

American Pediatric Surgical Association

Best Practice for Infant Surgery Position Statement

May 28, 2008 - Approved by the APSA Board of Governors

As a specialty, infant surgery is unique in its diagnostic range, health care skills required, complex medical environment, infrequency of conditions treated, and relative paucity of complete teams of qualified professionals required for safe practice. The optimal care of infants with surgical conditions requires a coordinated team effort fully independent of socio-economic considerations. Such a team requires continuously available pediatric surgeons either certified by the American Board of Surgery in pediatric surgery, or awarded membership in this Association, who are well versed in infant surgery. Infant surgery also requires intimate involvement of other well qualified specialty trained and continuously available professionals including: neonatal/pediatric anesthesiologists, neonatal/pediatric radiologists, and neonatal-perinatal specialists. Also key in the effective care of newborns and infants with surgical problems are nursing professionals skilled, practiced, and experienced in all aspects of care for surgical infants. This broad group of expert professionals and the necessary ancillary support are most often provided by full-service children's health care facilities. Such facilities may exist within freestanding children's hospitals, children's hospitals within general hospitals, or comprehensive pediatric in-patient services within general hospitals. Regardless of venue, infant surgery must be delivered with a bona fide and demonstrated commitment of that institution to the provision of the full range of pediatric medical, surgical, and nursing subspecialties and resources needed to provide care to this unique patient cohort.

Variability exists among states in definitions and regulations governing high intensity infant care. High intensity infant care is variously defined according to details of maternal health, infant birth weight, and/or degree of respiratory support required by the infant. The lack of a broadly accepted definition of and standard for neonatal care is compounded by a nearly complete lack of attention to standards for the care of infants with high intensity surgical conditions. The American Pediatric Surgical Association supports defining high intensity infant surgery as operative and peri-operative management of an infant before 60 weeks post-menstrual age and/or less than 30 days of postnatal age that requires pre- and/or post-operative care in an intensive care environment. Although infants requiring mechanical ventilation meet this criterion, we also would recommend including within this group any infant with a surgical condition who would benefit from acute convalescence in an intensive care environment.

An additional important subset of high intensity infant surgical patients includes those whose antenatal evaluation reveals a major surgical condition. We strongly encourage that these pregnancies be evaluated in a maternal-fetal program experienced in such evaluations and intimately affiliated with a full service children's facility. It is intuitive that antenatal referral is safer than post-natal transfer. Moreover, the value of having parent and infant within reasonable physical proximity is also intuitive.

Because such neonatal and infant surgical conditions are relatively uncommon and teams of appropriately skilled professionals and health systems properly resourced for expert perioperative care of infants are limited in number, the Association strongly advocates that the surgical care of high intensity infants occur within facilities with the human and institutional resources outlined. We further recommend that candidate institutions be expected to demonstrate

records of caring for such infants and outcomes consistent with established benchmarks. Absent a record of consistent outcomes for infant surgery, *or* a documented plan and commitment to developing consistent outcomes, this Association strongly discourages care of high intensity surgical infants in limited resourced facilities. We view this approach as offering the greatest likelihood of providing optimal medical and surgical care to infants who have significant surgical conditions.

The Association recognizes that full-service children's facilities and maternal-fetal medicine programs are not readily available to all geographic locations. However, when full-service children's facilities and maternal-fetal medicine programs are reasonably available, it is strongly recommended that infants requiring high intensity surgery receive their care at such facilities.

The Association endorses this statement as a position reflecting the judgment of the Association. It is not intended to be a regulatory or standard-of-care document. Moreover, in any specific infant surgical circumstance the venue for care is ultimately subject to judgment of the responsible pediatric surgeon.

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