

showed normal lactate (mean 0.89, $p < 0.02$); mean PA pressures reduced to 20 mmHg ($p < 0.05$) within 36 h. There was complete recovery in all. No recurrences observed in average 7 months (range 4-24 months) follow-up.

Conclusion: Early clinical suspicion of cardiac beriberi is extremely important in infants with low SE strata presenting with unexplained CHF and severe PAH.

Bicuspid aortic valve with restrictive cardiomyopathy – A rare case report



N. Praveen

Post Graduate, 3-4-526/36/303 Thrayarshaya Apartments, Opposite Barkatpura Post Office, Barkatpura, Hyderabad 500027, India

Introduction: Congenital bicuspid aortic valve is the most common congenital anomaly in cardiovascular system accounting for 1-2% of the population, more common in men. Restrictive cardiomyopathy is a heterogeneous group of diseases characterized by a nondilated left ventricle, often with a well preserved ejection fraction.

Case: A 52-year-old male, nonhypertensive, diabetic came with complaints of shortness of breath, abdominal distention, pedal edema. On examination, he had raised JVP, pulse 54/min, BP – 100/70 mmHg. On CVS examination, there was S1, S2, lungs b/l creps were heard. His Hb – 10.5 g/dl, WBC counts were normal. Renal parameters were within normal limits. Liver function tests – normal. Viral screening – negative. USG abdomen – gross ascites, b/l pleural effusion, liver size normal. Chest X-ray – cardiomegaly, b/l pleural effusion. ECG – idioventricular rhythm, low voltage complexes. Echo showed biatrial enlargement with normal sized ventricles and normal systolic function with grade III diastolic dysfunction. There was bicuspid aortic valve with calcification, antero-posterior orientation of commissures and positive eccentricity index. There was moderate aortic stenosis and mild aortic regurgitation. Due to disparity between the echo findings and the clinical situation, restrictive cardiomyopathy was suspected and an abdominal fat pad biopsy was done with Congo red staining and subjected to polar microscopy. The biopsy was positive for amyloidosis.

Discussion: Amyloid deposition in heart is a common occurrence in systemic amyloidosis (50% occurrence). Fine needle aspiration of abdominal fat pad is minimally invasive, convenient, safe, economical, simple procedure for the tissue diagnosis of AL. It has sensitivity of 52-88% and specificity >95%, equal to or better than rectal biopsies with Congo red staining. Congestive heart failure is the presenting feature in restrictive cardiomyopathy with a median survival is <6 months after onset of heart failure. Goffin et al. reported the term dystrophic valvular amyloidosis' in a patient with a calcific bicuspid aortic valve subjected to aortic valve replacement on biopsy. Association of a bicuspid aortic valve with RCMP is rare and to the best of our knowledge it is the second case report.

Clinical implications: Association of bicuspid aortic valve with restrictive cardiomyopathy is rare.

To assess effect of ultrafiltration by peritoneal route on echocardiographic parameters in refractory congestive heart failure by two dimensional echo and tissue Doppler imaging



Praveen Pawal*, P. Krishnam Raju, Rajashekara Chakrawarti, Santosh Headu

Care Hospital, Road No. 1, Banjara Hills Hyderabad, Telangana 500034, India

Background: Heart failure as a chronic progressive disorder of all heart failure patients eventually progress to a refractory stage characterized by worsening renal function and resistance to diuretic therapy with attending severe edema. A logical treatment for this “cardiorenal syndrome” is the use of dialysis, which is efficient in treating both the hypervolemia and azotemia of refractory heart failure. Peritoneal ultrafiltration is associated with preservation of residual renal function, gentle continuous ultrafiltration, hemodynamic stability, sodium sieving with maintenance of normonatremia and perhaps less inflammation than hemodialysis.

Methods: The study was conducted prospectively on cohort of patients for two years patients with NYHA functional class III/IV; refractory heart failure with ejection fraction (EF) <45%. And one out of two criteria (i) persistent dyselectrolytemia (hyponatremia or hypokalemia); (ii) at least one previous hospitalizations for acute heart failure in previous 3 month, were followed for a median of 3 months after the catheter implantation. To measure the success of ultrafiltration, the endpoint will be defined by changes that occurred in study variables pre- and post-ultrafiltration at 3 months. NYHA class, 6 MIN WALK TEST, days of rehospitalisation or unscheduled visit or admission, hemoglobin, serum creatinine, eGFR, sodium, NTproBNP. Echocardiographic parameters before and after ultrafiltration at 3 months.

A total of 19 study subjects were studied, most of them 17 (89.4%) were male while only 02 (10.6%) were female. We found significant increase in ejection fraction measured by Simpson method. EF before the treatment was (35.4 ± 6.6), (43.1 ± 13.8) with mean difference (7.64 ± 10.4) at the end of 3 months. After ultrafiltration, duration of hospital stay, hospitalization rate and cases in NYHA class III and IV highly significantly reduced ($p < 0.0001$), while other parameters like Hb (g%) and EF showed significant increase ($p < 0.0001$) after ultrafiltration. After ultrafiltration, RVSP significantly reduced ($p < 0.001$), was marker for fluid overload state; physical activity index (6MWT) and NYHA class improved significantly in our study over the period of 3 months $p < 0.001$ and $p < 0.01$ respectively. Significant reduction was observed in level of NTproBNP. There was improvement in serum sodium level ($p < 0.05$) after ultrafiltration. We noticed there was significant increase in the hemoglobin (g%).

Conclusion: This preliminary study indicates that ultrafiltration is a feasible alternative for the treatment of symptomatic patients with advanced CHF, persistent fluid overload despite loop diuretic therapy excluding patient with ESRD and echocardiography is a good tool to assess effect of ultrafiltration.

To detect occult coronary artery disease in global severe left ventricular hypokinesia



S. Saraf, S. Shandra, R.K. Saran, V.S. Narain, S.K. Dwivedi, R. Sethi, A. Pradhan, G.K. Chaudhary, P.K. Vishwakarma

Aim: Global hypokinesia of left ventricle (GHLV) is uncommon in ICMP that delays the proper treatment because of confusion with DCM as the closest differential diagnosis. Here author has tried to evaluate the role of coronary angiogram in unexplained dilated and significant GHLV of with no prior documentation of CAD.

Methods: This was the prospective observational study carried at a single centre serving the large number of population in North-East India, which included 30 patients during the period March-2015 to August-2015 (period of four months). The study group consists of