



New Horizons for Interventional Cardiology - A Plug for the Future

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Congenital interventional cardiology has changed greatly over the past twenty years moving from a predominantly diagnostic tool to a therapeutic one. Interventions have become more complex and a myriad of imaging platforms has evolved to optimize comprehension of 3-D anatomy, facilitate precision and decrease radiation exposure. Smaller older and more complicated could be the tag line for our specialty's development. The scope of procedural collaboration with surgeons has led to an atmosphere of co-dependence, moving us away from the paternalistic and often dictatorial systems of decision making and management of the past. This newer way of thinking is evident inside and outside the operating and interventional rooms in our clinics and multidisciplinary meetings and might be best described as hybrid thinking.

It is an exciting time to be involved in the field but rapid change brings its own challenges. In this special edition we are honored to have some of the greatest minds in congenital interventional cardiology share their thoughts on the future of our specialty. Rather than focus on specific interventions, in the earlier section of the edition we wanted to examine the impact of broader cultural and personal influences on the field. Culture is a buzz word in larger corporations but how is it influencing our field? Do we understand ourselves well enough to ensure our decision making for our patients is sound, both in the pre-procedural and intra-procedural realms? How are we protecting ourselves and our patients from increasingly complex interventions and ensuring we have appropriate data to reflect on whether we are moving in the right direction?

Congenital intervention is recognized by the wider cardiology community as a hotbed of innovation. However, low potential sales volumes deter industry from investing the money required to turn a brilliant idea into a product on our shelf. We need to work with regulators and industry partners to ensure that congenital patients are not disadvantaged by this; finding innovative ways to facilitate availability of much needed technology. We have excellent articles dealing with each of these topics that should be of great interest to readers.

In the second part of the edition, we look at more specific approaches, some of which have been evolving over decades without gaining widespread acceptance such as fetal interventions and MRI catheterization, and others which have evolved more rapidly such as hybrid interventions. We have included articles by our surgical colleagues to ensure we have a broader viewpoint on the direction of the specialty. Precision or personalized medicine is gaining widespread traction throughout healthcare but what does it mean for our patients, each with unique anatomy that would surely benefit from more bespoke devices and interventional approaches. Finally, we chose a common congenital defect, tetralogy of Fallot and invited renowned interventional and surgical commentators to discuss whether a purely interventional approach to treat this condition is achievable within the next twenty years.

The foundations of our specialty are steeped in problem solving and innovation. We hope this special edition outlines the challenges and solutions to continuing the tradition of providing the best, least invasive anatomically and physiologically corrective therapies for the current and future generations of very special patients we treat.

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