INTRODUCTION AND AIM OF THE WORK

In the past, some practicing physicians have advocated withholding anesthetic or analgesic agents from neonates undergoing surgical procedures. The rationale expressed for such practice is that some neonates undergoing surgery are often so unstable that the risk of an anesthetic agent is too great to justify the possible benefit of anesthesia ***(Bogetz, 1984)***.

There is an increasing body of evidence that neonates including those born preterm, demonstrate physiological responses to surgical procedures that are similar to those demonstrated by adults and that these responses can be attenuated by anesthetic agents ***(Owens, 1984)***.

Recent researches suggest that infants may be more vulnerable to the 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 pre term neonate is especially at risk ***(Larsson, 1999)***.

In neonates, choosing appropriate analgesia is highly complex. One of the major problems is concern regarding the safety and efficacy of pain-relieving interventions in such a vulnerable age group ***(McIntosh, 1997)***.

Preterm neonates are more prone to complications after minor surgery compared to full term neonates ***(Steward, 1982)***. Anesthesia for

pre-term neonates is difficult because they often have multi-system disease and they respond poorly to anesthetics ***(Gregory, 1994)***.

Pharmacological agents available permit relatively safe administration of anesthesia or analgesia to neonates, and that such administration is activated according to the usual guidelines for high risk potentially unstable patients ***(Gutierrez-Mazorra, 1987).***

It was proposed that spinal anesthesia replaces general anesthesia in the group of high-risk neonates. It was used in a variety of surgeries with remarkable success and its role has recently been reviewed ***(Broadman, 1996)***.

AIM OF THE WORK

This easy in suggested to discuss the correct approaches in the anesthetic management of neonates and preterms. As they have unique requirements for equipment, intravenous access, fluid and drug therapy anesthetic dosage, and environmental control.