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GALLIC ACID AND MEDICINAL USES

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KEYWORDS:

Anticancer, Wound healing,
Antioxidant, Hepato protective,
Gallic acid, Medicinal uses.

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ABSTRACT

Gallic acid 3,4,5-trihydroxybenzoic acid is a naturally occurring polyphenolic compound found in processed beverages such as red wines and green teas. It occurs in plants in the form of free acids, esters, catechin derivatives and hydrolysable tannins. The interest in these compounds is due to its pharmacological activity as radical scavengers. It has been proved to have potential preventive and therapeutic effects in many diseases, where oxidative stress had been implicated, including cardiovascular diseases, cancer, neurodegenerative disorders and in aging.

INTRODUCTION:

Gallic acid is an organic acid found in a variety of foods and herbs that are well known as a powerful antioxidant. Gallic acid is found both free and as part of tannins. Salts and esters of gallic acid are termed gallates. It is an endogenous product found in plants. Gallic acid is one of the active compounds that have potent anti-angiogenic and alpha-glucosidase inhibitory activities.

Pharmacological investigations have shown that this gallic acid has several biological activities such as antimicrobial, antifungal, antiviral, anti-inflammatory, antioxidant, anticarcinogenic and antimutagenic activities. Gallic acid is used in printing inks. Gallic acid is compound interest to both pharmaceutical and chemical industries because of its several interesting properties and commercial applications. Gallic acid is also found in gallnuts, sumar, witch hazel, watercress, oak bark, tea leaves, areca nut, bearberry, black berry.

MEDICINAL USES OF GALLIC ACID:

1. Neruoprotective activity
2. Antioxidant activity
3. Anti inglammatory activity
4. Wound healing activity
5. Hepato protective activity
6. Anticancer activity
7. Anti depressant activity
8. Anti malarial activity
9. Anti viral activity
10. Anti fungal activity
11. Anxiolytic activity
12. Cardio protective activity
13. Antihelmintic activity
14. Anti Parkinson activity
15. Anti allergic activity

CONCLUSION:

Gallic acid is a very important common antioxidant it is found naturally in various plants and used in several polyherbal formulations. Thus, it is imperative to promote more credible research on eploring medicinal properties of gallic acid and its congenets. Gallic acid is well known for its role in drug development. Free radicals occur as a natural consequence of cell metabolism. Gallic acid is wide spread in plant foods and beverages such as tea and wine was proven to be one of the

anticarcinogenic polyphenols present in green tea. It has shown phytotoxicity and antifungal activity. Gallic acid is of great interest in arteriosclerosis prevention.

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