

challenged with either ajmaline or flecainide is necessary to provide any definitive conclusions about the use of additional ECG leads in screening for BrS.

Public Hospital Training Program Increases Access to PCI in Trinidad and Tobago

Routine percutaneous coronary intervention (PCI) can be performed safely by a specially trained team of cardiologists, registered nurses, and cardiovascular technicians in a public hospital, according to findings from a pilot PCI training program. Clifford Thomas, MD, Eric Williams Medical Sciences Complex (EWMSC), Mount Hope, Trinidad and Tobago, described outcomes from the first 101 procedures that were performed as part of the pilot program at EWMSC.

With a high prevalence of coronary artery disease (CAD) and few interventional cardiologists in Trinidad and Tobago, the growing needs for PCI were not being met. Physicians at the EWMSC initiated a PCI training program for cardiologists, nurses, and technicians in September 2008. During the first 20 months of the program, 101 patients were treated.

The mean patient age was 56 years, and 69 patients (69%) were male. At the time of presentation, the mean left ventricular ejection fraction (LVEF) was 56%. The majority of patients (71%) had class III or IV angina, and one patient required primary PCI for ST-segment elevation myocardial infarction. Patients were more likely to receive drug-eluting stents than bare-metal stents. Following PCI, all patients were started on 2 years of anticoagulation therapy with clopidogrel.

All procedures met the standard of clinical success, which was defined as a combination of procedural success (<10% stenosis) with no major complications. The mean diameter stenosis was reduced from 86% at baseline to 8% after PCI. No patients required repeat revascularization during the index hospitalization, and no deaths were reported. One patient required elective coronary artery bypass grafting after PCI failed to dilate a calcified lesion.

These preliminary results support the expansion of the PCI training program, Dr. Thomas said. The program will continue to increase the number of skilled interventional cardiologists and provide increased access to PCI for public sector patients. The team is currently evaluating procedural success rates by lesion severity, as well as long-term outcomes among patients who have received treatment as part of the program.

New Technologies in Pulmonary Arterial Hypertension

Pulmonary arterial hypertension (PAH) is a rare cardiopulmonary disease that is associated with remodeling within the small pulmonary arteries, increased pulmonary vascular resistance, and right ventricular failure. Identifying PAH is a challenge for clinicians, in part due to its nonspecific symptoms, such as dyspnea, chest pain, heart failure, and palpitations. As a result, the accurate diagnosis of PAH is often delayed up to 2 years after symptom onset. Pierre Gacon, MD, Centre Hospitalier Universitaire, Dijon, France, described the role of new imaging technology in improving the diagnosis and assessment of patients with PAH.

Among Caribbean patients with PAH, approximately 40% has idiopathic disease. Additional etiologies include connective tissue disease (15%), HIV infection (10%), and hemoglobinopathy (5%). Current guidelines from the American College of Chest Physicians recommend Doppler echocardiography as a noninvasive screening test for patients who are suspected of having PAH. Echocardiographic abnormalities, such as pericardial effusion, right atrial enlargement, septal displacement, and left ventricular eccentricity index, predict adverse outcomes in patients with PAH and identify patients who may be candidates for more intensive medical therapy or earlier transplantation.

Additional tools are also emerging as valuable options for patient assessment. For instance, echocardiographic measurement of the tricuspid annular plane systolic excursion (TAPSE) adds valuable prognostic information about RV systolic function in patients with PAH. The measurement of TAPSE is easy to obtain in patients with PAH, irrespective of heart rate and rhythm, and significantly improves the prognostic value of other echocardiographic measures.

New technologies for measuring key prognostic variables, such as regional contractility, left ventricular eccentricity index, and myocardial performance index, can also improve risk assessment in patients with PAH. Compared with conventional Doppler echocardiography, new options, such as Doppler tissue imaging, 2-dimensional strain echocardiography, and speckle tracking echocardiography, provide more accurate prognostic information for determining PAH severity.

Improving outcomes for patients with PAH will require collaboration among primary care physicians, cardiologists, and other members of the health care team. By incorporating new technologies, physicians can improve the diagnosis, risk assessment, and management of patients with PAH.