



Controlled Release Society Indian Chapter

One Day National Seminar on

Translational Research: From Bench to Bedside

Sunday, 17th November, 2019

SOUVENIR & ABSTRACT BOOK

Organized by -

All Pharmacy Colleges

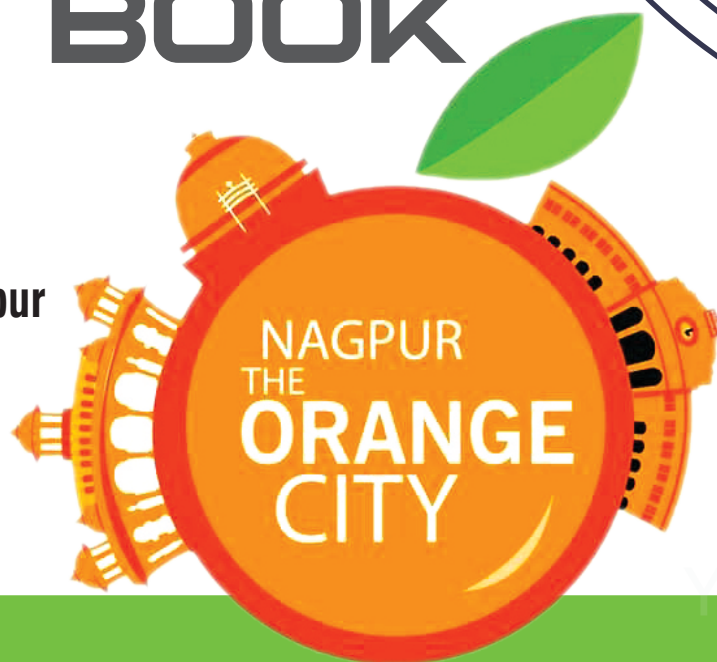
Affiliated to R.T.M. Nagpur University, Nagpur

Venue :

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SOUVENIR

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ASSESSMENT OF SYNTHETIC STEROIDS IN AN AYURVEDIC ANTI-RHEUMATOID FORMULATION

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Abstract:

Aim: To determine authenticity of an Ayurvedic anti-rheumatoid formulation from Nagpur District (AAFN) for treatment of Rheumatism. **Objective:** Present work was to ascertain whether antirheumatic effect of AAFN by its intrinsic phytochemicals or synthetic steroid adulterant. **Methodology:** A patient survey was conducted on 50 patients suffering from rheumatism to authenticate effectiveness of AAFN. It was based on questionnaires on quality of the symptoms and pain suffered by rheumatoid arthritis patients. AAFN was successively extracted from non-polar to polar solvents. TLC, phytochemical screening, spectroscopic standardization of AAFN extracts was done to determine secondary metabolites. Synthetic steroids in AAFN extracts was determined by comparing TLC, RP-HPLC and UV spectroscopy of standard sample of methyl prednisolone, dexamethasone, prednisolone with the constituents in AAFN. **Results and Discussion:** A survey revealed that AAFN is extremely effective to treat symptoms associated with rheumatism. AAFN extracts showed the presence of phytosterols, triterpenoids, flavonoids, and tannins. Petroleum ether and ethyl acetate extracts showed high concentration of total sterols content by Lieberman-Burchard reagent method. Methanolic and hydroalcoholic extracts showed high phenolic content in AAFN by Folin-Ciocalteu reagent. Retention factor (R_f) and retention time (R_t) of standard steroid sample were not matched with constituents in AAFN extracts as well as UV absorption maxima of the standard steroids were not coincided with that of AAFN extracts constituents. The above results prompted that AAFN has not adulterated by steroid steroids. **Conclusion:** The anti-rheumatoid effect of AAFN has been attributed due to its inherent enriched phytochemical.

Keywords

Synthetic steroid, Rheumatism, Ayurveda, Adulteration

