

عنوان مقاله:

Inflammation, a Key Factor in Cancer Ambush

محل انتشار:

مجله تحقیق در پزشکی مولکولی، دوره 2، شماره 2 (سال: 1393)

تعداد صفحات اصل مقاله: 15

نویسندگان:

Omolbanin Amjadi - *Molecular and Cell Biology Research Center, Department of Immunology, Faculty of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*

Alireza Rafiei - *Molecular and Cell Biology Research Center, Department of Immunology, Faculty of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*

Abolghasem Ajami - *Molecular and Cell Biology Research Center, Department of Immunology, Faculty of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*

Vahid Hosseini - *Inflammatory Diseases of Upper GI Tract Research Center, Department of Internal Medicine, Faculty of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*

Hossein Asgarian-Omran - *Molecular and Cell Biology Research Center, Department of Immunology, Faculty of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*

خلاصه مقاله:

Inflammatory condition is the consequence of defensive mechanism of immune system against viral and bacterial infection, tissue injury, UV radiation, stress and etc. Persistently acute inflammation leads to chronic phase which is characterized by production of pro-inflammatory mediators from T cells. These molecules (e.g. IL-6, TNF- α , IL-1 β and IL-17) are mostly pleiotropic cytokines involved in multiple signaling cascades. NF- κ B, STAT3, and HIF-1 α are the major engaged pathways directing to several downstream targets associating with tumorigenesis and inflammation. Carcinogenesis processes such as DNA mutation/damage, proliferation, angiogenesis, apoptosis, and invasion are implicated to inflammation. Clearly there is a closely association between cancer and inflammation reported as "Seven Hallmark of Cancer". The elucidation of relationship between inflammation and cancer and their interaction may result in effective therapy and prevention. Gastric cancer is one of the main cancer involved in complex correlation of inflammation and cancer. Inflammation in gastric epithelium could trigger cellular transformation and promote invasion by inducing immune responses and utilizing signaling cascades. Gastric tumor microenvironment has inverse association by providing cytokines and inflammatory mediators. This closely relationship facilitates gastric tumor development and the induction of chronic inflammation in tumor microenvironment. The current review will focus on describing the possible and critical ways in which inflammation and cancer are linked together with specific view to gastric cancer and inflammation. Finally, it introduces some putative .treatment generally used in this way in order to direct more attention for further exploration

کلمات کلیدی:

Inflammation, Cancer, Gastritis, Gastric cancer, Cytokines, Chemokines, Signaling pathway

