Display Settings: Abstract

Phytomedicine. 2004 Feb;11(2-3):255-60.

Pharmacokinetic study of 11-Keto beta-Boswellic acid.

Sharma S, Thawani V, Hingorani L, Shrivastava M, Bhate VR, Khiyani R.

Author information

Abstract

INTRODUCTION: Boswellia serrata has been used in traditional medicine for treatment of inflammatory diseases since antiquity. However human kinetic studies are lacking for this. Hence to better elucidate its effects in humans and determine its optimal dosing, this study was planned.

MATERIAL AND METHODS: Twelve healthy adult men volunteers were given capsule Wok Vel containing 333 mg of Boswellia Serrata Extract, orally, after a seven days washout period. Venous blood samples were drawn through indwelling canula from each volunteer prior to drug administration and at 30, 60, 120, 150, 180, 210, 240, 300, 360, 480, 600, 720, 840 minutes after drug administration. Plasma obtained after centrifuge was analyzed to measure concentration of 11-Keto beta-Boswellic Acid (KBA) by HPLC. Various kinetic parameters were then calculated from the plasma concentrations.

RESULTS: The results are expressed as mean +/- Standard Error of Mean. The peak plasma levels (2.72 x 10(-3) +/- 0.18 micromoles/ml) of BSE were reached at 4.5 +/- 0.55 h. The concentration declined with a mean elimination half life of 5.97 +/- 0.95 h. The apparent volume of distribution averaged 142.87 +/- 22.78 L and the plasma clearance was 296.10 +/- 24.09 ml/min. The AUC(0-infinity) was 27.33 x 10(-3) +/- 1.99 micromoles/ml h.

CONCLUSION: Elimination half life of nearly six hours suggests that the drug needs to be given orally at the interval of six hours. The plasma concentration will attain the steady state after approximately 30 hours. BSE is a safe drug and well tolerated on oral administration. No adverse effects were seen with this drug when administered as single dose in 333 mg.

PMID: 15070181 [PubMed - indexed for MEDLINE]

MeSH Terms, Substances

LinkOut - more resources