



Opinion

# Sodium in Hemodialysis Fluid

Sanjay Kumar Agarwal

Department of Nephrology, All India Institute of Medical Sciences (AIIMS), New Delhi 110029, India; skagarwalnephro@gmail.com

**Abstract:** The principal aim of dialysis in relation to sodium is that dialysate sodium should not be low enough to cause intradialytic hypotension and cramps, and should not be high enough to cause interdialytic weight gain and hypertension. Dialysis sodium at 138 meq/L is supposed to be neutral and for most patients, this remains the standard sodium level for regular long-term dialysis. In my opinion, sodium should be changed temporarily from this level to 142 meq/L in selected patients only for a few dialysis sessions, where the cause of intradialytic hypotension is not obvious. In patients who regularly go into intradialytic hypotension and whose cause of intradialytic hypotension is unclear or cannot be corrected, sodium profiling should be used for maintenance dialysis. There is no consensus on the level of sodium, although I think 142 meq/L for the initial hour followed by a decrease to 138 meq/L in the last hour is sensible.

**Keywords:** dialysate Na; Na profiling; intradialytic hypotension



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Hemodialysis, in addition to directly affecting the fluid and solutes of the body, also indirectly affects systemic features such as hypertension. Sodium is an important solute of the body, which not only directly affects the osmolality of compartments of the body but also affects the degree of blood pressure. It has a large volume of distribution in various body compartments and has variable transfer rate between different compartments, depending on many factors. Sodium is the main extracellular solute and defines the osmolality and size of the extracellular volume.

The principal aim of dialysis in relation to sodium is that dialysate sodium should not be low enough to cause intradialytic hypotension and cramps, and should not be high enough to cause interdialytic weight gain and resulting interdialytic and later persistent hypertension affecting cardiovascular morbidity and mortality [1]. Dialysis sodium at 138 meq/L is supposed to be a neutral sodium level for dialysis, and for most patients, this remains the standard sodium level for regular long-term dialysis. In my opinion, sodium should be changed temporarily from this level to 142 meq/L in selected patients only for a few dialysis sessions, where the cause of intradialytic hypotension is not obvious. In patients who regularly go into intradialytic hypotension and whose cause of intradialytic hypotension is unclear or cannot be corrected, sodium profiling should be used for maintenance dialysis. There is no consensus on the level of sodium to be used in sodium profiling, although I think 142 meq/L for the initial hour followed by a decrease to 138 meq/L in the last hour is a sensible approach. Regular higher sodium is likely to increase interdialytic weight and cause hypertension and its related cardiovascular effects, which are undesirable for the long-term outcome of patients on maintenance dialysis [2].

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## References

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