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## PHYTOCHEMICAL SCREENING AND ANTI-INFLAMMATORY ACTIVITY OF *Centellaasiatica*

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### Abstract

*Centellaasiatica* is a valuable medicinal herbaceous aromatic creeper which has been valued for centuries in ayurvedic medicine. Phytochemical analysis of *Centellaasiatica* (Apiaceae) plant extracts revealed the presence of various biochemical compounds such as alkaloids, flavonoids, glycosides, phenolic compounds, triterpenoids and saponin etc. Since phenolic compounds, triterpenoids and flavonoids have remarkable anti-inflammatory, anti-arthritic and antioxidant activities, so our present work aims at evaluating the in vitro anti-inflammatory activity by Human Red Blood Cell (HRBC) membrane stabilization. The inhibition of hypotonicity induced HRBC membrane lysis was taken as a measure of the anti-inflammatory activity. The maximum membrane stabilization of *Centellaasiatica* extracts was found to be 94.97% at a dose of 2000 µg/ml. The results show that the extracts of *Centellaasiatica* exhibited anti-inflammatory activities. *Centellaasiatica* is a profusely branched prostate herb consisting of active principles such as Vallarine, Asiaticoside, Sitosterol, Tannins, Oxy-asiaticoside. Asiaticoside is used in the treatment of leprosy. Sitosterol and tannin possess antiprotozoal and spasmolytic property. According to Siddha literature, its leaves are used in the treatment of syphilis, all types of fever, children's abdominal disorder, elephantiasis and hydrocele and these features are highlighted in this article.

**Keywords:** *Centellaasiatica*, Anti-inflammatory, HRBC membrane stabilization.

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## INCREASED EMERGENCE OF LUNG ADENOCARCINOMA AND POLLUTANT PARTICULATE MATTER: A REVIEW

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Lung cancer evolves as a result of a series of alteration events that are being studied. However, the molecular pathological process of carcinoma remains incompletely outlined. It is the most typical reason behind world cancer-related mortality, resulting in over 1,000,000 deaths annually. Smoking is that the major reason behind pulmonary carcinoma however, as smoking rates decrease, proportionately a lot of cases occur in never-smokers. Adenocarcinoma is an increasing concern whose etiological factors are as observed extended beyond the smoking confines. The effect of the air pollutants and their pathway for the development of lung cancer is evident on exposure to these particles especially in the non-smoking community. Various studies from European, Asian, Australian population aided by the air quality index and particulate matter data substantiate the above findings. A major contributor will be exposure to the pollutant particle of particulate size less than 2.5 micrometer and must be considered for future studies. In this review we focus to establish an etiological relation between air pollution and the increased incidence of lung cancer studied emphasizing the non-smoker population and consider the possible risk to the pregnancy and diabetes group.

**Keywords:** Adenocarcinoma, particulate size, pregnancy, diabetes.

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