

## KSN 2017 Abstract

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### The additional benefit of weighted subjective global assessment (SGA) for the predictability of mortality in Korean incident peritoneal dialysis patients

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**Objectives** : Although subjective global assessment (SGA) has been considered to be a representative index to evaluate nutritional status in dialysis patients, it reaches to subjective limitation. Therefore, the aim of this study was to investigate whether weighted SGA using serum albumin and total iron binding capacity (TIBC) has additional effect on predicting mortality compared with SGA alone in Korean incident peritoneal dialysis (PD) patients.

**Methods** : A total of 365 incident PD patients was enrolled from CRC for ESRD cohort between May 2009 and December 2015 and divided into two groups [Good nutrition (G1; n= 226) and Mild to Severe malnutrition (G2; n=139)]. Additionally, Kaplan-Meier (KM) and Cox proportional regression analysis were performed to evaluate whether SGA was useful to predict mortality in these patients. Moreover, weighted SGA using graded albumin and TIBC, which has been known to be nutritional index, was calculated and receiver operating characteristic (ROC) curve was conducted to show more additional effect on the predictability for mortality than SGA alone.

**Results** : During median 3.2 years of follow-up period, 61 patients (16.7%) died, KM curve and univariate Cox analyses showed that G2 was independently associated with an increase of mortality rate compared with G1 [HR, 2.54; 95% CI, 1.53-4.22; P < 0.001]. Moreover, the mortality risk in G2 was also significantly higher than that in G1 after adjusting for all eligible variables [HR, 1.760; 95% CI, 1.021-3.035; P = 0.042]. Furthermore, ROC curves showed that the area under the curve (AUC) of weighted SGA (SGA + graded albumin + graded TIBC) was significantly higher than the others (SGA, graded albumin, or SGA + graded albumin for mortality) [AUC, 0.71; P < 0.001].

**Conclusions** : The evaluation of nutritional status based on SGA in incident PD patients may be useful for predicting mortality. However, weighted SGA with

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objective parameters including graded serum albumin and TIBC can provide more additional predictability for mortality compared with SGA alone in incident PD patients.

**Keywords** : subjective global assessment, weighted subjective global assessment, mortality, incident peritoneal dialysis