Abstract

Effects of quinuronium sulphate pre-exposure on hepatic excretion of sulfobromophthalein (BSP) as measured by isolated perfused rat liver was investigated. Seventeen rats were used in the study. Rats were divided into controls (Group 1, n = 5), low quinuronium treated animals (Group 2, n = 6), and high quinuronium treated animals (Group 3, n = 6) receiving 0, 1.5 or 2.3 mg quinuronium sulphate/kg intraperitoneally, respectively. Each animal was dosed 30 min. before sacrifice. After 30 min. of equilibrium perfusion, BSP was introduced and the experiment continued for 2 hours. Perfusate and bile were collected at designated time intervals and the volume of bile was noted. BSP in perfusate and bile was assayed. Half-life in minutes (t1/2$pLS.E.) of BSP disappearance from perfusate in groups 1, 2 and 3 were 12.5$pL1.8, 13.7$pL1.0 and 16.8$pL3.3, respectively. Group 2 and 3 rats had a significant decrease of BSP excretion in bile ($P<0.01$) compared to group 1 rats. Bile volumes decreased in both quinuronium pre-exposed groups of rats compared to control rats. These observations indicate that quinuronium affects liver function.