The Murmur

What's new in Cardiology

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PRACTISING

Clinical Cardiology

Transoesophageal Echocardiography

Echocardiography

Stress Echocardiography

Contrast Echocardiography

Dobutamine Stress Echocardiography

Stress Testing

Holter Monitoring

Event Monitoring

Ambulatory BP Monitoring

Pacemaker and Defibrillator Follow-up

I am excited to announce that we are hosting the second HeartRx GP Symposium on May 14th the Sea Temple, Palm Cove. We aim to work with our GP's to offer the best standard in heart care for our patients and our Cardiologists are keen to provide informative education in their area of speciality in a relaxed setting. Details of the Symposium are included in this newsletter and invitations have been sent. We look forward to seeing you there and please contact us if you have not received your invitation.

Dr Tim Carruthers

HEARTRX SYMPOSIUM Saturday 14th May

Program

11.00-11.30	Registration/coffee/chat
11.30-11.35	Welcome/Introduction Dr Tim Carruthers
11.35-12.20	**"Cardiovascular risk in the diabetic patient"** Dr Greg Starmer Interventional Cardiologist
12.20 –1.00	**"Heart Failure - the latest and greatest!"** Dr Sam Hillier Imaging Cardiologist
1.00-1.30	Lunch
1.30-2.15	**"Non STEMI'S - after the dust has settled!"** **" PCSK9 Inhibitors are here"** Dr Shane Preston Interventional Cardiologist
2.15-3.00	**"Rheumatic Heart Disease in FNQ Children"** Dr Ben Reeves Paediatric Cardiologist
3.00-3.30	Coffee break
3.30-4.15	**"Interesting cases - pericarditis and endocarditis for review"** Dr Ram Saireddy Interventional Cardiologist
4.15-4.35	**"Now we can reverse - NOAC management"** Dr Tim Carruthers Consultant Cardiologist
4.35-5.00	Round table discussion and questions

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Lipid-Lowering Therapy in 2016

We are on the verge of entering a new era in managing cholesterol, in particular LDL, with the imminent arrival of a new class of agents – the PCSK-9 inhibitors. There is strong evidence that these new agents significantly lower LDL over and above statin therapy, and their effect on clinical outcomes in large randomized trials is eagerly anticipated. With these new (and expensive) agents on the horizon, it is worth considering the evidence and justification for lowering cholesterol with the agents currently at our disposal, with a particular focus on statins.

When confronted with patient with elevated cholesterol, consideration should be given to what outcome is being sought, and if they require treatment at all. Initially, a sub-classification into primary (those with no history of cardiovascular events) or secondary prevention (patients with a history of prior cardiovascular events) is useful. In the case of secondary prevention, there is robust clinical data for a significant reduction in major adverse cardiac events with statin use.

Statin therapy for primary prevention is perhaps where some of the controversy exists and I find it useful to further sub-classify this group into; Familial dyslipidaemia's, elevated LDL in diabetic patients, elevated LDL with high 10yr risk score, and elevated LDL in patients with a low or intermediate 10yr risk score. In patients with a familial, or likely familial, dyslipidaemia, and in patients with diabetes, the guidelines, supported by evidence, suggest a benefit from statin therapy.

The Jupiter trial, looking at the benefit of Rosuvastatin in patients with elevated LDL and a high risk for future cardiovascular events, also suggested benefit in this group.

In patients with an elevated LDL, but at low or intermediate 10yr risk for cardiovascular events as assessed by a validated risk score, little evidence is available to support a net clinical benefit of statin therapy, and therefore consideration should be given to other options, with ongoing clinical follow-up to monitor risk. A summary of these groups and recommendations is provided in the table:

Category	Recommendation
Secondary prevention	High-Intensity Statin
Familial Dyslipidaemia	High-Intensity Statin
Elevated LDL and Diabetes	Moderate to high-Intensity Statin
Elevated LDL and high estimated10yr risk of adverse CV events	Moderate-Intensity Statin.
Elevated LDL and low-intermediate estimated 10yr risk of adverse CV events	Surveillance and lifestyle modification.

Recently, media outlets have focused on the negative elements of statin therapy in primary prevention, and whilst some justification can be made for this in certain individuals, it is important to carefully explain to our patients that in the correct clinical situation, guidelines, backed by robust scientist evidence, supports the use of these agents to significantly lower the risk of adverse cardiovascular outcomes.

References:

Rosuvastatin to prevent vascular events in men and women with elevated CRP; Ridker et al, NEJM, 2008; 359;21; 2195-2207

Comparative benefit of statins in the primary and secondary prevention of major coronary events and all-cause mortality: A network meta-analysis of placebo-controlled active comparator trials; Naci et al, European Jnl of preventative cardiology; 20 (4); 641-57

ESC guidelines on the management of patients with dyslipidaemia: EHJ; 2014: 35; 960-68

Dr Greg Starmer

Vaccination in Heart Failure

Heart failure patients are prone to infections and complications from vaccine preventable infections such as Influenza and Pneumococcus. This is due to several factors such as old age, malnutrition, multi-organ damage, metabolic abnormalities and depressed immunity.

Influenza vaccination: Influenza results in increased hospital admissions; longer hospital stays and increased mortality in heart failure patients. Vaccination against influenza reduces cardiac related hospital admissions, acute heart failure exacerbations and all cause mortality. It is estimated that 1 death is prevented for every 122 annual vaccinations in individuals over 65 years with congestive heart failure or coronary artery disease.

Caution should however be exercised in patients in heart failure due to autoimmune myocardial disease. Viral fragment or purified surface antigen vaccine is recommended over live attenuated vaccine.

Pneumococcal vaccination: Annual vaccine is recommended especially in patients with chronic bronchitis and heart failure. Patients with heart failure appear to be more prone to respiratory infections in general.

Hepatitis B vaccine: Vaccination is recommended in Hepatitis B sero-negative heart failure patients especially in those with a serious prospect of joining a heart transplant program. Vaccination should be undertaken if possible before significant clinical deterioration as depressed immunity results in sub-optimal immune response. It is usually effective for over 10 years.

References:

Influenza Vaccination as Secondary Prevention for Cardiovascular Disease: *A Science Advisory From the American Heart Association/ American College of Cardiology*
Influenza Vaccination in Patients With Chronic Heart Failure: The PARADIGM-HF Trial. *Vardeny et al; PARADIGM-HF Investigators. JACC Heart Fail. 2016 Feb;4(2):152-8.*
Risk factors for community-acquired pneumonia in adults in Europe: a literature review. *Torres A, et al. Thorax 2013;68:1057–1065*
Risk factors for pneumonia in the elderly. Irma Koivula, et al. *The American Journal of Medicine. April 1994. Volume 96, Issue 4, Pages 313–320*

Dr Ram Saireddy