ICODEXTRIN-BASED PERITONEAL DIALYSIS AS THERAPEUTIC APPROACH IN CONGESTIVE HEART FAILURE RESISTANT TO PHARMACOLOGICAL TREATMENT

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removal of extensive fluid overload is one of the most difficult challenges in the management of severe congestive heart failure, particularly in patients who do not respond to diuretic therapy. Peritoneal ultrafiltration could be the solution to treat hypervolemic congestive heart failure patients. Icodextrin solution is a long acting osmotic agent that allows the patient’s ultrafiltration volume to gradually increase for up to 12 hours. We present a case of successful peritoneal ultrafiltration treatment in a 76 years-old woman diagnosed with diuretic-resistant congestive heart failure. Seven months of treatment with one daily dialysis exchange with icodextrin resulted in better functional status (from IV to II NYHA class), quality of life and improvement of cardiac ejection fraction (from 20).

a 76 years old woman was admitted to the emergency department of INRCA Ancona in March 2018. She had been diagnosed with advanced biventricular heart failure (NYHA class IV) resistant to diuretics in the course of dilated cardiomyopathy and established atrial fibrillation. Due to the advanced degree of kidney damage (V stage of chronic kidney disease and eGFR 10 ml/min according to the CKD-EPI formula), one 12-hour night time dialysis exchange with 2 L of glucose polymer (icodextrin) as an osmotic agent was started.

after seven months of treatment with icodextrin at home, the patient reported an overall improvement in her well-being with better exercise tolerance (from NYHA IV to II) and an improvement of cardiac ejection fraction (from 20). Moreover the treatment was able to restore the patient’s sensitivity to oral diuretics without any other re-hospitalizations.

this report proves that the use of peritoneal ultrafiltration in patients with congestive heart failure resistant to pharmacological therapy can significantly improve clinical state of patients