Reviewer’s report

Title: End-stage renal disease preceded by rapid declines in kidney function: a case series

Version: 1  Date: 21 December 2010

Reviewer: Joseph A Vassalotti

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Overall, this is an interesting, well-written and important case series of patients with rapid decline of kidney function before initiating dialysis from two centers in Northern California. The author’s three conclusions are supported by the data, including 1) the significance of the problem to foster additional research, 2) the obvious implications for AV fistula quality improvement initiatives, and 3) the absence of data capture for this clinical problem by USRDS. This is a strong paper. I have a 5 discretionary suggestions for strengthening.

1. The authors explore hemodialysis access and peritoneal dialysis as markers of preparation for chronic kidney failure. Lack of access to pre-emptive kidney transplantation is at least worth mentioning in the introduction and/or discussion as an additional potential consequence of rapid loss of kidney function. Although given the mean age at dialysis initiation of the study population, I would not expect the authors have any pre-emptive kidney transplantation data.

2. Where any patients excluded from the analysis for late presentation or “crashing into ESRD” because of the absence of kidney function data in the 3 months prior to initiation of dialysis?

3. Tables 1a and 1b: Where there differences in the duration of nephrologic care between the groups?

4. Tables 2a and 2b: Where there any predictors of rapid loss of kidney function? For example, cardiac catheterization or hospitalization could have precipitated cholesterol emboli and acute tubular necrosis? How many of the individuals had hospitalization or iodinated contrast media or administration prior to rapid decline of kidney function?

5. Discussion of limitations: please note that compared to USRDS data at dialysis initiation this population is older, mean age about 69 versus 63 years and also predominantly male, 68% (120/176) versus 56%.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.

**Declaration of competing interests:**

I declare that I have no competing interests