Effects of ursodeoxycholic acid on conjugated bile acids and progesterone metabolites in serum and urine of patients with intrahepatic cholestasis of pregnancy

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Background/Aims and Methods: The mechanism(s) behind the effects of ursodeoxycholic acid on serum steroid sulphate profiles in patients with intrahepatic cholestasis of pregnancy is not clear. Conjugated progesterone metabolites and bile acids have therefore been analysed in serum and urine of patients with intrahepatic cholestasis of pregnancy before and during treatment with ursodeoxycholic acid using chromatographic and mass spectrometric methods. Results: The concentration of glycine-/taurine- conjugated bile acids decreased from 8.9±3 ?mol/l (mean± SEM) before treatment to 1.8±0.6 ?mol/l during treatment with ursodeoxycholic acid. The total bile acid excretion in urine decreased from 56±14 to 32±5.6 ?mol/g creatinine. The proportion of cholic acid in serum and urine, and of 1?-, 2?- and 6?-hydroxylated cholic acids in urine decreased markedly during ursodeoxycholic acid while the percentages of 3?,12?-dihydroxy-3-oxo-4- cholenoic acid and chenodeoxycholic acid were unchanged. The