Abstracts

wills affect the responder rate. Intraoperative factors including the position of the left ventricular lead in relationship to the region of delay electrical activation also has been shown to affect the clinical outcome of CRT. Last but not the least, post-operatively the effectiveness of delivery of CRT which may be affected by condition like atrial fibrillation or frequent premature ventricular complex has significant impact on responder rate. In order to improve outcome of CRT, especially in those known to be poor responder including patient with right bundle branch block type of conduction abnormality, effort including that from our centre, is paid to understand the pattern of conduction delay in left ventricle and tailor-made the configuration of pacing therapy delivery by high intensity noninvasive global mapping system to improve the activation delay and dysynchrony and hence improve the clinical response of such patient to CRT.

10 PRE-OPERATIVE MULTIMODALITY IMAGING FOR LVAD
Teerapat Yingchoncharoen. Ramathibodi Hospital and Mahidol University, Bangkok, Thailand
10.1136/heartasia-2018-apa110

Cardiac imaging, particularly echocardiography, plays a critical role in patient selection and in predicting post-operative complications. There are several pre-implantation imaging red flags that guide intraoperative concomitant procedures consideration and may predict post-operative outcomes.

The pre-operative imaging should include assessment of the left ventricle (LV), especially with attention to the LV cavity size, the presence of prominent trabecular or LV thrombus which may lead to LV assist device (LVAD) suction events, inflow cannula obstruction or thromboembolic events.

Assessment of right ventricular (RV) function is one of the most important pre-operative evaluation. This talk will discuss the advantages and disadvantages of imaging modality in pre-operative assessment of RV function for LVAD patients, and the assessment of valvular function. The presence of aortic insufficiency, mitral stenosis or tricuspid insufficiency that is greater than moderate degree must be corrected. The presence of patent foramen ovale may lead to post-operative persistent hypoaxemia. Aortic aneurysm, aortic dissection and aortic atheroma may impact cannula placement, leading to dissection progression or increased risk of thromboembolic stroke. These findings are red flags and should be documented and discussed with the surgeon before the time of surgery.

REFERENCE

11 SUCCESS WITH MCS – STARTING FROM PATIENT SELECTION
Jakob R Lahpor. Department of Cardiothoracic Surgery, University Medical Centre Utrecht, Utrecht, The Netherlands
10.1136/heartasia-2018-apa111

Since the introduction of continuous flow (CF-)VADs a decade ago, early and mid-term survival rates have dramatically improved with 1 year survival of 85% or higher. These better survival rates should not only be attributed to improvement in technology and patient management but also to better patient selection and better timing of implantation. From the REMATCH study (2001) with the pulsatile HeartMate 1 LVAS we learned that the high 6 month mortality of 40% was mainly a result of poor selection of patients. Since the introduction of CF-VADs in 2008, the INTERMACS registry has shown a significant reduction in INTERMACS Profile 1 (‘crashing and burning’) VAD patients at the time of implantation, resulting in 6 month survival rates of 90% or higher. Also, the HeartMate II ROADMAP Study has shown that earlier implantation in less sick non-hospitalised patients results in statistically better survival. During the last decade, introduction of individual patient risk profiles such as the Lietz-Miller score, Michigan Score (Matthews, 2008) and the HeartMate II risk score has attributed to improved patient selection. In this regard in many publications the importance of pre-implant assessment by ultrasound or haemodynamic metrics of the right ventricular function and its pre- and after-load (i.e. pulmonary vascular resistance or PVR) has been stressed to optimise the patient obtaining a better result of VAD implantation. This has resulted in many other risk stratifications such as the EuroMACS Right-Sided Heart Failure Risk or the TTE score (Raina, 2013).

12 EFFECTIVENESS OF SIMULTANEOUS CARDIAC RESYNCHRONISATION THERAPY IN SURGICAL VALVULAR PATIENTS WITH SEVERE HEART FAILURE
Tetsuro Uchida. Second Department of Surgery, Yamagata University Faculty of Medicine, Yamagata, Japan
10.1136/heartasia-2018-apa112

Background Cardiac resynchronisation therapy (CRT) is an adjunct to medical therapy in managing severe heart failure (HF) patients. Despite advances in CRT, valvular heart disease (VHD) is currently a specific exclusion criterion and response to therapy in this setting remains unclear. This study aims to determine the effectiveness of CRT in HF patients undergoing valvular operation simultaneously.

Methods Between 2010 and 2016, 15 HF patients who underwent CRT in conjunction with valvular surgery were studied. Right and left ventricular and atrial epicardial leads were implanted after completion of valvular procedures. In patients with chronic atrial fibrillation (AF), Maze procedure was performed. To evaluate the improvement of ventricular mechanical dysynchrony, echocardiographic assessment was repeated on admission and 1 month after CRT implantation.

Results There was no operative death. One patient with ischaemic cardiomyopathy died of sustained ventricular tachycardia two months after the operation. Post-operative course of severe HF