

Foreword

Congenital Heart Disease: Impact on the Fetus, Pregnancy, Neonate, and Family

It is rare in one's lifetime to witness the kind of progress that has been made in the care of infants who have congenital heart disease. The specialty of pediatric cardiology has transformed from a predominantly descriptive one with various palliative operations to one in which most heart defects are totally or partially corrected in the neonatal period.

In the 1970s, echocardiography was in its infancy and cardiac catheterizations were common. With the widespread use of cardiac MRI and improved echocardiographic technology, only in unusual circumstances do infants require invasive diagnostics. The availability of prostaglandin E1 now permits operative procedures to be scheduled electively rather than emergently. Most importantly, with advancements in antenatal diagnostic techniques the diagnosis of congenital heart disease is rarely a surprise. As the mortality rate for many common congenital heart lesions has plummeted to single digits, the attention of neonatologists and cardiologists has been appropriately redirected to find ways to improve neurologic outcomes in infants who have complex congenital heart disease. Improvements in developmental outcomes will probably not come from changes in surgical techniques or advances in life support technology (although both are important); it will likely come from attention to the minute details of cardiac and neonatal intensive care and better ways of assessing central nervous system function in the preoperative, intraoperative, and postoperative periods. This will require the expertise of cardiac intensivists, anesthesiologists, neonatologists, and experienced nurses working in close collaboration.

This issue of the *Clinics in Perinatology*, edited by Gil Wernovsky, Stuart Berger, and David Rubenstein focuses on the coming frontiers in the subspecialty of pediatric cardiology. Although the articles do not provide all the answers, they clearly outline the way the problems will be solved. Drs. Wernovsky, Berger, and

Rubenstein are to be congratulated on their foresight and for organizing an outstanding issue.

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