

Introduction

Neonatal jaundice is a common disorder, with more than half of all newborns being affected in the first 3 to 5 postnatal days. Because of the increasing number of early discharged newborns, there is a corresponding danger of failing to diagnose severe hyperbilirubinaemia in time and start the treatment, as reports about kernicterus in fullterm healthy newborns demonstrate (*Maisels & Newman, 1995 and Newman et al., 2002*).

There is a strong need to identify in advance those neonates who may develop significant levels of bilirubin, which would necessitate clinical and laboratory evaluation to provide therapy and avoid toxic effects of hyperbilirubinemia (*Masiels, 1999*).

However, so far no standardized procedure has been laid down for predicting neonatal jaundice or for following up the early discharged newborns, thus increasing the risk of re-admission and the possibility of brain damage due to kernicterus (*Brown & Jahanson, 1996 and Hansen, 2002*).

Several investigators have tried to find a simple marker to predict severe postnatal icterus in newborns. Some of them used a blood bilirubin determination at an age of 6h up to 24h to

predict the subsequent course of bilirubinaemia (*Agarwal et al., 2002 and Alpay et al., 2000*). Others determined the predictive value of later (>24h) bilirubin measurements (*Bhutani & Johnson, 2000*).

Knupfer and coworkers (2005) suggest that umbilical cord serum (UCS) bilirubin may be a promising marker to assess the risk of subsequent excessive hyperbilirubinaemia.

Aim of the work

The aim of this study is to investigate the predictive value of umbilical cord serum (UCS) bilirubin measurement for postnatal course of hyperbilirubinemia in healthy newborns.