Abstract

Objective: The purpose of this paper is to comprehensively evaluate the quality of Chishao. Methods: In the experiment of this paper, the fingerprint spectrums of Chishao in all locations are established by RP-HPLC and the model of principle component analysis with the RP-HPLC peak areas is established. Results: The quality of Chishao in the northern part of China or that made of Paeonia lactiflora is better than that of these in others or that made of other species. The quality of Chishao comes from P. veitchii is in the middle class and is better than those that comes from P. obovata, P. mairei and P. anomala. The results are consistent with traditional views of the quality of this plant. These results indicates that principal component analysis (PCA) can be used as an effective and economic method to evaluate the quality of Chishao, and may be extended to other Chinese medicinal plants. Conclusions: Due to the complex basis of the efficacy of Traditional Chinese Medicine (TCM), the method such as PCA of several chemical components appears to be a more appropriate method for the quality evaluation of TCM in contrast to the determination of a single or few chemicals.

Keywords

Key words, Chishao, Paeonia lactiflora, HPLC, Principle component analysis.