Preface JCDR 2013 issue 2

1. Diabetic foot: what can we do?

This issue starts with the state of the art review of surgical revascularization techniques for diabetic foot by Dr Sunil Kota. Diabetes is a common disease affecting millions of people worldwide. Diabetic foot wounds are responsible for 5–10% of the cases of major or minor amputations. Revascularization using techniques including surgical bypass, angioplasty, a combination of the two procedures and subintimal recanalization has been used for salvaging ischemic limb. In this informative review, Dr Kota described in detail how to differentiate the ischemic vs non ischemia diabetic foot using a combination of clinical evaluation, imaging and functional approaches. The indications of revascularization, and details of each surgery approaches are also provided. We highly recommend the readers to apply information from this review to guide our care of our diabetic patients.

2. We can do better

Zhou Li et al, in a large echocardiogram study of 262 cases of severe mitral regurgitation, identified an important clinical area of potential improvement. In their article “Initial Misdiagnosis of Acute Flail Mitral Valve is Not Infrequent: The Role of Echocardiography”, the authors studied a 262 consecutive echocardiograms with severe mitral regurgitation performed between 2005 and 2010. Among them, 15 patients were found to have acute flail mitral valve. A holosystolic murmur was appreciated in only 33%. Clinically, 60% were misdiagnosed on admission. Using echocardiogram, the correct diagnosis of flail mitral valve was made in all cases, however, only 40% on the day of presentation. The maximum time to echocardiographic diagnosis was four days. The concerning results indicate that initial misdiagnosis of acute flail mitral valve happens frequently. Early echocardiographic exam is essential in the timely diagnosis and management of acute flail mitral valve. In the US, there are compact ultrasound machines in the emergency rooms and critical care units which are capable of doing cardiac echocardiogram. There is also available hand held cardiac ultrasound with cost of less than ten thousand dollar on the market. By providing basic cardiac echocardiogram training to the residents and ER doctors, we believe that the use of hand held or portable compact cardiac ultrasound, the life-threatening conditions such as cardiac tamponade and acute mitral or aortic valvular disease can be easily recognized to provide prompt appropriate care.

3. We can do more!

Preventive medicine is playing a major role in the developed countries. As the heavily populated countries such as India and China have been growing economically strong, the primary prevention of cardiovascular diseases in the developing countries in turn is emerging as center of attention. In the current issue, there are three articles from India investigating the cardiovascular risk factors in specific populations including urban population, elderly in remote rural area, and in high stress population such as police. Prasad DS et al, in “Effect of Obesity on Cardiometabolic Risk Factors in Asian Indians”, studied the prevalence of overweight and obesity and their effects on cardiometabolic risk factors in a representative sample of urban population aged 20–80 year in Eastern India. Based on the revised Asian–Pacific obesity and overweight criteria (BMI ≥25 kg/m² and ≥23 kg/m², respectively), the authors reported one-third of the urban populations are obese in urban Eastern India. Older age, female gender, family history of diabetes, being hypertensive, hypertriglyceridemia, hypercholesterolemia, physical inactivity and middle to higher socio economic status significantly contributed to increased obesity risk among this urban population. Rajnish Joshi et al, in “Prevalence of Cardiovascular Risk Factors Among Rural Population of Elderly in Wardha district”, evaluated 2424 elderly population aged above 60 years old in rural central India. They reported a surprising high prevalence of tobacco use as high as 50.8%, and hypertension 46.3% with 90% unrecognized. Pal-anivel Chinnakali et al, in “High Prevalence of Cardio-vascular Risk Factors Among Policemen in Puducherry, South India” carried out a cross-sectional study involving 256 policemen in Puducherry, south India. Seventy percent (n = 178) subject reported moderate stress in their life related to their profession. A high prevalence of diabetes of 33.6% and hypertension 30.5% were reported in this specific population. These findings indicate the presence of distinct cardiovascular risk factors in specific population. Being doctors as we treat individual patients, we might play bigger roles in preventive medicine by providing educating to our community and working with local governments to have area-specific disease awareness and screening.

4. Are we doing enough?

In two articles from India and Middle East, the authors independently reported the concerning status of management of acute coronary syndromes (ACS) in the elderly patients. In “Age and Clinical Outcomes in Patients Presenting with Acute Coronary Syndromes” Ayman El-Menyar et al, evaluated the impact of age on clinical presentation and short- and long-term clinical outcomes in the Arab Middle Eastern population. In this prospective, multicenter study of the 2nd Gulf Registry of Acute Coronary Events (Gulf RACE-2) between 2008 and 2009, the authors recruited 7930 consecutive ACS patients from 6 adjacent Middle Eastern Gulf countries. They
reported a significantly under use of dual antiplatelet, beta blockers, thrombolysis and coronary angioplasty in the patient age older than 70 years as compared to patients younger than 70 years old. Not surprisingly, the elderly patients had more unfavorable hospital outcomes compared with younger patients in terms of myocardial re-ischemia, heart failure, cardiogenic shock, stroke, major bleeding and mortality. Similarly, in India, Lovleen Bhatia et al. in “Clinical Profile of Acute Myocardial Infarction in Elderly Patients”, evaluated 200 consecutive patients with acute myocardial infarction in a tertiary care center in west India. Comparing 107 patients aged above 65 years and 93 patients aged below 65 years, the authors reported that the elderly patients were significantly less frequently revascularized, and they were less likely to receive beta-blockers. In-hospital mortality was also significantly higher in the elderly. Although the American College of Cardiology/American Heart Association guidelines clearly state that a patient’s age should not influence decisions about cardiac care, elderly patients are much less likely to receive evidence-based therapies compared to their younger counterparts as evidenced by these two independent studies.

5. Can we predict that?

Exploring of biomarkers for CAD has been on ongoing effort and has attracted large funding in this area at least in the US. In the article “Anti-CCP Antibody in Patients of Established Rheumatoid Arthritis: Does it Predict Adverse Cardiovascular Outcomes?” Biswadip Ghosh et al. investigated the role of anti-CCP antibody as an independent risk factor for developing cardiovascular complications in 80 established rheumatoid arthritis (RA) patients. The authors reported both left ventricular systolic and diastolic dysfunction were significantly more prevalent in anti-CCP positive patients. Mild pericardial thickening was documented among 12.5% patients of anti-CCP positive group while none of the anti-CCP negative patients had similar findings in echocardiography. The results from this study indicate that presence of anti-CCP is associated adverse cardiac outcomes and patients with autoimmune diseases who are anti-CCP positive should be closed monitored for cardiac function.

It is our hope that this issue will stimulate further discussion and additional research in related clinical areas. We are grateful to all of the authors who contributed to the issue. We are also appreciative of reviewers and editors for their time and effort. It is our intent that the issue may serve to attract more submissions of both bench work and clinical studies to expand the interdisciplinary readership of the journal.

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