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Loranthus Europaeus is an alternate medicine in management of cyst and mouth inflammation resulted from chemotherapy of breast cancer- Ali Awad Hamoud Aljeboory - Uruk University Iraq

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Natural product still continue to be important as source of novel drugs because these dugs does not need sophisticated instrument, cheep resources, less toxic, no resistance to them by bacteria compared with the synthetic drugs. However the natural product will continue to be important in addition in three areas of discovery, they are a target for production by biotechnology, as source of new lead compounds of novel chemical structure and as the active ingredients of useful treatments divided from traditional systems of folkloric medicine. It stands as an infinite resource for drug development, novel chemotypes and pharmacophores, and scaffolds for amplification into efficacious drugs for a multitude of disease indications and other valuable bioactive agents. Even though popularity of the synthetic products increased due to its production cost, time effectiveness, easy quality control, stringent regulation and quick effects, but their safety and efficacy was always remained questionable, resulting in the dependence on the natural products by more than 80% of the total population in the developing world, because of its time tested safety and efficacy.

Natural products will continue to be extremely important as sources of medicinal agents. In addition to the natural products which have found direct medicinal application as drug entities, many others can serve as chemical models or templates for the design, synthesis, and semi synthesis of novel substances for treating humankind's diseases. Although there are some new approaches to drug discovery, such as combinatorial chemistry and computer-based molecular modeling design, and many drugs are made by synthetic chemistry, none of them can replaced the important role of natural products in drug discovery and development as most of the core structures or scaffolds for synthetic chemicals are based upon natural products.

The herb Loranthus Europaeus leaves and fruits was used in Iraq traditional medicine for treatment of inflammation, tumor and antimicrobial infection. For these reasons we tried to use the phytochemical and pharmacological studies to approache to their bioactive products as a new source for medicine. Loranthus is a genus of parasitic plants that grow on the branches of woody trees. It belongs to the family Lo-ranthaceae (the showy mistletoe family) and this genus has 1253 species. LE is a hemi-parasite mistletoe, it is a deciduous plant (flower are produced in May and June) with dull brown twinges, the fruit is yellow roundish berry, which remain sticky even after dried, the fruits ripen in late autumn and gradually fall off in late winter, the plant grows vigorously on aging trees mostly on branches of oak, and chestnut as host trees and once established, the mistletoe take minerals and water from the host tree, and block sunlight through its dense foliage, the most important vectors of yellow mistletoe are birds. LE is widely distributed in south-west Europe, south Russia, Anatolia, Iran and Iraq. In Iraq, LE distri-buted in the north of country especially in Ammadia, Roundoze and Sulymania.

LE had a known importance in Iraqi folk medicine for long time ago, for treating boils and abscesses, where a dry fruit used in form of poultice after mastication and moisture in the mouth, it is claimed that the poultice cause maturation and acceleration in the drain of pus from the boils, however the mechanism of action was un-known, until 2006, a study from Iraq done to evaluate the anti-inflammatory effect of the plant in animals, which explained the effect of LE oil extract in pyogenic inflammation and concluded that the oil extract may act as immunomodulator during bacterial infection and may contain substance act as a chemotactic agent for neutro-phile and promote macrophage activity.

Many of these compound have a biological activities such as antihypertensive and anti-diabetic effect of L. bengwensis, and antiviral activity of L. parasiticus. Loranthus europaeus is one species of Lorantheceae, and many studies showed that LE contain many bio-logical compounds including: Flavonoids (kaempherol, quercetin and rutin), alkaloids, glycosides, carbohydrate, aldehyde, ketones, protein, polysaccharide, terpenes (monoterpens and triterpenes), phenolic acid (caffeic and gallic acid), lipid include Palmitic acid, paraffin C30H62 and wax alcohol and sugar

Methods:

The extraction of active constituent of loranthus Europaeus (flavonoids terpenoids and alkaloids) by using chromatography method using a thimble of suxlet with different organic solvents. The ethylacetate extract contain flavonoid which contain qurcitin and quercitrin. The active ingredient mixture of LE leaves extract have used as mouth

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wash for 10 ladies different age have breast cancer and under treatment with chemotherapy.

Result:

We found that the bioactive martial extracted from LE used as mouth wash cause cure of the inflammation of the mouth of those ladies. In addition that 10 humans of different sexes complaining of cyst attached to one of their tooth treated with different types of antibiotic there was no response but when have given an antibiotic with bioactive agents of this LE there was complete cure of the cyst and there was no need for operation which give the possibility of presence of one or more of these (qurcitin and quercitrin) active agents act as positive nano carrier of the antibiotic to the cyst directly and cure it.

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