ejection fraction changed in a negative direction in patients of ADHF who are troponin positive.

Though from the present study, we got some positive directions in making prognostic correlation of ADHF patients with troponin positivity, further large prospective randomized trials are necessary before coming to definite conclusion in making recommendation for doing quantitative troponin T in all patients of acute decompensated heart failure for prognosis and guiding therapy.

Post renal transplantation – Effect on ventricular dysfunction and pulmonary hypertension

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Background: Heart disease is a frequent complication of chronic kidney disease and the major cause of death in patients on renal replacement therapy. The purpose of this study was to evaluate the impact of successful renal transplantation on systolic and diastolicventricular dysfunction and pulmonary arterial hypertension in patients with chronic kidney disease (CKD).
Methods: The study included 35 patients >18 years of age with CKD who had successful kidney transplantations. Ventricular function and pulmonary arterial pressure were evaluated by echocardiography before and 1 year after transplant.
Results: The mean age of subjects was 40 _+ 14 years, and 63% were men. Mean left ventricular ejection fraction (LVEF) was 52 +_ 16%. Before transplant, 28 (80%) of the patients had ventricular dysfunction (34.3% diastolic and 45.7% systolic). Pulmonary arterial hypertension was found in 48.6%. Ventricular dysfunction was associated with dialysis of >2 years duration before transplant. The LVEF of the entire group increased from 52% to 64% ($P < .001$) by 12 months after kidney transplant. Left ventricular diameters, wall thickness, and pulmonary arterial systolic pressure decreased significantly after transplantation Echocardiograms became normal 1 year after transplant in 8 (66.7%) of the patients with diastolic dysfunction and 9 (56.2%) with systolic dysfunction, and diastolic dysfunction persisted in 5 (31.2%).
Conclusions: Renal transplantation has led to considerable improvement in left ventricular systolic and diastolic function as well as pulmonary arterial pressure of patients with CKD, optimal treatment for dysfunction and transplant as soon as possible is recommended.

Echocardiographic parameters and cardiac failure in end-stage renal disease on vigorous hemodialysis

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Background: Abnormal Echocardiographic parameters are seen in all patients starting dialysis therapy and are associated with the development of cardiac failure and death.
Objective: to know whether regression of cardiac abnormalities is associated with an improvement in prognosis with vigorous renal dialysis.
Methods: As part of a prospective cohort study with mean follow-up of 6 mo, 57 patients had echocardiography at inception and after 1 week of vigorous renal dialysis therapy.
Results: Improvements in left ventricular (LV) mass index, volume index, and fractional shortening were seen in 48, 48, and 46%, respectively. Twenty-four patients had developed cardiac failure by 6 months of dialysis therapy. Twenty-six percent of the remaining 27 patients subsequently developed new-onset cardiac failure. The mean changes in LV mass index were 17 g/m(2) in those who subsequently developed cardiac failure compared with 0 g/m(2) among those who did not ($P = 0.05$). The corresponding values were -8 versus 0% for fractional shortening ($P < 0.0001$).
Conclusion: Regression of LV abnormalities is associated with an improved cardiac outcome in endstage renal disease patients on vigorous dialysis.

Heart failure etiologies, management and outcomes in hospitalized and clinic-based patients

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Background: There are no contemporary data on etiologies, management and outcomes of heart failure in India. To determine etiologies and management of heart failure in hospital- and clinic-based patients in India we performed a study.
Methods: Successive patients presenting to a tertiary care non-government hospital with acute decompensated heart failure (ADHF, n=102) and stable heart failure (SHF, n=179) were enrolled. Both the groups were followed for 90 days. Etiology of heart failure was diagnosed using clinical examination and echocardiography. Details of in-hospital, discharge and 90-day medications were obtained in both groups. Outcomes (mortality) data were recorded. Descriptive statistics are reported.
Results: Prevalence of various cardiovascular diseases in ADHF vs SHF patients, respectively, was coronary heart disease 50.0 vs 53.6%, hypertension 60.8 vs 44.7%, cardiomyopathy 16.7vs 7.3%, rheumatic heart disease 4.9 vs 14.0%, and hypertrophic cardiomyopathy 1.0 vs 7.3%. Heart failure with normal ejection fraction was in 23 ADHF and 2 SHF patients. In-hospital treatments included diuretics, nitrates, angiotensin converting enzyme (ACE) inhibitors, digoxin, anticoagulants and vasopressors. At discharge significantly greater number of patients with ADHF vs SHF were on loop-diuretics (95.5 vs 78.2%), anti-platelets (74.4 vs 64.2%) and anti-arrhythmics (23.3 vs 6.1%) while lesser were on thiazides (1.5 vs 9.5%), anti-aldosterone (33.4 vs 43.0%), ACE inhibitors (30.0 vs 35.2%), angiotensin receptor blockers (ARBs, 4.5 vs 40.8%) and beta-blockers (33.4 vs 45.8%) ($p<0.05$). Use of digoxin {28.9 vs 31.8%), nitrates (32.2 vs 30.7%) and anticoagulants (11.1 vs 8.9%) was similar. At 90 days, in ADHF vs SHF patients lower use of ACE inhibitors (42.4 vs00.0%) and ARBs (4.5 vs. 0.0%) and similar use of beta-blockers (48.5 vs00.0%) was observed. In ADHF patients, in-hospital mortality was 10.3% (n=11). Cumulative 90-day mortality in ADHF was 45.0% (n=46) while in SHF patients was 1.1% (n=7) ($p<0.05$).
Conclusions: This study shows that coronary and hypertensive heart diseases are important causes of heart failure at a tertiary-

care hospital in India. Rheumatic heart disease and primary cardiomyopathies are also present in significant proportion. In ADHF patients there is low use of evidence-based therapies (ACE inhibitors/ARBs, beta-blockers) and short-term mortality is high.

Hypertension

Evaluation and assessment of rosuvastatin 40 mg treatment in high risk dyslipidemic patients (EARTH Study)

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Background: Rosuvastatin is commonly used in the treatment of dyslipidemia, however, studies with rosuvastatin 40 mg in Indian patients with high cardiovascular risk are lacking.
Objective: To assess the safety and efficacy of **rosuvastatin** 40mg in dyslipidemic patients with high cardiovascular risk.
Methods: In an open label, non-comparative, multicentric, post marketing observational study, 574 Indian patients were enrolled. Treatment was started with **rosuvastatin** 40 mg once daily for one month. After one month, patients achieving target goal of LDL-C < 70 mg/dl were shifted to r**osuvastatin** 20 mg once daily for next two months and those not achieving were continued on 40mg. At third month, patients achieving LDL-C < 70 mg/dl continued 20 mg and those not achieving the target goal were continued on 40mg for next three months. Lipid profile was repeated after six month. The primary evaluation parameter was percentage of patients achieving target serum LDL-C goal < 70 mg/dl at the end of one, three and six month. The secondary evaluation parameters included percentage reduction in serum LDL-C, serum. total cholesterol, serum triglyceride and percentage increase in S. HDL-C level at the end of one, three and six month, and effect on serum creatinine at six months. Global assessment for efficacy and tolerability was recorded by the doctor and patient at the end of six months. All adverse events were also recorded.
Results: Compared to baseline, there was significant increase in number of patients achieving serum LDL <70 mg/dl at one, three and six months. Similarly, significant reduction in serum LDL, total cholesterol and triglyceride level and increase in HDL was seen at one, three and six months. There was no significant effect on serum creatinine level. Most of the patients reported efficacy as either excellent or good as evaluated by both doctors and patients. Close to 95% of the patients reported tolerability as "good" as per global evaluation of tolerability by patients as well as doctors. Rosuvastatin was generally well tolerated. The incidence of adverse event was 9.9% with headache, myalgia, constipation and vomiting being the commonly reported adverse events. All the adverse events were of mild to moderate intensity and all of them resolved during the treatment. None of the patient required termination of treatment because of adverse event.
Conclusion: Rosuvastatin is effective and well tolerated medicine for the treatment of dyslipidemic patients with high cardiovascular risk.

Efficacy and safety of Telmisartan alone or in combination with hydrochlorothiazide in patients of essential hypertension

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Background: This study was conducted to evaluate the effect of telmisartan or telmisartan with hydrochlorothiazide (HCTZ) with or without patient's education about the blood pressure (BP). This education was focused on the reduction of body weight and healthy life-style.
Methods: 922 patients of essential hypertension were included in this study. The inclusion criteria were: essential hypertension (BP≥140/90 mmHg or BP≥130/80 mmHg in diabetic patients), age > 18 year and treatment of hypertension with at least one of the above anti-hypertensive drug. A total of 387 patients were treated with telmisartan and 535 patients with telmisartan with HCTZ. The randomization ratio for life style programme was 2:1. The life style programme included a 30 mins structured interview and written detailed materials focused on the healthy life style, diet and weight reduction. Patients were followed up at 4 to 8 weeks intervals.
Results: The decrease of BP (both systolic & diastolic) during telmisartan/telmisartan with HCTZ treatment was statistically highly significant (P<0.001). The decrease of BP below 140/90 mmHg was attained in 78.55% patients treated with telmisartan and in 66.64% patients treated with telmisartan with HCTZ. The final BP values (both systolic and diastolic) of patients enrolled in the life style programme were not significant different from the BP value in patients without the life style programme. The life-style programme had more "normotensive" patients (73.41%) than the patients not enrolled in the life style programme (69.70%). The difference was not significant. The mean decrease of body weight in the life-style programme patients was 2.64±4.11 kg, which was significantly more than in the non-life style programme patients (0.65±3.85 kg, p<0.05).
Conclusions: The telmisartan either alone or in combination with hydrochlorothiazide is an effective and safe anti-hypertensive drug. The educational programme led to the decrease of body weight, but did not significantly change the BP values.

Efficacy and tolerance of cilnidipine in cases of amlodipine – Induced edema in hypertensives patients

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Background: Ankle oedema is a common adverse effect of Amlodipine, a widely used L-type Calcium Channel Blocker (CCB), seen in about 15% of patients receiving the drug. Cilnidipine is a newer third generation L/N-type CCB and is approved for the treatment of essential hypertension. This study was, therefore, planned to determine whether Cilnidipine therapy can produce resolution of Amlodipine-induced oedema while maintaining adequate control of blood pressure.
Methods: This study was carried out on 56 patients of essential hypertension with Amlodipine-induced oedema. Concomitant