Cardiology update

Dr Fiona Stewart

Cardiologist, Auckland City Hospital

The past 2 years have been dominated by COVID, initially with concerns about the risk of myocarditis and pericarditis from the Pfizer mRNA vaccine and then about cardiac complications of COVID infections. COVID infections are associated with increased risk for myocarditis, arrhythmias and coronary events acutely and in the 2 years following infection rates of coronary events and stroke are increased. In children the multi system inflammatory syndrome MIS-C is also reported. We re beginning to understand the increased risk of surgery (and anaesthesia) in the first 2 months following a COVID infection and Long COVID is occurring in a small but significant number of previously well patients. Long COVID has many features in common with other dysautonomias including POTS (postural orthostatic tachycardic syndrome) and Orthostatic Intolerance. Patients with Long COVID can deteriorate further if anaesthetised. Throughout the COVID period many patients have not received adequate routine medical care and may have poorly controlled hypertension, undetected significant valvular heart disease or biochemical abnormalities.

In assessing risk for coronary disease the new European Guidelines now look at Lifetime Risk as well as 10 year risk. New risk factors have been identified for women including adverse pregnancy outcomes (pre-eclampsia and gestational hypertension, intrauterine growth restriction, gestational diabetes), polycystic ovaries, endometriosis, premature menopause and chest radiotherapy particularly for left sided breast cancer.

The ISCHAEMIA study utilised early CTCA for the assessment of chest pain. Patients with left main stem or proximal LAD disease all proceeded to invasive angiography but for the remaining patients, outcomes were similar with medical therapy or invasive angiography.

The appropriate duration of dual antiplatelet therapy following PCI (and triple therapy with NOACs for patients who also have AF) has been better defined according to patient risk.

TAVI AVR is now the preferred approach for most patients with severe AS aged over 75 but SAVR is preferred in younger age groups.

Several studies have shown the benefit of early rhythm control for patients with AF.

SGLT2 inhibitors are the first class of drugs to show benefit in the management of patients with HFpEF. Their benefit has been demonstrated in patients with HFrEF and in patients with impaired renal function.

Mavacamten an inhibitor of β-cardiac myosin is the first agent that has been shown to reduce hypercontractility in HCM and improve patient symptoms.