

漢方製剤中のバイカリン, オウゴノシド, バイカレイン,
オウゴニン, ベルベリン, コプチシン, パルマチン,
ヤテオリチン, グリチルリチンのイオンペア—
HPLC法による同時定量分析

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**Simultaneous Determination of Baicalin, Wogonoside, Baicalein,
Wogonin, Berberine, Coptisine, Palmatine, Jateorrhizine and
Glycyrrhizin in Kampo Medicines by Ion-Pair High-Performance
Liquid Chromatography**

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ABSTRACT An ion-pair high-performance liquid chromatographic method for the simultaneous determination of four flavonoids, namely baicalin, wogonoside, baicalein and wogonin, and four berberine-type alkaloids, namely berberine, coptisine, palmatine and jateorrhizine, and glycyrrhizin in Kampo medicines is described. The analysis can be accomplished within 30 min with a Wakosil-II 5C18 HG column by linear gradient elution using a mobile phase containing aqueous phosphoric acid, sodium dodecyl sulfate and acetonitrile at a flow-rate of 1.0 ml min⁻¹, a thermostatic oven at 45°C, and detection at 210 nm. The method was applied to quantifying these components in three Kampo decoctions: Oren-gedoku-to, San' o-shashin-to and Hange-shashin-to. The decoctions were diluted with 65% methanol at the final stage because a large quantity of precipitate, mainly from baicalin and berberine, was formed. The within-day relative standard derivations were less than 2.02% (n=10). The recoveries of these compounds were 90.3–102%. The detection limits of compounds were 0.02–1.96 μ M per injection (5 μ l).

抄録 バイカリン, オウゴノシド, バイカレイン, オウゴニン, ベルベリン, コプチシン, パルマチン, ヤテオリチン, グリチルリチンのイオンペア-HPLC法による同時定量法を確立し, 代表的な3種の苓連剤の煎液中の含量を分析した. その結果, これらの煎液中に水に不要なバイカリンとベルベリンの等モルの複合体を形成することを確認した.

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