

Reducing Fluid Overload May Be Better Than Antihypertensive Drugs for Blood Pressure Control in ESRD

Reducing fluid overload may be better than antihypertensive drugs for blood pressure control in patients with end-stage renal disease (ESRD), according to the results of a qualitative literature review reported in the *Clinical Journal of the American Society of Nephrology*.

Achieving and maintaining dry-weight appears to be an effective but forgotten strategy in controlling and maintaining normotension among hypertensive patients on hemodialysis. The purpose of this review was to define dry-weight and to assess its usefulness in achieving blood pressure control. With time, the concept of dry-weight has evolved, and its definition has changed accordingly. Dry-weight may be defined as the lowest tolerated postdialysis weight achieved through a gradual change in postdialysis weight with only minimal signs or symptoms of hypovolemia or hypervolemia.

Latent increase in dry-weight is not reliably identified on clinical examination. However, several technologies that may be useful in the future to measure dry-weight include relative plasma volume monitoring and body impedance analysis.

Sodium restriction is a modifiable risk factor that may help achieve better control of blood pressure, but lifestyle modifications needed to restrict dietary sodium are difficult to implement and even more difficult to sustain long term. A simpler, but less used and studied, strategy is to restrict dialysate sodium, which may reduce thirst and interdialytic weight gain while facilitating achievement of dry-weight. Benefits of achieving dry-weight may include better interdialytic blood pressure, lower pulse pressure, and fewer hospitalizations.

Reference

Clin J Am Soc Nephrol. Published online May 27, 2010. [Abstract](#)