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Drugs and Their Actions

HEROIN ADDICTION AND NEONATAL JAUNDICE The excretory pathway in bilirubin metabolism involves conjugation of bilirubin to the glucuronide by the action of hepatic glucuronyl transferase. Certain drugs, notably phenobarbital, enhance glucuronyl transferase activity and thereby lessen the severity of jaundice. Absence of significant jaundice among infants of heroin-addicted mothers suggests a possible modifying effect of heroin on bilirubin accumulation in the newborn infant. A group of addicted newborn infants, undergoing narcotic withdrawal, demonstrated a significantly lower level of serum bilirubin than control infants in the first three days of life. Laboratory experimentation suggests that opiate drugs may increase bilirubin excretion by enhancement of glucuronyl transferase activity, and suggests that infants of heroin-addicted mothers may possess a mechanism for increased turnover of other biologic substances whether through glucuronidation or enzyme induction. (*Nathanson, G., and others: The Effect of Maternal Heroin Addiction on Neonatal Jaundice. J Pediatr* 81: 899-903, 1973.)