

## DOCUMENTED INFECTION AND NUTRITIONAL STATUS

Jessica Stauffer, Monica Serra, Maureen McCarthy, Kamyar Kalantar-Zadeh, Janeen León, Alison Steiber.

Case Western Reserve University, Cleveland, OH, USA

Infection and inflammation are shown to increase morbidity and mortality in maintenance hemodialysis (MHD) patients. The purpose of this study was to determine differences in nutrition status between those with documented infection and those without infection using scores from overall and specific components of Subjective Global Assessment (SGA), i.e., gastrointestinal symptoms (GI), weight, dietary intake, and physical exam. A secondary analysis from the SGA 7-point scale validation study (Steiber et al, 2007) was conducted. The 54 participating renal dietitians (RD) were trained to perform SGA and collect data via a website created for the study. Data collection occurred at HD facilities in the United States, Canada, and New Zealand. Infection was defined by documentation in patients' medical records. Statistical analysis was performed using SPSS version 15; statistical significance was defined as  $p \leq 0.05$ . Of the 153 patients, 46% were female and 64% Caucasian, 21% African American, 6% Hispanic, 6% Asian, and 1% Native American. The mean age, body mass index (BMI), and serum albumin were  $64 \pm 14$  (mean  $\pm$  SD) years,  $28 \pm 7$  kg/m<sup>2</sup>, and  $3.7 \pm 0.4$  mg/dL, respectively. Patients with documented baseline infection (n=13, 9%) had a worse overall baseline ( $p < 0.01$ ) and 6-month ( $p < 0.05$ ) SGA score than those without (n=140). Baseline overall SGA score for 12 (92%) of the 13 patients with infection demonstrated some degree of nutritional deterioration. Six month overall SGA score showed that 8 (62%) continued to have documented infection and of those, 7 (87.5%) had some degree of nutritional loss. Those who had infection at baseline were more likely to have worse baseline, 1-month, and 6-month physical exam ( $p < 0.05$ ) and GI ( $p < 0.01$ ) SGA scores. Additionally, those patients were more likely to have worse baseline and 1-month SGA scores in weight ( $p < 0.01$ ) and dietary intake ( $p < 0.01$ ). Patients with documented infection were more likely to have a worse overall baseline and 6-month SGA score than those without infection. Furthermore, baseline infection was associated with worse GI, weight, dietary intake, and physical exam as scored by the SGA at all time points (baseline, 1-month, and 6-month).