Garlic: A brief overview of its interaction with chemical drugs

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Introduction

In the experimental medicinal sciences, medical plants play an important role in the treatment of diseases and disorders. They are a valuable source of medicine because of their active pharmaceutical ingredients [1,2]. One of the most widely used medicinal plants in traditional medicine is garlic. Allium sativum L. belongs to the Amaryllidaceae family that has pronounced nutritional and medicinal properties [3]. Garlic is a widely used herbal medicine in traditional medicine. The garlic plant structure includes stem, onion with the white and slender leaves, and white and red flowers. The plant grows up to 70 cm in height. This plant has antimicrobial, antifungal, anticancer, lipid-lowering, anti-inflammatory, anti-atherosclerosis, antioxidant, immune system stimulant, decreasing stomach acid, meningitis, anti-parasitic, and stomach tonic effect [4-15]. Therapeutic compounds of garlic include allele, allicin, mercaptans, polysulfides, adenosine, thioglycosides, aguins, and thiosulfonates [16]. Despite the valuable medicinal effects that have been reported for the garlic plant, but drug interactions with chemical drugs have been reported. Garlic interacts with antihypertensive drugs, Saquinavir, hypoglycemics, general anesthetics, and anticoagulants, so associated use of garlic with mentioned chemical drugs should be used with caution to prevent drug interactions and side effects.

Abstract

Allium sativum L. belongs to the Amaryllidaceae family that has pronounced nutritional and medicinal properties. A. Sativum L. is a plant with different nutritional and medicinal principles. Therapeutic compounds of garlic include allele, allicin, mercaptans, polysulfides, adenosine, thioglycosides, aguins, and thiosulfonates. Despite the valuable medicinal effects that have been reported for the garlic plant, but drug interactions with chemical drugs have been reported. Garlic interacts with antihypertensive drugs, Saquinavir, hypoglycemics, general anesthetics, and anticoagulants, so associated use of garlic with mentioned chemical drugs should be used with caution to prevent drug interactions and side effects.
According to various studies that have proven the drug interaction of this valuable plant with chemical drugs, so the simultaneous use of garlic with chemical drugs should be used with attentiveness to prevent different side effects.

**Conclusion**

The results of this short review study showed that the drug G. glabra L. can interact with various chemical drugs, so the concomitant use of G. glabra L. with other drugs requires caution.

**Authors’ contribution**

All authors contributed equally to the manuscript.

**Conflicts of interest**

The authors declared no competing interests.

**Ethical considerations**

Ethical issues (including plagiarism, data fabrication, double publication and etc.) have been completely observed by author.

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**References**