Study of Terminalia avicennioides (COMBRETACEAE) Guill and Perr an alternative source of anthelmintic; its phytochemical constituents and pharmacologic activities: Mini review

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Background

The review was carried out as a consequence of the importance of medicinal plants in the world and in particular Africa. Informations were obtained using searches which include Medline, PubMed, ScienceDirec, Googlesearch and searching through journal papers. Terms which include Combretaceae, Terminalia, T. avicennioides, antimicrobial, antiparasitic, anti-inflammatory, anti-oxidant, cytotoxicity etc were used to conduct the search. The search revealed the efficacious activity of the plant against infections of both animals and humans

Introduction

Plants have long been used as therapeutic agents and were the main source of medicine prior to advances in modern medicine. Combretaceae is a large family of trees, shrubs, vines and mangroves occurring mainly in tropical and subtropical regions worldwide with the highest diversity in Asia and Africa¹. Two of the largest and most useful genera are Combretum, and Terminalia². T. avicennioides, a common plant of medicinal importance in West Africa is reported to be effective against diseases including microbial and parasitic infections; anti-inflammatory and antioxidant, including wound healing. The species is reported to be relatively safe for humans and animals.

Methodology: Available informations on Terminalia avicennioides were compiled from electronic databases which include Medline, GoogleScholar,, PubMed, ScienceDirect, SCOPUS, Chemical Abstract Search and Springer Link.

Results: Crude extracts, fractions and isolated components of different parts of T. avicennioides have been reported to show efficacy against different bacteria (S. aureus, S. typhi, B. species) species, fungi (A. niger, A. fumigates, T. rubrum)³ and parasites (Strongyline nematodes)⁴.Antioxidant and anti-inflammatory activities of the plant have been reported. Phytochemical studies have resulted to the isolation of different classes of compounds including; tannins, flavonoids, phenolic acids, triterpenes, triterpenoidal glycosides, lignan and lignan derivatives these could be responsible for the activities observed.

Conclusion: Terminalia avicennioides has biologic activities that make its use in the treatment of diseases worthwhile. Reports of phytochemical studies have revealed different constituents of the plant. Further studies need to be carried out to explore the bioactive compounds responsible for the pharmacological effects and their mechanisms of action.