A182 - Prognostic value of malnutrition in cardiac surgery. an eight year follow up data.

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Introduction:
Prognostic value of malnutrition on postoperative complications and prolonged hospitalization in cardiac population, operated on under cardiopulmonary bypass (CPB) has been previously demonstrated [1]. The impact of malnutrition on long term follow up was the aim of this study.

Methods:
A data of 1200 patients previously enrolled in prospective observational study (NCT01366807) was used. Five nutritional screening tools Malnutrition Universal Screening Tool (MUST), Mini Nutritional Assessment (MNA), Nutritional Risk Screening 2002 (NRS-2002) and Short Nutrition Assessment Questionnaire (SNAQ) were used for nutritional screening during initial hospitalization. Follow up data of 747 patients was successfully collected. Among them 8 year follow up was reported in 397 patients and 2 year follow up – in 350 patients. In order to analyze prognostic value of preoperative variables on survival, univariate and multivariate Cox regression analyses and Kaplan-Meyer curve analysis was performed.

Results:
Nutritional screening tools did not significantly predict mortality. Among total patient cohort mortality was predicted by Euroscore II (HR 1.05; 1.03-1.07 CI; p<0.0001), CPB time (HR 1.003; 1.002-1.005 CI; p<0.0001) and albumin (HR 0.94; 0.92-0.96 CI; p<0.0001) by univariate and multivariate (Euroscore II (HR 1.05; 1.03-1.08 CI; p<0.0001), CPB time (HR 1.006; 1.003-1.009 CI; p=0.0001), albumin (HR 0.95; 0.92-0.98 CI; p=0.0004)) analyses. Despite lack of significance, trend for worse outcomes, associated with malnutrition were found among patients with heart valve diseases (Figure).

Conclusion:
Among cardiac patients operated on under cardiopulmonary bypass preoperative malnutrition does not significantly affected long-term survival.

References:
long term survival with accordance to primary cardiac pathology.