Opinion

Benefits beyond the need of treating inflammation

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Among the divers' outcomes of the immune responses, inflammation has specific medical aspects in therapy, diagnosis and surveillance. Pharmacological classes include anti-inflammatory drugs[1–3] which are widely used as a treatment.

However, the most important and the less known aspect of the inflammation are the diagnosis of diseases, in addition to the surveillance of prognostic and the efficacy of treatments. Indeed, many diseases involve inflammation such as cancer[4,5] and Alzheimer's disease[6,7] as a part of their symptoms or their pathogenesis and therefore, this immune response represents the basis or the starting pint of the diagnosis of such disease. Additionally, measuring the severity and the type of inflammation may constitute an indicator of the evolution of the disease or the efficacy of the treatment.

On the other hand, and from a biological viewpoint, the inflammation represents a part of the immune system functions[8,9] that is required for the homeostasis[10,11] of the organism and as a part of the biological defenses against exogenous organism.

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Conflicts of interest

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References

1. Penga Y, Zhangb H, Ronghua L, et al. Antioxidant and anti-inflammatory activities of pyranoanthocyanins and other polyphenols from staghorn sumac (Rhus hirta L.) in Caco-2 cell models. *Journal of Functional Foods*. 2016;20:139−147.
2. Theodosis-Nobelos P, Kourti M, Tziona P, et al. Esters of some non-steroidal anti-inflammatory drugs with cinnamyl alcohol are potent lipoxygenase inhibitors with enhanced anti-inflammatory activity. *Bioorg Med Chem Lett.* 2015;25(22):5028−5031.
3. Kaur A, Umar A, Kansal SK. Sunlight-driven photocatalytic degradation of non-steroidal anti-inflammatory drug based on TiO_2 quantum dots. *J Colloid Interface Sci* . 2015;459:257−263.
4. Suman S, Sharma PK, Rai G, et al. Current perspectives of molecular pathways involved in chronic Inflammation-mediated breast cancer. *Biochem Biophys Res Commun.* 2015.
5. Sutcliffe S, Pontari MA. Inflammation and Infection in the Etiology of Prostate Cancer. In: JHMJ Godec (Ed.), In Prostate Cancer. (2nd edn), Academic Press, San Diego, USA. 2016. p.13−20.
6. Lonskaya I, Hebron ML, Selby ST, et al. Nilotinib and bosutinib modulate pre-plaque alterations of blood immune markers and neuro-inflammation in Alzheimer's disease models. *Neuroscience*. 2015;304:316−327.
7. Bennett LE, Julie N, Michael B, et al. Chapter 21-Chronic Inflammation and Innate Immunity in Alzheimer's Disease-Role of Diet. In: CRMR Preedy (Ed.), In Diet and Nutrition in Dementia and Cognitive Decline. Academic Press, San Diego, USA. 2016. p.223−233.
8. Kidd BA, Dudley JT. Systems Immunology. In: Tan SL (Ed.), In Translational Immunology. *Academic Press*, Boston, USA. 2016. p.3−44.
9. Bassaganya-Riera J, Hontecillas R. Introduction to Computational Immunology. Computational Immunology: J Bassaganya-Riera. *Academic Press*, USA. 2015. p.1−8.
10. Ordovas-Montanes J, Rakoff-Nahoum S, Huang S, et al. The Regulation of Immunological Processes by Peripheral Neurons in Homeostasis and Disease. *Trends in Immunology* . 2015;36(10):578−604.
11. Divangahi M, King IL, Pernet E. Pernet Alveolar macrophages and type I IFN in airway homeostasis and immunity. *Trends Immunol* . 2015;36(5):307−314.