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There was some question in the past years about whether the neonate needed anesthesia for surgery. However, the neonate and premature infant should be considered as any other patient who needs anesthesia ***(Berry, 1997).***

There is an increasing body of evidence that neonates including those born preterm demonestrate physiological responses to surgical procedures that are similar to those demonstrated by adults and that these responses can be lessened with anesthetic agent ***(Larrson, 1999).***

Recent researches suggest that infants may be more vulnerable to negative effects of pain than older children and adults. Apart from short term effects, untreated pain and stressful stimuli may also have long term effects, which may later affect their neurological development, including the reaction to pain. The preterm neonate is especially at risk ***(Larrson, 1999).***

Once separated from the placenta, the newborn infant must function independently to adapt the new environment. This adaptation involves anatomic, physiologic and pharmacologic changes to maintain homeostasis and ensure the infant's survival. Disease status, anesthesia, and surgery can interfere with these developmental changes and threaten survival. Thus, the anesthesiologest must understand the principles of neonatal anesthesia and surgery, the normal course of development, and the pathophsiology of neonatal disease states. ***(Bikhazi and Davis, 1996)***

Many physiologic and anatomical differences between the pediatric (specially neonates) and adults are present and important in the development of working concepts, when administrating anesthesia to children. ***(Pang and Mellins, 1975)***

The provision of safe anesthesia for pediatric patients requires a clear understanding of the psychologic, physiologic and pharmacologic differences between children and adults. ***(Berry, 1997)***

Neonatal surgical disease in the first days of life are invariably of an urgent nature. In addition to the physiologic aberrations produced by the disease process, incomplete adaptation to the extrauterine environment may further complicate perioperative management. ***(Dierdorf and Krishna, 1981)***

The most commonly encountered neonatal surgical disease include diaphragmatic hernia, tracheoesophageal fistula, abdominal wall defects (omphalocele & gastroschisis), pyloric stenosis, lobar emphysema, biliary atresia & necrotizing enterocolites. ***(Pang and Mellins, 1975)***

It is true that one is not just anesthetizing the child, one is really anesthetizing the whole family. The more information one can provide to the child and the family, particularly about monitoring and safety, the greater will be the reduction in anxiety and the smoother will be the induction. The smile on the face of a child who is comfortable in her or his mother's arms in the post anesthesia care unit is one of the greatest rewards any practitioner can receive ***(Karamanoukian et al., 1996)***

Premature neonates are more prone to postoperative complications after minor surgery compared to term neonates. Anaesthesia for preterm neonates is difficult because they often have multisystem disease and they respond poorly to anesthetics ***(Gregory, 2002).***

It was proposed that spinal anesthesia replaces general anesthesia in the group of high-risk neonates. It was used in large series with remarkable success and its role has recently been reviewed ***(Gregory, 2002).***

This study updates and focuses on the recent modalities in anesthetizing neonates with surgical emergencies.