Sum of serum n-3 fatty acid value might be correlated with residual living days in older adult patients with gastrointestinal cancer

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Aims: To examine our working hypothesis that anti-inflammatory factors, mainly n-3 fatty acids (FA) might affect survival days of patients with GI cancers.

Methods: All consecutive patients with GI cancers admitted between December 2012 and September 2015, for their treatment were enrolled as the subject of the present study. This was retrospective chart-review in a single institute. Patients with liver (AST, ALT, T-Bil>1.5 upper limit of normal range) or renal (s-creatinine>1.5 upper limit of normal range) dysfunction was excluded. The following data were collected: Demographics-sex, age, site and stage of cancer, body weight (BW) measured at the first before treatment (T1) and/or the last before death (T2); blood tests drawn at T1, T2 to measure FA profiles; and correlation between FA profiles and residual living days (RLDs) were analyzed.

Results: 31 patients were enrolled. Demographics at T1(T2) male/female=19(15)/12(8), age 73.0(75.6), site of cancer-stomach/colon/Liver/bile tract/pancreas=3(2)/7(6)/6(4)/10(6)/5(5). Among all FA profiles analyzed, sum of serum n-3 FA value showed significant inverse correlation with RLDs (p<0.05), although each FA involved in n-3, such as alpha linolenic acid, EPA and DHA did not show any relationship.

Conclusion: Sum of serum n-3 FA values might show inverse correlation with survival days in patients with GI and hepato-biliary-pancreatic cancers. To our knowledge, this observation is the first report although it is not clarified whether this correlation is causality or association.

Biography
Moeko Kitagawa is a graduate student of Mukogawa Women’s University and is studying Administration Food Sciences and Nutrition at Graduate School of Human Environmental Sciences.