

## Ultrafiltration by peritoneal route in refractory chronic congestive cardiac failure

Rajasekara Chakravarthi M, Santosh Hedau, P. Vikranth Reddy and Piyush Mathur

CARE Hospitals, India

Ultrafiltration is an alternative treatment for patients with Refractory chronic congestive cardiac failure. The mechanism of improvement in these patients has not been evaluated till now. The latest understanding of cardiorenal syndrome is organ cross talk with the help of inflammatory mediators (myocardial depressant factors). This is a prospective study started in June 2009 with an objective of studying safety, efficacy as well as mechanism of ultrafiltration by peritoneal route. Data of 30 patients out of 54 was analysed as they have completed a minimum followup period of one year. There was significant improvement in NYHA functional status ( $p=0.0006$ ), haemoglobin level ( $p=0.0001$ ), serum creatinine level ( $p=0.0001$ ), mean days of hospitalisation per year ( $p=0.0001$ ), LV ejection fraction ( $p=0.0001$ ). The levels of myocardial depressant factors (IL-1, IL-6, TNF-ALPHA, BNP) were significantly decreased which may explain the mechanism of improvement. We conclude that ultrafiltration by peritoneal route is a safe and effective alternative to conventional treatment. The clearance of various inflammatory mediators by peritoneal ultrafiltration may explain the mechanism of improvement.

### Biography

Rajasekara Chakravarthi M graduated from Mysore University (MBBS) in 1993 and completed M.D. (internal medicine) from the same university in 1996. Subsequently he trained as a fellow in Nephrology under the guidance of Dr. M. K. Mani between June 1997 and June 1999. He was the Head of the department of Nephrology CARE hospitals Banjara hills from March 2002 to September 2011. Since September 2011 he is officiating as the Director Nephrology services CARE group of hospitals India which is a 13 hospitals group spread across the country. He has more than 25 publications in national and international journals, including Nature, International Journal of urology and nephrology, Blood purification, Indian journal of nephrology etc. He has keen interest in understanding Acute Kidney Injury and is a member of the AKIN and ADQI (2011-Dublin).

[rajasekarac@gmail.com](mailto:rajasekarac@gmail.com)