

APAHFF Abstracts 2017

1 HEART FUNCTION REPLACEMENT: THE CURRENT STATE AND A LOOK INTO THE FUTURE

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10.1136/heartasia-2018-aphaff.1

There is an epidemic of advanced heart failure across developed countries. For those who are refractory to medical and/or device therapies, cardiac replacement can improve quality of life and life expectancy.

Fifty years on from the first successful human case, heart transplantation remains the most effective treatment for advanced heart failure with <5% 30 day post-transplant mortality and median survival approaching 14 years. However, there is a severe shortage of suitable donor hearts.

Conventionally, only hearts from donation after brain dead (DBD) are considered for transplantation. After careful assessment, 25% to 30% of DBD hearts go on to be retrieved and transplanted. The rest are declined due to donor medical history, poor function, coronary artery disease, hypertrophy etc. The challenge over the last decade has been to increase DBD heart utilisation and to identify other donor pools.

In recent years, targeted early donor management of DBD donors by a member of the cardiothoracic retrieval team at the donor ICU, or 'scouting', has been shown to increase the percentage of DBD hearts retrieved and transplanted.¹ The other major development has been the use of reconditioned asystolic hearts from donation after circulatory death (DCD). Here, withdrawal of life supporting therapy results in hypoventilation, hypoxia and systemic hypotension. Eventually, profound cardiac ischaemia results in cardiac arrest. After a mandatory observation period of five or more minutes, death is legally confirmed. A combination of *in-situ* and *ex-situ* perfusion techniques have been successfully used to re-animate asystolic DCD hearts for consideration of transplantation.^{2 3}

REFERENCES

1. Retrieval team initiated early donor management (scouting) increases donor heart acceptance rate for transplantation. *J Heart Lung Transplant* 2016;**35**:S220. <http://dx.doi.org/10.1016/j.healun.2016.01.620>
2. Functional assessment and transplantation of the donor heart after circulatory death. *J Heart Lung Transplant* 2016;**35**:1443–1452.
3. Outcome following heart transplantation from donation after circulatory determined death (DCD) donors. <http://dx.doi.org/10.1016/j.healun.2017.10.021>

2 THE CHALLENGES AND TRIUMPHS OF ESTABLISHING A HEART FAILURE PROGRAMME IN SINGAPORE

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10.1136/heartasia-2018-aphaff.2

Heart failure (HF) is a major global healthcare problem with an estimated prevalence of approximately 26 million. In Asia-Pacific regions, HF is associated with a significant socio-economic burden and high rates of hospital admission.^{1 2} Though undesirable, hospitalisation is an opportunity to optimise HF therapy and advise clinicians and patients about the importance of continued adherence to HF medication and regular monitoring. Epidemiological data that could help to improve management approaches to address this burden in Asia-Pacific

regions are limited, but suggest patients with HF in the Asia-Pacific are younger and have more severe signs and symptoms of HF than those of Western countries.^{3 4} The Heart Failure Care Program in the National Heart Centre Singapore which has been implemented since 2002, is designed to improve outcomes following HF hospitalisation through inexpensive initiatives to improve prescription of evidence-based drug therapies, patient education and engagement, and post-discharge planning in care and treatment adherence. Factors leading to successful implementation include support from HF specialists and local hospital leaders, multi-disciplinary collaboration, and full integration of pre- and post-hospital discharge checklists across care services.⁴ Effective evidence-based care can be achieved through the use of simple clinician and patient-focused tools. Our experience supports implementation of a more comprehensive and organised approach to HF care in Asia.

REFERENCES

1. Reyes EB, Ha JW, Firdaus I, *et al.* Heart Failure Across Asia: Same healthcare burden but differences in organisation of care. *Int J Cardiol* 2016;**223**:163–167.
2. Cowie MR, Lopatin YM, Saldarriaga C, *et al.* The Optimise Heart Failure Care Program: Initial lessons from global implementation. *Int J Cardiol* 2017;**236**:340–344.
3. Lam CSP, Teng THK, Tay WT, *et al.* Regional and ethnic differences among patients with heart failure in Asia: the Asian sudden cardiac death in heart failure registry. *Eur Heart J* 2016; **37**: 3141–3153.
4. Rajadurai J, Tse HF, Wang CH, *et al.* Understanding the epidemiology of heart failure to improve management practices: an Asian Pacific perspective. *J Card Fail* 2017;**23**:327–339.

3 EXPERIENCE OF LVAD AS DESTINATION THERAPY AT RAMATHIBODI HOSPITAL, BANGKOK

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10.1136/heartasia-2018-aphaff.3

Setting up a new left ventricular assist device (LVAD) centre in a low-income country is challenging. Here we present our first case of long-term LVAD as destination therapy. The case illustrated the team effort and importance of the Heart Failure Team (heart failure cardiologists, cardiothoracic surgeons and VAD coordinators), nursing services, hospital administrators and other supportive services (nutrition, social services, physical/rehabilitation services, and finance and data management).

In brief, this was a case of a 74-year-old gentleman who had suffered from ischaemic cardiomyopathy (LVEF 22%) and had been hospitalised more than twice in the preceding six months due to decompensated heart failure (New York Heart Association functional class IV). He subsequently underwent HeartMate3 implantation successfully. This case demonstrates the process of patient selection, pre-operative and post-operative management as well as long-term follow-up of LVAD patients.

4 BRIDGES TO TRANSPLANT

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10.1136/heartasia-2018-aphaff.4

Heart transplantation remains the gold standard treatment for end-stage heart failure. By definition, these patients are