



Understanding Cancer through Microbial Adherence, Toxin Liberation and Oncogenes: A Relation of Cytokines and Macrophage

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Abstract:

Causing cancer and its remedy in presence of microbes has been reported. Human healthy body contains 10 trillion good immunological active cells and 100 trillion gut microbes. They are managing the metabolic and defense mechanisms. Symbiotically and infectious microbes of a human body are managing the immunological tolerances. A tumor cell is differentiated by benign and malignancies (metastases). The disorders if caused by genetic mutations caused due to hereditary and environmental effects, may initiate cancer growth. Environmental factors are characterized by sudden effects of radiations and chemical reactions. A galaxy is conceptualized by gathering of millions of milk ways with trillions of planetary systems, symbolized the unending concepts of galaxy by Stephan Hawkins Black Hole and Einsteins Relativity and $E=mc^2$ relations. Similarly, the 100 trillion bacterial cells in a healthy body increased trillion-time possibilities to generate a cancer cell and its settlement on a surface of epithelial cells and are not destroyed by macrophage. In a healthy body possibilities may initiate a generation of a cancer cell, due to inactivity of good lymphocytes and the generation of pathogenic microbes, prone to adhere and proliferate on thin epithelial cell liberates exo- and endo- toxins to destroy immune resistance. A cancer cell is adherence

prone toxin liberating multidirectional cellular proliferation. Chemo- and radiotherapy are approached for treatments and need target-oriented drug delivery. Due to chemo, the tolerance factor and the immunological responses are also reduced, subsequently the existing of 10¹⁴ bacterial cells camouflaging them as good microbes may change rapidly by genetic transformation to pathogen, opportunistic infections, initiate cancer patients towards fatal death by multiorgan failures. We are all generating cancer cells, continuously and are being destroyed by our immune system. In case of immune deficiencies this process could be stopped and could generate metastases. Louise Pasteur, unpredictable power of microbes is well established in case of AIDS, for T-cell damage and aberration of chromosome 17 in case of Leukemia symbolize the shifting of immunological tolerance towards immune deficiencies and suppressions. During antibiotic and chemotherapy, antibiotic resistant as caused by transposable elements may lead to resistant bacterial proliferation and the damage of salt Na⁺, K⁺ balance. Lung, colon and pancreas, are those sustainable organs. So bidirectional chemotherapy of BNT, genetically engineered hybrid Escherichia coli could be appropriate to activate cytokine and macrophages and are characterized by the binding power of $[Ab]+[Ag] \rightarrow [AbAg]$ immune complex. Cancer causing bacterial involvements varied by groups A, B and C and their probabilistic influence on organ specific cancer.

Biography:

Nitosh Kumar Brahma a life Fellow of The Institution of Engineers, India. He is actively engaged as Convener of WBSC/IEI, Chemical Engineering Division and as Visiting Professor of Institute of Genetic Engineering (IGE) Badu, Madhamgram. He completed his double Graduation with Distinction; BSc ÇU, B Tech, M Tech, TUB and Doctoral work in Max-Planck Germany 1968-1986. He published more than 100 articles related to Genetic Engineering, Chemical and Bio-Chemical Process Technology. He is the author of three books entitled Introduction to Chemical Science and Engineering, Molecular and Engineering Concepts of Micro-Biology and Bacterial adherence.