The Therapeutic Rise of Turmeric: From Spice to Medicine

Authors : Merzak Siham, Benguerine Zohra, Si Tayeb Fatima, Bouzian Chaimaa Affaf, Jou Siham, Belkessam Nafissa **Abstract :** Introduction: Medicinal plants, particularly spices, are essential for pharmacological research due to their health benefits. This study focuses on Curcuma longa, a spice recognized for its therapeutic properties. Materials and Methods: This study is based on a thorough search conducted on Google Scholar, PubMed, and ScienceDirect. From an initial selection of 25 articles, five were chosen to extract relevant information on Curcuma longa. Results and Discussions: Clinical studies have indicated that curcumin is well tolerated at doses up to 12 g/day. Its anti-rheumatic efficacy was compared to phenylbutazone in 18 individuals. Each participant received a daily dose of either 1200 mg of curcumin or 300 mg of phenylbutazone for 2 weeks. Curcumin was well tolerated at this dose and demonstrated activity comparable to phenylbutazone. Additionally, a study on 62 patients showed that curcumin sustainably relieved symptoms without toxicity. Its effects included reduced itching, lesions, and pain. In ten volunteers, administering 500 mg of curcumin for seven days resulted in a 33% decrease in lipid peroxidation, a 29% increase in HDL cholesterol, and a 12% decrease in total cholesterol. It is important to note that curcumin is a potent, selective inhibitor of phosphorylase kinase, an increased marker in psoriasis. Conclusion: Curcumin is promising as a future drug for various diseases, but its bioavailability must be improved through techniques such as nano encapsulation.

Additionally, exploring chemical derivatives of curcumin could lead to more potent and targeted molecules.

 $\textbf{Keywords:} \ \text{turmeric, spice, medicinal plants, pharmacological activities.}$

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