INTRODUCTION

The use of medicinal plants as a foundation to cure the diseases can be traced reverse more than five millennia to on paper credentials of the early civilizations in China, India and Near East and is an art as old as mankind without a doubt. Even today medicinal plants are the almost exclusive source of drugs for the majority of the world’s population helps to relief from illness. Nature has been the good architect of compounds for thousands of years and a variety of plants with therapeutic properties is quite amazing. It is predictable that approximately 70,000 plant species from lichens to gigantic trees have been used at one time for medicinal purposes. The entire useful crude drugs have been thoroughly studied botanically and histologically thus botanically oriented sciences of Pharmacognosy became stagnant.

*Urena lobata* Linn, of Malvaceae family is an erect herbaceous or semi woody, tomentose under shrub[1]. The main constituents of *Urena lobata* Linn include flavonoids, flavonoid glycosides, β-sitosterol and stigmasterol, furocoumarin, imperatorin, mangiferin and quercetin[2]. It also contains kaempferol, luteolin, hypolatin and gossypetin[3]. The traditional uses of the plant was found to be diuretic, febrifuge and in the treatment of rheumatism, malaria, gonorrhoea, wounds and toothache[4]. It is also used as food for animals as well as humans[5]. The lobes not extending half way down or occasionally nearly obsolete generally acute or acuminate, serrate, stellately tomentose on both surface. But paler beneath with five to seven pairs of basal nerves which are prominent on the under the surface and with a large gland below at the base of the midrib and sometimes at the base of two lateral also. The different extracts of the leaves and roots of *Urena lobata* Linn are used to treat diverse ailments such as cough, malaria, venereal diseases and rheumatism. The leaves and flowers of *Urena lobata* Linn are eaten as famine food in Africa.

Modern herbal research is mainly focused on activity-guided isolation (AGI) of phytoconstituents from the crude drugs. Many of the plants used in herbal medicine contain chemical constituents whose effects can be demonstrated pharmacologically. The herbal medicines/traditional medicament have therefore, been derived from rich traditions of ancient
civilizations and scientific heritage\textsuperscript{[6, 7]}. A free radical is considered as fragments of a molecule. They are highly reactive in nature, thus are known as reactive oxygen species and are short lived. They are continuously produced during the body’s normal functions and also generated through environmental pollution, cigarette, smoke, automobile exhaust fumes, radiation, air pollutants and pesticides etc.

Naturally, there is a dynamic balance between the amount of free radicals generated in the body and antioxidants to quench or scavenge them and also to protect the body from their deleterious effect. Phenol compounds can trap the free radicals directly or scavenge them through a series of coupled reactions with antioxidant enzymes. Currently available synthetic antioxidants like butylated hydroxy anisole (BHA), butylated hydroxy toluene (BHT), tertiary butylated hydroquinon and gallic acid esters, have been suspected to cause or prompt negative health effects. Hence, strong restrictions have been placed on their application and there is a trend to substitute these synthetic antioxidants with naturally occurring antioxidants even though these synthetic antioxidants show low solubility and moderate antioxidant activity\textsuperscript{[8]}.

Wound is a physical trauma where the skin is torn, cut, burn or punctured. Wound often possesses problems in clinical practice. A lot of research has been done to develop the better healing agents. The rapidity of wound healing depends to a considerable extent on the contraction that begins a few days after injury and continues for several weeks\textsuperscript{[9, 10]}. World Health Organization (WHO) has been promoting traditional medicine as a source of less expensive, comprehensive medical care, especially in developing countries. Wound healing is a complex phenomenon, involving a number of well-orchestrated processes, including regeneration of parenchyma cells, migration and proliferation of both parenchymal and connective tissue cells, synthesis of extracellular matrix (ECM) proteins, remodeling of connective tissue (CT) and parenchymatous components and collagenisation and acquisition of wound strength\textsuperscript{[11]}.

In India, medicines based on herbal origin have been the basis of treatment and cure for various diseases\textsuperscript{[12]}. Moreover, Indian folk medicine comprises numerous prescriptions for therapeutic purposes such as healing of wounds, inflammation, skin infections; leprosy, diarrhoea, scabies, venereal disease, ulcers and snake bite\textsuperscript{[13]}. Many ayurvedic herbal plants have a very important role in the process of wound healing. Plants are more potent healers because
they promote the repair mechanisms in the natural way. The healing process can be physically monitored by assessing the rate of contraction of the wound.

Cancer is one of the most dreaded diseases of the 20th century and spreading further with continuance and increasing frequency in 21st century. The cancer cells of each type grow up and extend in different ways. The scientific researchers are making most excellent hard work to combat this disease, but the perfect cure is yet to be brought into world medicine. The herb *Urena lobata* Linn contains active constituents such as flavonoids, flavonoid glycoside, alkanes, β-sitosterol stigma sterol and triglycerides[14]. Various extracts of the leaves and roots are used in herbal medicine to treat varied ailments such as cough, malaria, venereal diseases, wounds, toothache, and rheumatism[2, 4, 5, 15]. Experimental tumors have great significance for the purposes of modeling and Ehrlich Ascites Carcinoma (EAC) is one of the commonest and spontaneous breast cancers. EAC used as ascites or a solid form due to these purposes, that is, if ascites fluid contains the tumor cell that injects through intra-peritoneal (i.p). Ascites fluid accumulation occurred in parallelism with the proliferation of tumor cells. After a given time, the host animal died due to the pressure exerted by the tumor volume and the damage that resulted from the tumor. The main objective of the present study was to evaluate the anticancer activity of the methanolic and aqueous extracts of *Urena lobata* Linn.