative entropy it was difficult to distinguish the necessary conditions from the sufficient cause of self-organization of neoplasms from the cells of the ill or only ageing patient. A special role in this is played by oncologists, ever more often burned out professionally due to the fast progress in medical technology, and gynecologists, responsible for the protection of human procreation. Psychoneurocybernetic conquest of carcinogenesis and cancers is the result of international uninterrupted cooperation since the neurohormonal symposium entitled “Oxytocin and its analogues” (Cracow PTE 1964). Many P.T. Scientists contributed to discovery of natural cause of cancer, mathematical interpretation of its cause as well as to obstetrical prevention of all human cancers and psycho-neuro-endocrine therapy of diseases [1] [6] [35] [45] [67] [76]. The dissipative nature of cancers has to be presented so that everyone could understand the neoplastic diseases and the primary significance of own life style in the formation and progress of cancer along with importance of caring about the environment inhabited by people.

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