



APPLICATION OF ANALYTICAL TECHNIQUES IN QUALITY CONTROL OF HERBAL DRUGS

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ABSTRACT

Plant derived products are increasingly being use as medicinal products, nutraceuticals and cosmetics. Herbal drugs widely used in health-care are complex chemical mixtures prepared from plants and quality control of herbal drugs is also complex. Different chromatographic and electrophoretic techniques commonly used for the quality evaluation of herbal medicines are extensively studied. Chemical fingerprints obtained by chromatographic technique and especially by hyphenated chromatography, are strongly recommended for the purpose of quality control of herbal medicines, since they might be used for authentication and identification of the herbal products. Concept of phyto equivalence and the chromatographic fingerprints could be use for addressing the problem of quality control of herbal medicines. Several novel approaches like micellar electrokinetic capillary chromatography (MECC), high-speed countercurrent chromatography (HSCCC), low-pressure size exclusion chromatography (SEC), reversed-phase ionpairing HPLC (RPIPC-HPLC), and strong anion-exchange HPLC (SAX-HPLC) will provide new opportunities for quality control of herbal drugs.

KEY WORDS: Herbal Drugs, Hyphenated chromatography, Chemical fingerprints.

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