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### Identifying Malnutrition in End-stage Renal Disease (ESRD) (P12-037-19)

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**Objectives:** Malnutrition and appetite disturbances, such as anorexia, are commonly reported amongst hemodialysis patients. Nutrition management is a complex issue in ESRD and greater understanding is needed into the associated clinical mediators in ESRD. However, there is currently limited data on anorexia and the pathophysiology framework involved.

The aim of this study was to assess the relationship between appetite score and associated clinical biomarkers as a means to identify malnutrition. This work is part of an ongoing international multicenter effort to better define and develop treatment strategies for cachexia in patients with ESRD.

**Methods:** A cross-sectional analysis study included 106 patients from two hemodialysis (HD) units within the United Kingdom (U.K). Appetite score was assessed using the Functional Assessment of Anorexia/Cachexia Therapy (FAACT). Clinical bio-makers included Body Mass Index (BMI), Albumin and C-reactive protein (CRP). Correlations between FAACT and clinical bio-markers were determined using Spearman's rho for non-normally distributed scales.

**Results:** There was no significant relationship between FAACT and albumin levels ( $r = 0.14$ ;  $P = 0.16$ ) or BMI ( $r = 0.28$ ;  $P = .19$ ). However, there was a moderate and significant negative correlation between FAACT and CRP levels ( $r = 0.31$ ;  $P < 0.001$ ) indicating an inverse relationship between appetite (e.g., decreased FAACT score) and CRP levels (e.g., higher inflammation).

**Conclusions:** We found a significant and incremental relationship between inflammation and anorexia which is supported by previous research. The FAACT may be a useful tool in identifying patients at higher risk of malnutrition-inflammation cachexia syndrome which has been associated with higher hospitalization and mortality rates. Nutritional status and inflammation are important aspects of clinical practice in ESRD. A more focused approach to anorexia in ESRD is warranted.

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