## INDIAN HEART JOURNAL 66 (2014) SI-SI43

Table. Documentation of HF medications use from any outpatient encounter in patients with EF $\leq$ 40% by various subgroups.								
Medications (any use)	Men [N= 1225]	Women [N= 3679]	<65 years [N= 11874]	≥65 years [N= 3949]	Receiving care in a practice with EMR [N=15726]	Receiving care in practice without EMR [N=214]	History of MI [N= 2758]	No history of MI [N= 13182]
ACE-I or ARB n, (%)	4232(34.5)	1025(27.9)	3804(32.0)	1418(35.9)	5197(33.1)	60 (28.0)	1408(51.1)	3849 (29.2)
Beta blockers n, (%)	4381(35.7)	1069(29.1)	3949(33.3)	1486(37.6)	5407(34.4)	43 (20.1)	1454(52.7)	3996 (30.3)
ACE-I/ARB and beta blocker n, (%)	3768(30.7)	879(23.9)	3366(28.4)	1273 (32.2)	4630(29.4)	17 (7.9)	1342 (48.7)	3305 (25.1)

ACE-I: angiotensin converting enzyme inhibitor, ARB: angiotensin receptor blocker, EF: ejection fraction, EMR: electronic medical record, HF: heart failure, MI: myocardial infarction

## A decade with heart transplantation – Single centre experience

K.M. Cherian, A.G. Narayanaswamy

Frontier Lifeline Hospital & Dr.K.M. Cherian Heart Foundation, Chennai, India

**Background**: Heart transplantation is being done at Frontier Lifeline Hospital & DR. K.M. Cherian Heart Foundation, Chennai since 2004. So far 41 heart transplants have taken place till date.

Methods and Results: A vast majority 80% of the transplant recipients were male. A majority i.e 46% of the transplant recipients were in the age group of 41 - 60 yrs and 36% of the transplant recipients are in the age group of 21 - 40 yrs and 17% were in the age group 0 -20 yrs old.

The major cause for cardiac transplantation is Dilated Cardiomyopathy in 65% of the patients, Ischemic Cardiomyopathy in 17% and the rest were diagnosed as Restrictive Cardiomyopathy, Hypertrophic Cardiomyopathy and Cardiac Tumor.

A vast majority 85% of the transplant recipient hearts were taken from the hospitals in Chennai through ambulance (road) and the remaining 15% of the hearts were taken from outside Chennai through flight & ambulance (Vellore, Madurai, Bangalore, Coimbatore).

Majority of the transplant surgeries were done by Bicaval technique. Immunosuppressant protocol started with induction in 50% of patients. Immunosuppressants used were cyclosporine 70%, tacrolimus 30%, mycophenolate 100% and prednisolone 100%.

No endomyocardial biopsy was done, evaluation of rejection is done by ECHO criteria only. The causes of death among post transplant patients were mostly infections, especially fungal in 90%, late rejection occurred 50% of transplant patients, early renal failure in 70%, Anemia in 10%, complete heart block in 1% and infection of urinary tract in 10% of patients.

**Conclusion**: Heart transplantation is here to stay. After changes in our strategies of induction therapy and modification of immunosuppression, our survival rates have improved.

## ECG changes after heart transplantation – Single center experience of a decade

A.G. Narayanaswamy, S. Anandan, A. Johnson, K.M. Cherian

Frontier Lifeline Hospital & Dr.K.M. Cherian Heart Foundation, Chennai, India **Background**: Frontier Lifeline Hospital & DR. K.M. Cherian Heart Foundation, Chennai has done maximum number of Heart Transplants in India to our knowledge. The study reviews the static and dynamic ECG changes seen in 41 heart transplantation patients done in our center.

**Methods & Results**: ECG changes post transplantation can be divided into two groups.

Fixed ECG changes which persists with the patients all through his life. These fixed ECG changes appeared first time after heart transplantation. These changes were right bundle branch block in 26% of patients, left bundle branch block in 10.52% & Sinus tachycardia 5.26%, right axis deviation in 10.52%, left axis deviation in 5.26%, poor R wave progression in 18.4%, Prolonged PR interval 5.26%.

Dynamic ECG changes occurring anytime during post heart transplantation which were of benign prognosis. There were VPC's especially VPC's with LBBB morphology. LAE occurred usually after 1 year of heart transplantation in 18% patients.

ECG changes major prognostic implication were junctional tachycardia 2%, prolonged PR interval 8%, prolonged QTC interval 4%, decreased in QRS amplitude of ECG's which portended a bad prognosis 20%. Subsequent in size of QRS amplitude meant a better prognosis. This is perhaps the largest number presented to our knowledge with Indian patients.

## Diagnostic issues in DCM: A proposal for universal definition based on LV end systolic dimension

Venkatesan Sangareddi, Arun Ranganathan, Sundar Chidambaram

Madras Medical College, Chennai, India

Background: Dilated cardiomyopathy (DCM) is a common clinical cardiology problem. Still, there is no uniform definition for this entity. One popular definition for DCM is based on following parameters (1)LVEF  $\leq$  45% (2) fractional shortening  $\leq$  25% and (3) LVEDD  $\geq$  112% predicted value corrected for age and body surface area. By tradition we use EDD to define LV dilatation but hemodynamic principles would suggest LV ESD may be ideal to define DCM as it is less dependent on preload. Further if MR is associated it can confound LVEDD.

**Methods**: In this context, we analysed the relationship between LV ESD, EDD, EF% and the impact of treatment on these parameters. 25 patients with DCM who were attending our OPD were the subjects of the study.