**Platelet Inhibitory Effects of Phytochemicals: A flow Cytometry Study**

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**Abstract**

Platelets are essential for haemostasis and thrombosis. However, increased platelet activation due to various pre-disposing factors can lead to thrombotic disorders like coronary artery diseases and stroke. Various phytochemicals have been well studied for their biological effects such as antiviral, anticancer, immunomodulatory, anti-inflammatory, antimicrobial, anti-diabetic, anti-parasitic, and anti-HIV properties etc and possess beneficial effects for human health. Therefore, we undertook a study to evaluate various phytochemicals for their effect of platelet activations. We stimulated platelet activation with various platelet agonists like collagen, Adenosine 5′-diphosphate (ADP), thrombin, thromboxane A2 analogue U46619, calcium ionophore A23187 and Phorbol 12-myristate 13-acetate (PMA). The samples were analyzed by flow cytometer (BD FACS Canto ™ II) to determine the level of platelet activation. The effects Epigallocatechin gallate (EGCG) and betulinic acid on various agonist induced platelet activation will be discussed.