

Chief Guest



Cancer - Inflammation and Life Style Disorder

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Cancer is a dreadful but a preventable disorder. Cancers figure among the leading causes of morbidity and mortality worldwide, with approximately 14 million new cases and 8.2 million cancer related deaths in 2012. The number of new cases is expected to rise by about 70% over the next 2 decades (1). In common terms, it simply means uncontrolled division of cells, which are initiated by series of mutations in genes. Mutations are caused by failure of some inherent internal processes (intrinsic factors) (2) and also by external factors (extrinsic). External factors include environmental pollution, life style and food habits. Extrinsic factors lead to a condition often refer to as chronic inflammation. From initiation to progression to an advanced stage of cancer, it often takes 10-20 years inflammatory conditions to persist. It has been empirically estimated, and which has been recently mathematically modelled that the extrinsic factors contribute close to 90% for the incidence of most of the cancers (3). Extensive epidemiological data analysis on incidence of cancer worldwide has revealed that life style and dietary habits play a significant role in lower incidence of many cancer in some region of world including India (4). Globalization has resulted in to homogenization of culture (Life style and food habits) and led to change in the incidence of cancer.

1. <http://www.iarc.fr/en/publications/books/wcr/wcr-order.php>
2. Tomasetti C. and Vogelstein B. (2015) Variation in cancer risk among tissues can be explained by the number of stem cell divisions. *Science*, 347 (6217) pp. 78-81.
3. Wu S, Powers S, Zhu W, Hannun YA (2016) Substantial contribution of extrinsic risk factors to cancer development. *Nature*. 529(7584):43-47.
4. http://globocan.iarc.fr/Pages/fact_sheets_cancer.aspx