History of development of pediatric cardiology

In 2015, pediatric cardiology is a very well developed specialty. In the past, cardiology as a specialty was limited to the internists. For centuries, pediatric cardiology was developed into a specialty where only trained pediatricians in cardiology took care of fetuses with congenital heart disease (CHD), neonates and further followed them into adulthood. With excellent care, children with severe life threatening CHD are surviving into adulthood and leading productive lives serving the society as physicians, lawyers, MBAs and in many other professional and non-professional activities. In 1938, when Robert Gross ligated a patent ductus, a new era of pediatric cardiology was born. Clinical acumen, understanding of physiology, anatomy, angiography and development of extracorporeal circulation allowed caring for children with CHD which was previously lethal. A few interested pediatricians taught themselves and finally the subspecialty was born. In 1961, pediatric cardiology became the first subspecialty board in the USA. In the past 60 years, significant progress has been made in non-invasive imaging e.g., cardiac ultrasound, color-Doppler, MRI, and CT scan. Utilization of these modalities has made invasive diagnostic cardiac catheterization almost unnecessary. Development of interventional cardiac catheterization has almost replaced cardiac surgery in multiple CHD. For the past 50 years, pediatric cardiology was focused on diagnosis, patient care, education and clinical research. However, for the past 10 years basic research discoveries of the cause of the CHD have developed, which will hopefully prevent them from happening in the future. Pediatric cardiology is team work involving cardiologists, anatomists, physiologists, surgeons, intensivists, interventionists and the anesthesiologists. All play very important roles in caring for children with cardiac problem. In my presentation, I will discuss more in depth about the role of individual physicians and scientists that have helped to develop this wonderful subspecialty in pediatrics.

Biography

Brojendra Agarwala has completed his MBBS from University of Kolkata, India and completed Pediatric Cardiology Fellowship from New York University Medical Center, New York, USA. He is a Pediatric Cardiologist and Professor of Pediatrics at the University of Chicago. He has received best teacher award by the pediatric residents and the medical students. He has published 68 papers in reputed journals. He is named as one of the top doctors and best pediatricians in Chicago magazine for many years.

Notes: