

Maintaining optimal hydration status - a constant challenge for haemodialysis patients

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Introduction

In haemodialysis patients, the dialysis treatment replaces the kidneys function and the dialyser removes excess water and toxins from the blood by artificial filtration of the blood. Chronic hyperhydration leads to a high blood pressure in the long-term and increased morbidity due to cardiovascular incidents. Maintaining an optimal balance of fluids is one of the most important challenges in the treatment of haemodialysis patients.

Objectives

To maintain an optimal hydration status in the body by establishing the ideal dry weight in haemodialysis patients. Involving the patient by encouraging his/her compliance to medical, nutritional, and fluid consumption recommendations.

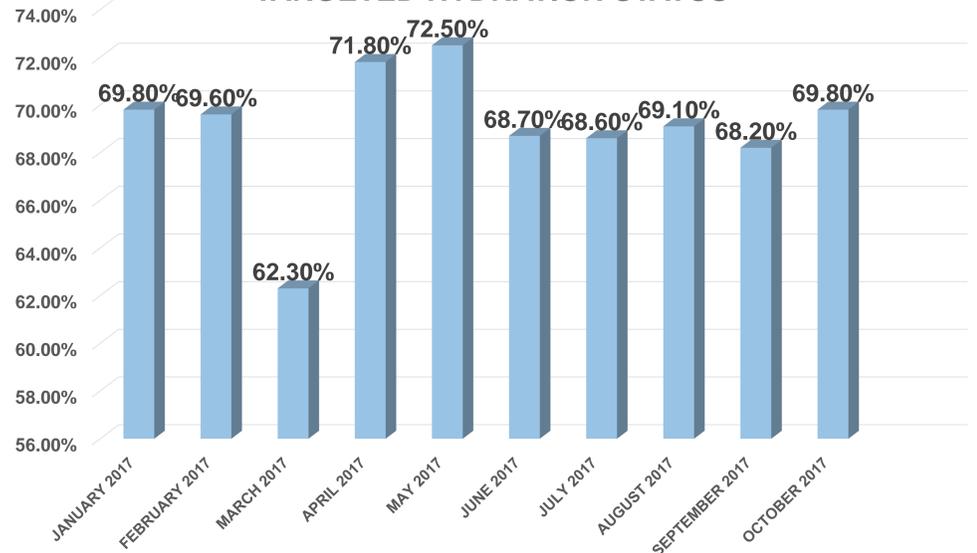
Methods

Monitoring of the hydration status of dialysed patients by means of bioimpedance spectroscopy (BIS) to measure the body composition.

1. Determining dry weight according to BIS results and clinical examination (regular re-evaluation of dry weight).
2. Adjusting dry weight on an individual basis.
3. Increasing dialysis time in high volume ultrafiltration cases.
4. Intensifying individual discussions on the importance of maintaining interdialytic hydration balance through dietary compliance and limiting fluid consumption.



TARGETED HYDRATION STATUS



Results

From January 2017 to October 2017 we performed BIS measurements in 320 patients on a quarterly basis. Among these, 68 patients (18.8%) required dry weight adjustment.

The proportion of patients reaching the targeted hydration status (relative hyperhydration $\leq 13\%$ for women and $\leq 15\%$ for men) ranged between 62.3% and 72.5% every month from January to October 2017.

Conclusion

Maintaining the interdialytic fluid balance by complying with the physician's recommended diet helps to avoid hyperhydration, which is responsible for the increased risk of cardiovascular diseases affecting the haemodialysis patients' quality of life.

Monitoring body composition by BIS is an important method to assess the hydration status of haemodialysis patients.

Hyperhydration complications can be controlled by the following measures:

- complying with the recommended fluid intake;
- complying with the salt restriction diet;
- frequent re-evaluation of "dry weight";
- increasing dialysis time in high volume ultrafiltration cases.