

Jaundice assesement of newborn baby: A short review on Kramel's Rule and magnetic induction spectroscopy

Abstract

Jaundice is a yellow discolouration of white eyes (sclera), skin and mucous membrane which is clinically apparent when the level of serum bilirubin rises up to 5 mg/dl. Jaundice could cause abnormalities in the newborn infant when production of bilirubin exceeds the normal range. Formation of bilirubin starts from degradation of hemoglobin and haemoprotein, which is released from red blood cell. Current technique in evaluating jaundice of new born infant is based on Kramer's Rule but unfortunately it is not very applicable to the babies with dark skin. Thus Magnetic Induction Spectroscopy (MIS) is introduced as an alternative to this issue as MIS is a non-invasive, non-intrusive and electrodeless measurement scheme. This paper will go through short overview on jaundice measurement as well as MIS modality.

Keywords; Bilirubin; Kramer's rule; Magnetic induction spectroscopy