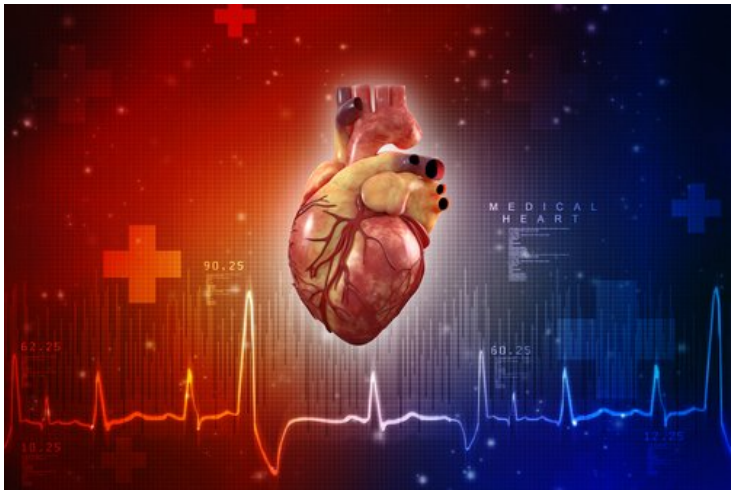
BioSpectrum the business of Bio & Health Sciences

Expanding the scope of heart care with advanced imaging tools

02 March 2020 | News

With the growing cases of cardiovascular disorders in India, doctors are looking at new tools to address the burgeoning burden



Turning a corner in interventional cardiology, advanced tools have opened new frontiers in heart care. Even as India is home to the highest burden of cardiovascular diseases (CVDs) with changing lifestyles leading to a dramatic shift in the CVD patient profiles, doctors are now looking at newer tools to address the burgeoning
burden. Leading experts from the various fields of interventional cardiology came under one roof to discuss the most advanced percutaneous cardio vascular interventions at the 11 th India Live national conference in New Delhi from Feb 28 to March 1 with focus on &Interventional Cardiology: From Clinic to Cutting Edge".

Emphasizing on the biggest challenges faced by cardiologists today, and the role played by latest imaging techniques, Dr. Nils P Johnson: Associate Professor of Cardiology, University of Texas, Houston. USA said, "Lifestyles are changing and as doctors, we come across complex Cardiovascular diseases (CVDs) manifestations every day. Hence, latest modalities become particularly important in dealing with these complexities to ensure better patient outcomes. For instance, we have technologies like Fractional Flow Reserve (FFR) that help us decide in advance if the artery needs a stent or not. Such tools are provided by
some of the leading names in healthcare. In India, we must ensure our patients have access to these technologies."

Today, heart failure is the leading cause of mortality amongst all heart diseases in India. With 23 per cent patients succumbing within one year of their diagnosis, experts underline the need to look at technological interventions from around the globe to address this burden. "One in four deaths in India are now because of CVDs with ischemic heart disease and stroke responsible for over 80% of this burden. Cutting-edge technologies provided by global leaders like Abbott are offering imaging techniques that are specifically designed to offer physicians the greatest practical advantages when performing percutaneous coronary intervention (PCI). Doctors rely on these tools to give them precise results."

"It is encouraging to see how technology is transforming the way we treat patients. We have tools like Optical Coherence

Technology (OCT) that help us assess the extent, nature and exact location of the blockage. Apart from helping us choose the right stent, OCT also helps in the post-implantation process to ensure that the stent is placed properly and expanded well. We need such advanced tools for better patient outcomes," shared Dr. Krishna Sudhir, Divisional Vice President Medical Affairs at Abbott.

Turning the focus to improved diagnosis with technologies such as Optical Coherence Tomography (OCT), Dr. Shirish (M.S.) Hiremath, Consultant Cardiologist & Director – Cath Lab, Ruby Hall Clinic, Pune mentioned, "Advanced tools like OCT are allowing us to visualize the minutest details inside the vessel and get the exact assessment of the blockage. Even today, most of the world uses angiography which gives us only a two- dimensional view of the coronary artery. We need new technology to help optimize the treatment, and that is what new technology is providing. We can get a 3D view of the blocked artery with OCT. It also helps us decide the kind of stent we should choose."

Whether it's the validation a doctor needs in choosing the stent or post-procedure risk assessment, advanced technologies like FFR and OCT are helping doctors make precise decisions, resulting patient outcomes.

"I treat a lot of complex heart disease patients using advanced technologies like Fractional Flow Reserve FFR and OCT. These latest tools are becoming important in achieving precision PCI and are now an inherent part of my routine clinical practice. FFR is a guiding tool used world over for assessing whether the artery needs to be stented or not. It gives a score which helps physicians decide the treatment strategy. It is the first line of assessment in highly developed countries like the USA and Japan having the highest level of evidence and it's part of international guidelines ESC," concluded Dr Nils P Johnson: Associate Professor of Cardiology. University of Texas, Houston. USA.