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Introduction

In advanced forms of congestive heart failure refractory to maximal medical therapy, patient management is extremely complex and requires a multidisciplinary approach and more aggressive therapies. In our experience we have submitted such patients to nefrocardiocare ultrafiltrative treatment.

Methods

Fourteen patients aged > 65 years with clinical and laboratory signs of cardiorenrenal decompensation were enrolled, presenting at the time of admission:

- EF between 35 and 55%
- a weight gain of at least 3 kg in the previous month
- signs of overload to instrumental investigations (pleural and/or endoabdominal effusion/anasartic state)
- dyspnea (stratified through dedicated score)
- renal function III-IV stage sec KDOQI at the baseline, submitted to diuretic stimulus in the first 24 hours of about 129-150 mg/day.

They have been subjected to standard medical therapy since entry and subsequently, based on the clinical and laboratory response, they were proposed treatment with UFI nefrocardiocare, in single or multiple session, with a liquid removal greater than 2 l/session (nb. To reduce the risk of hypovolemia and consequent renal damage induced by hypoperfusion the recommended total loss should not be more than 75% of the estimated PC input). The parameters monitored were: PC +/- BIA, renal function indices, serum electrolytes, Hb and HCT, dyspnea score, PA detected respectively at input, 48h, 96h, dimission and first mount later. The UFI sessions necessary to restore the state of compensation and the days spent in the hospital were subsequently evaluated.

Results

For each patient the improvement of dyspnea (according the score) and of the state of congestion (PC/BIA) was documented already at 48H, the achievement of a more stable renal function over time, and, last but not least, the reduction of recovery. Significant longterm changes were also observed for systolic blood pressure, Hb, Na and dyspnea.

Conclusions

Our study demonstrates that the choice of UFI as firstline treatment in patients with cardiorenrenal decompensation leads to greater short-term outcomes and greater long-term stabilization of cardiorenrenal function with reduced hospitalization rate. The Nefrocardiocare treatment has a valuable impact in improving and stabilising long-term renal function and dyspnea of these patients.