in hypertensive type 2 diabetics with altered lipid profiles (23.9%) than in nondiabetic hypertensive patients (7.7%). Diabetes (OR, 3.741), altered lipid profile (OR, 13.096), and age group (OR, 1.444) were all associated with an increased odds of MI. Increasing serum uric acid quartile (p=0.029) was also associated with MI.

The data suggest that altered lipid profile and elevated serum uric acid are associated with MI in hypertensive patients with diabetes. While dyslipidemia is an established risk factor for MI and a current therapeutic target, further studies that adjust for other clinical and laboratory covariates are needed to understand if serum uric acid is an independent predictor of MI and whether this measurement is a useful clinically in directing therapeutic decision-making.

Evaluating the Asymptomatic Patient for CV Risk Factors

Written by Rita Buckley

Cardiovascular disease (CVD) is the number one cause of death in Trinidad and Tobago [http://www.health.gov.tt]. CVD risk scoring methods can be used to identify patients who are asymptomatic but at a high risk of developing CVD in the future. However, the generalizability of risk scores in different populations can not be assumed [Beswick AD et al. London: Royal College of General Practitioners (UK) 2008]. K. Singh, I. Ogeer, R. Bachus, and K. Mungrue, University of the West Indies, Trinidad and Tobago, presented a poster on the Evaluation of Cardiovascular Risk Factors in Asymptomatic Individuals in a Trinidadian Community. The primary objective of the study was to evaluate cardiovascular (CV) risk factors in asymptomatic individuals.

Framingham risk score models have performed well in United States populations but do not predict risk as well when applied to populations that are substantially different from the source cohort [Matheny M et al. Agency for Healthcare Research and Quality (US) 2011]. Qrisk, which was developed in Great Britain, encompasses traditional and newer risk factors, such as atrial fibrillation and rheumatoid arthritis. Singh et al. used a cross-sectional design and pretested questionnaire to collect data from 151 participants on relevant CV risk factors.

Outcomes showed that 6.6% of participants had a Qrisk score >20; 23 (15%) were current smokers; and 50.7% consumed alcoholic beverages. In addition, a large proportion consumed a Western-style diet only; 51.6% did not engage in physical activity; and only 48% ate fruits on a regular basis.

The authors concluded that a significant proportion of asymptomatic patients have risk factors, as identified using the Qrisk score, and underscored the need for effective prevention strategies. As CV outcomes were not followed, it is unclear whether the Qrisk score performed better than the Framingham risk score in this population.

The Occurrence of LVH In Normotensive Individuals In A Community Setting In Northeast Trinidad

Written by Maria Vinall

The performance of the Cornell or Sokolow-Lyon voltage criteria, which were established in the developed world from populations of vastly different ethnic backgrounds, has not been evaluated for the detection of left ventricular hypertrophy (LVH) in Trinidadians. In the first study of its kind to be conducted in Trinidad, the estimated prevalence of LVH appears to be relatively high if ECG is the single investigation that is performed. However, it approaches a value that is similar to that in the literature when echocardiography (ECHO) is performed. Romel Bacchus, MD, University of West Indies, Mt. Hope, Trinidad, presented poster data that showed the value of using ECHO in individuals who are suspected of having LVH.

LVH is an independent predictor of cardiovascular morbidity and mortality and can occur in normotensive individuals or those without any recognized underlying pathology. Healthy participants (n=209) with normal blood pressure (<140/90 mm Hg), no previous history of type 2 diabetes or hypertension, or no existing LVH that is confirmed by ECHO were enrolled in a cross-sectional study. The study participants (mostly women in their mid-30s) consisted of Southeast Asians, Africans, and those of mixed descent.

Using ECG and the Sokolow-Lyon criteria, 10.5% of normotensives were diagnosed with LVH, while ECG and the Cornel criteria detected 5.3%. Using the American Society of Echocardiography criteria and World Health Organization criteria, ECHO confirmed the diagnosis of LVH in 2.9% and 1.5% of normotensive individuals, respectively, in both ECG groups. Pearson's correlation coeffficient indicated that the Cornel criteria were a more accurate measurement of LVH compared with the Sokolow-Lyon criteria.

Although limited by its small sample size, this study suggests that ECHO should be used for all patients who are suspected of having LVH. The low pretest probability of LVH in this cohort, largely comprising women in their mid-30s, may have impacted test performance. Larger studies that involve a broader group of patients are recommended.

Further reading: Bacchus R et al. *Vasc Health Risk Manag* 2011;7:327–332.

Symptom Recognition of AMI Among Patients Attending Primary Care Facilities in North-Central Trinidad

Written by Maria Vinall

Educating the public about acute myocardial infarction (AMI) may be an important tool for reducing risks of morbidity and mortality. In a study that was presented by S. Bhola, University of West Indies, St. Augustine, Trinidad and Tobago, over 75% of patients reported never discussing symptoms of AMI with a health care professional.

This prospective observational study was designed to assess the level of knowledge that patients have concerning AMI and the percentage who are able to recognize the symptoms of AMI. Patients (n=200) aged ≥40 years with 2 or more coronary artery disease (CAD) risk factors and an increased 10-year risk for CAD were randomy selected for the study. The majority of the participants was aged between 51 and 60 years (75%), female (59%), and of East Indian ethnic background. The questionnaire assessed patients' knowledge of AMI symptoms, the presence of risk factors for CAD, and sociodemographic characteristics.

Patients with a previous history of AMI obtained better knowledge scores in comparison with those with no prior history. However, these patients were still unable to fully recognize all of the symptoms of an AMI, as the majority only obtained a good knowledge score compared with the well informed. Shortness of breath (78%), severe chest pain (71.5%), and diaphoresis (69.0%) were the most commonly identified symptoms. A previous discussion with a health care professional significantly improved scores (p=0.011), as did a family history of AMI (p<0.05).

As the longest time interval delay is from the time of symptom recognition to the decision to seek treatment, it would be beneficial to implement strategies to educate the public concerning AMI symptoms and the importance of seeking immediate medical attention once the symptoms are identified.