Inadequate analgesia in infants undergoing open heart surgery is associated with a substantial hormonal and metabolic response which has been claimed to impair postoperative recovery and survival. In addition, low-dose opioid techniques fail to prevent unwanted reflexes such as disturbances of cardiac rhythm during sternotomy, and undesirable pulmonary and systemic vascular responses to stimulation. An ideal anesthetic for pediatric cardiac surgery should provide intraoperative cardiovascular stability and a stable and pain-free recovery. High-dose narcotics, whether given as an initial bolus or by the continuous infusion method, certainly have brought current practice closer to this ideal. However, these high-dose techniques generally prolong intubation time, which for numerous reasons is no longer the standard of care for cardiac surgery.

Central neuraxial analgesia is an alternative to high-dose narcotics, but its use has long been an issue of debate and concern in cardiac surgery. The need for full heparinization for cardiopulmonary bypass has curtailed the use of central neuraxial blocks. Until fairly recently, very few centers dared to attempt this kind of effective analgesia in cardiac surgery. However, during the last few years more and more reports have been published on the efficacy and safety of this type of analgesia when appropriate precautions are taken.