Correction of congenital heart disease in the current era: From the operative room to the catheterization lab

Since the introduction of the first interventional pediatric catheterization technique of balloon pulmonary valvuloplasty in the early 1980’s, the field of interventional pediatric cardiology has expanded exponentially. Cardiac catheterization for congenital heart disease prior to the 1980’s was utilized entirely for diagnostic purposes which currently has been replaced by non-invasive imaging modalities such as two dimensional echocardiography, magnetic resonance imaging and ultrafast CT scanning. As a result, many patients with congenital heart disease do not require a diagnostic cardiac catheterization prior to surgical repair. In contrast, the majority of cardiac catheterization procedures performed in children and adults with structural congenital heart disease today are for therapeutic purposes. This lecture will focus on the current strategies and therapies that have been developed over the past thirty years for the treatment of various congenital heart defects which can be corrected in the catheterization lab thereby avoid the need for invasive cardiac surgery and cardiopulmonary bypass. A description of various procedures and results will be presented including several specific techniques that have been developed at the Penn State Hershey Children’s Hospital.

Biography

Howard S. Weber completed his fellowship in Pediatric Cardiology at Yale New Haven Hospital in 1989 and immediately began his career as an Assistant Professor of Pediatrics at the Penn State Hershey Children’s Hospital and also Director of the Catheterization Lab. He has published more than 50 articles in various national and international peer reviewed cardiology journals and serves on numerous editorial boards of these same journals. He has been an invited Lecturer at numerous interventional pediatric cardiology meetings both nationally and internationally.