

Where to Put the Fulcrum?

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The worldwide incidence of prematurity is estimated to be around 10% or around 13 million children per annum, and there is evidence that rates of prematurity are increasing [1]. The care of preterm infants has expanded enormously in the last fifty years. The widespread adoption of synchronized, flow triggered ventilation, exogenous surfactant, antenatal steroids, amongst other technological advances allows bedside caregivers unparalleled tools to provide truly intensive care. Survival, much less disability-free survival, occurs with greater and greater frequency in infants who would not have even been resuscitated in the delivery room decades ago [2].

The human cost of this technology, however, namely the pain and discomfort born by the infants, should not be lost in the whirlwinds of progress. The elegant work of Dr. Anand [3] and others have shown us that preterm infants have the full capacity to experience pain and that these noxious stimuli may set the stage for a lifetime of neurodevelopmental consequences [4].

Although nearly all pediatricians and parents would agree that putting any infant or child through a painful procedure when the chance of success is small or non-existent is wrong, and perhaps even cruel, the relatively limited funding and research activity in the field of pediatrics often leaves us with the technical knowledge of *how* to perform a procedure or test but no information on *when* or *if* we should.

In the United States, Congress has begun to address these shortcomings by the passage of the *Best Pharmaceuticals for Children Act* in 2002, which incentivizes the study of pediatric indications for

medications by offering new patent-protection to pharmaceutical manufacturers. While this action has reduced one barrier, in many cases clinicians still lack systematic comparison of procedures.

Interventional Pediatrics and Research will serve as a platform to overcome these shortcomings. By providing open access to cutting-edge research in the surgical care of infants and children, particularly in relation to congenital malformations, innovative ideas can be rapidly disseminated. Through rigorous scientific evaluation, evidence of the best treatments will be developed, allowing those who care for preterm infants to better balance the risk or harm of intervention with the benefits. Let us have the goal of moving the fulcrum so we can leverage the best, evidence-based practices to improve outcomes without unnecessary suffering.

References

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