

Six years' experience with short daily hemodialysis: do the early improvements persist in the mid and long term?

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Observational studies from several groups have shown consistent beneficial effects in patients treated with short daily hemodialysis (SDHD). The cardiovascular and nutritional changes appear during the first few months after the initiation of SDHD. An extensive review of 17 patients from a group of 36 ESRD patients treated for up to 6 years with SDHD was undertaken to compare the clinicobiologic results during the initial period of standard hemodialysis (3 x 4 hr/week) and the short daily hemodialysis period at 1 year (SDHD₁) and subsequent years (SDHD₂). The statistical analysis of the clinicobiologic data clearly shows that the initial favorable results obtained during the first year of SDHD do persist in the mid and long term, which shows the more physiologic nature of this dialytic approach. The amelioration of left ventricular hypertrophy is of particular interest, showing a regression of ventricular dilation during the first year followed by a reduction of interventricular septum and posterior wall thickness during the subsequent years.

Commentary by Todd S. Ing, MD

Dr. Traeger and his colleagues have demonstrated that the early benefits observed with a short "daily" hemodialysis regimen (6 sessions per week, 120-150 minutes per session) will persist up to 6 years (the period of follow-up up to the time of writing). These favorable results do lend support to the notion that this variety of high-intensity dialytic therapy may turn out to be a treatment of choice.