SUMMARY

Neonatal hyperbilirubinemia is a very common entity in neonatal intensive care unit. Jaundice in term and near-term (35 to 37 week) infants is generally benign, however, concern has surfaced in recent years regarding reemergence of kernicterus in this patient population

The traditional view that the kernicterus is a disease of the past, and that bilirubin toxicity causes only the classical clinical and pathologic syndrome may be an oversimplification of the effect of bilirubin on the developing nervous system.

The present study was conducted during the period from May 2006 to November 2006. Seventy one jaundiced newborn were consecutively selected from Neonatal Intensive Care Unit of Specialized Pediatric Hospital of Banha, Shibin El-Kom Hospital Menofyia University, and of El Gammaia El-Shariaa Center in Shibin El-Kom.

Newborns that had metabolic abnormalities, sepsis, liver disease, infant of diabetic mother, congenital malformations or sever respiratory distress were excluded.

Only sixty jaundiced newborns out of the studied patients fulfilled the criteria of the study. They were divided according to total serum bilirubin level into three groups:

Group 1: Their TsB was between 15 - 20 mg / dl.

Group 11: Their TsB was between 20 - 25 mg / dl.

Group 111: their TsB were more than 25 mg / dl.

The present study revealed that a high statistically correlation between mean of total serum bilirubin and neurological score. The increase of total serum bilirubin results in decrease in neurological score.

The present study revealed that etiology of jaundice has a role in occurrence of bilirubin encephalopathy.

The present study revealed that total serum bilirubin level at cutoff point of 23.25 mg/ dl has sensitivity of 100 % and specificity of 78 % in prediction of occurrence of bilirubin encephalopathy outcome at 3 month old.