Principles & Use of Neonatal Pulse Oximetry

Content Outline

1. Underlying Principles of Pulse Oximetry & Clinical Applications
   1.1 Historical background
   1.2 Practical considerations including advantages & limitations
   1.3 Clinical applications
      1.3.1 Delivery room
      1.3.2 Use for preterm infants
      1.3.3 CCHD screening in newborns

2. Perinatal Oxygenation & Management of Oxygen Therapy
   2.1 Physiology related to tissue oxygenation
   2.2 Clinical assessment of oxygen saturation
   2.3 Oxidative stress and injury
   2.4 Use of pulse oximetry for targeting saturation in clinical practice

Reading Material Resources

Module WB1832: Principles & Use of Neonatal Pulse Oximetry is based on the resources listed below. A copy of the resources are included with the module.

Principles of pulse oximetry and its application in neonatal medicine, Tin W and Lal M, Seminars in Fetal & Neonatal Medicine, 20, 2015, pp. 192-197

Oxygen saturation in the newborn and the importance of avoiding hyperoxia-induced damage, Sola A, NeoReviews, 16(7), July 2015, pp. e393-e405