Poster Session III
Poster # 18

Preoperative Nutrition, Inflammation, and Quality of Life in Older Cardiac Surgery Patients

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Purpose: The purpose of this study was to examine nutritional, inflammatory, and quality of life (QOL) measures before cardiac surgery among community residing older adults (>65 years). Since little is known about the relationship of nutrition, inflammation, and quality of life following cardiac surgery, better understanding could potentially lead to improved outcomes and quality of life.

Methods: Inflammatory and nutrition biomarkers were measured at T1 (preoperatively) and T2 (six weeks post-discharge) and included nutritional (weight, serum albumin, Mini-Nutritional Assessment™ [MNA], calf-circumference, grip-strength, appetite), inflammatory (serum IL-6 and hsCRP), and QOL (SF- 8 Health Status Survey). Appetite was measured with the Council on Nutrition appetite questionnaire. Twenty community residing older adults, without active cancer or immune compromise, who were scheduled to undergo elective coronary artery bypass surgery, with or without valve repair, were enrolled in the study.

Results: The mean age of participants was 72.25 + 5.24 yrs, 70% male. Inflammatory response was categorized into low, intermediate and high using median IL-6 and hsCRP levels as cut-off. At T1, 42% were categorized as intermediate, and 28% as high inflammatory response. At preoperative, all SF-8 scales were at or below the standard US mean of 50, except for the Mental Component Summary score. T1 correlations ($p < .05$) between nutrition variables and SF-8 scales include: calf-circumference and, General Health ($r=.623$) and grip-strength and, Mental Component Summary score and Mental Health ($r=.532, .728$, respectively).

Conclusions: In the presence of inflammation, lower levels of nutritional markers are related to lower levels of QOL in older adults before cardiac surgery. Examination of the impact of nutrition interventions on promoting QOL in older adults recovering from surgery is warranted.