EVALUATION OF BRUCINE, A PLANT ALKALOID FOR IN VITRO ANGIOGENESIS, APOPTOSIS AND ANTIOXIDANT POTENTIAL IN MCF 7 CANCER CELLS

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Breast cancer is one of the most important oncologic diseases worldwide, and in India is the second most frequent neoplasia in women population and thus one of the goals of cancer research has been and continues to be, the discovery of natural and synthetic products for cancer prevention and for treatment. For time immemorial, plants played a dominant role in treatment of human ailment. Research thrust in this area has brought fore molecules possessing antiangiogenic and anticancer properties but their clinical use has been hindered by dose-limiting side effects. Hence, there is a need of a molecule that can be more specific and less toxic for the treatment of cancer. Strychnos nux-vomica L. (SN), an Indian medicinal plant, possess anti-oxidant and anti-snake venom activity and has been used for the treatment of diabetes, anemia, gonorrhea and bronchitis. It has recently been demonstrated to hold potential for use in anticancer therapy. Despite the potential, there is still paucity of clinching evidence in the literature which clearly (i) demonstrates the existence of a pharmacological activity and (ii) explains the mechanism of their action.