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Identification of Urinary and Feces Metabolites of Rhizoma Paridis Saponins in rats based on Ultra High Performance Liquid Chromatography/Time-Of-Flight Mass Spectrometry (UPLC/Q-TOF/MS)

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SUMMARY. An ultra-performance liquid chromatography/time-of-flight mass spectrometry (UPLC/QTOF/MS) method was established to analyze the saponins in Rhizoma Paridis saponins (RPS) and the constituents in urinary and feces samples. As we know, the constituents of traditional Chinese medicines are very complex and pre-clinical research including metabolism, excretion and pharmacokinetics of herbal medicine components are of great importance in understanding their biological effects and safety. Therefore, deduction of the metabolic and excretive processes of RPS are necessary. As a result, twenty-two original saponins were detected in RPS-treated urinary and feces. Four excreta were observed in rat feces. Therefore, most original saponins and little deglycosylated saponins have been excreted in the rat urine and feces.

KEY WORDS: Metabolites, Rat urine and feces, Rhizoma Paridis saponins, UPLC/Q-TOF/MS.

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