

Development of Analytical Method for Quality Control of Polyherbal Formulation

Sumedh P. Tayade¹ and K.B Gabhane²

Student¹ and Professor²

Vidya Bharti College of Pharmacy. Amravati, Maharashtra, India

Abstract: *The objective of these research work was to develop a simple, rapid and reliable HPTLC method for standardization for antidiabetic formulation. Development of method carried out by using Gymnemic acid and Berberine as bioactive marker reported to have an antidiabetic activity. Chromatographic analysis was performed using silica gel 60 F254 TLC plate, CAMAG Linomat 5 applicator and solvent system consisting of toluene: ethyle acetate: methanol: formic acid (6:2:1.5:0.5) and Ccl4: methanol: acetic acid (4:1:0.5). Densitometry scanning performed under reflectance absorbance mode at 360 nm to identify the spot. The Rf value of gymnemic acid and Berberine was found to be 0.03 and 0.11 respectively. No analytical method has been reported so far associated with polyherbal formulation associated with polyherbal formulation (Mahantak vati) containing Gymnemic acid and Berberine on antidiabetic activity.*

Keywords: Polyherbal formulation, marker compounds, HPTLC method development.

REFERENCES

- [1]. [http://www.pharmacy180.com/indian system of medicine](http://www.pharmacy180.com/indian%20system%20of%20medicine).
- [2]. A brief introduction and guide, Available from: http://www.ayurveda.com/pdf/intro_ayurveda.pdf.2003 [Last accessed on 2013 Jun 22]
- [3]. Arun N, Dr. Vinay Kadibagil. Various dosage form of Ayurveda. Unique journal of Ayurveda and herbal medicine 2014.
- [4]. YT. Kamal, development of modern analytical method for quality control of some polyherbal formulation, shodhganga reservoir of Indian theses 2013
- [5]. Kamboj VP. Herbal medicine. Curr Sci 2000; 78:35-51.
- [6]. KR Gopala Sinha, V. Lakshminarayana, standardization of ayurvedic polyherbal formulation, Nyagodhadi chuna 2006;6(4) :648-652.
- [7]. Wagner, H. Bladt, S, Rickl, V. plant drug analysis: A thin layer chromatography atlas, seconds ed, springer verlage. 1996
- [8]. Verma, J.K., Joshi, A.V., Rapid HPTCL method for identification and quantification of curcumin, piperin and thymol in an Ayurvedic formulation.2007; J. Planar. Chromatogar. 19; 398-400
- [9]. Liang, Y., Xie, P., Chan, K., Quality control of herbal medicines.2004; J. Chrome . B. 812; 53-70
- [10]. Shivani Chauhan and Vikrant Pundhir, Pharmacopoiel standerdisation of Mahasudarshan churna : a polyherbal formulation 2013 ,vol 1 ,13-18.
- [11]. P. Mahapatra, Annie Shirvekar, H.N Ashwatha Ram, Standerdisation of polyherbal formulation 2008 vol1,13.
- [12]. Chang, L.S., Run-Huai, Z., Moses, S.S., Chow, Zhong, Z., Simultaneous determination of ten active components in traditional Chinese medicinal products containing both Gegen (Pueraria lobata) and Danshen (Salvia miltiorrhiza) by High-performance Liquid Chromatography.2008; Phytochem. Anal. 19 :368-375.